A GUIDE FOR ENACTING AN APPRENTICESHIP EDUCATION MODEL AS A MECHANISM FOR FACILITATING HIGHER EDUCATION AND INDUSTRY COLLABORATION

By

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DECLARATION

The author hereby declares that, except where duly acknowledged, this thesis is entirely her own work.

This thesis is not one for which a degree has been or will be conferred by this or any other university or institution.

Signed: _Deirdre Giblin_
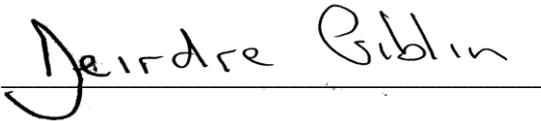
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ABSTRACT

This study seeks to create a process for enacting an apprenticeship education framework as a mechanism for facilitating higher education and industry collaboration (HE-IC). A review of the extant literature in the areas of apprenticeship, higher education and industry collaboration exhibits prior research in these areas. A preliminary conceptual framework is developed based on this review, drawing upon the frameworks of Engestrom (1987) and Sternlieb et al (2013), and underpinned by boundary organisation theory which aligns with the researcher's interpretivist philosophical approach to the study. The resultant research questions are: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for higher education institute (HEI) and industry collaboration?

A single interpretive sector study of the International Financial Services suite of apprenticeships underpinned the primary research. The ensuing sectoral study involved semi-structured interviews with apprenticeship consortium members and policy stakeholders, supported by a review of relevant documentation and researcher reflective log entries. The findings suggest that successful HEI and industry collaboration is core to the achievement of successful apprenticeship outcomes. The key drivers have been explored in the literature and combined with the insights from the participants. These drivers have been identified as: trust; transparency; mutual understanding; necessity; reciprocity; efficiency; stability; legitimacy and asymmetry (Schilke & Cook, 2013; Vanneste, Puranam and Kretschmer, 2014; Ankrah and Al-Tabaa, 2015) which can combine in different ways at different stages of the collaboration relationship (Plewa et al., 2015).

A revised conceptual framework provides greater insight into creating a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration. This framework can serve as a mechanism for broader HEI and industry collaboration, thereby extending boundary organisation theory. The findings have practical relevance to those interested in the range of benefits of HEI and industry collaborations; learners, the HEI, industry and regional and national socio-economic stakeholders. The ambiguity that existed on the apprenticeship landscape when this study commenced has been somewhat clarified by the relevant state agencies, but formal guidance for industry representatives contemplating in developing an

apprenticeship, is still missing. This motivated the researcher to produce outputs which draw attention to matters for consideration for industry representatives, considering developing a new apprenticeship. The guide produced by the researcher, as an output from this study, aims to close the guidance gap. While the study was carried out in the context of a higher education and industry collaboration specific to apprenticeship, it may also have relevance to further education and industry collaboration and also to broader education and industry collaborations outside of the apprenticeship setting.

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DEDICATION

This is dedicated to my family and friends without whose support I would never have been able to achieve this. To Luke, Kate and Gary for their patience over the four years – I know it has been a long road for us all as a family with some life blows along the way and I am very grateful for your support. Luke and Kate, I truly believe education changes lives and my wish for you both is to find your passion and to make that your job. I have been very lucky (with a fair dose of hard work thrown in), that after a circuitous but interesting route, I have found mine. To my sister Marie and brother Declan, in the absence of our late parents Donal and Bernie Giblin, I hope I have made you proud of your little sister – not that pa-feckin-thetic after all! I will be forever grateful to my parents for instilling in me a strong sense of self- belief which has propelled me through life and through this DBA. The Giblins of Enniscrone and the Caseys of Boyle gave our family, the Giblins of Coolock, the best possible start with an appreciation of the power of education. I am only the second Dr. Giblin in our family's history and I follow proudly in the footsteps of the late Fr. Cathaldus Giblin OFM. To my best pal of over 35 years, Valerie Craine, whom I met on my first day of third level study in the National College of Art & Design on Thomas Street in 1984 – Val, you have been a saint – I'm back!

LIST OF ABBREVIATIONS

DES   Department of Education and Skills

DBA   Doctorate in Business Administration

EU   European Union

FET   Further Education and Training

FSI   Financial Services Ireland

HEA   Higher Education Authority

HEI   Higher Education Institute

HE-IC   Higher Education- Industry Collaboration

IFS   International Financial Services

WBL   Work Based Learning

QQI   Quality Qualifications Ireland

GLOSSARY OF TERMS

Community of Practice - A community of practice is a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly (Wenger, 1999)

Department of Education and Skills (DES) – An Irish government department with responsibility for education and training, whose mission is to facilitate individuals through learning, to achieve their full potential and contribute to Ireland's social, cultural and economic development.

Financial Services Ireland (FSI) - FSI is the only cross-sector financial services industry association in Ireland and is part of Ibec

GDPR – GDPR stands for General Data Protection Regulation and is a legal framework that sets guidelines for the collection and processing of personal information of individuals within the European Union (EU)

Ibec - Ibec are Ireland's largest business membership organisation (www.ibec.ie

Institute of Technology (IT) - IT is a type of Higher Education Institution found in the Republic of Ireland, originally established in the 1960s to educate for trade and industry over a broad spectrum of occupations

International Financial Services Apprenticeship Consortium – The International Financial Services Apprenticeship Consortium is the steering group for the International Financial Services Apprenticeships

Lisbon Agenda - An action and development plan devised in 2000 for the economy of Europe

NVivo – Nvivo is a qualitative data analysis (QDA) computer software package designed for researchers working with text-based data and/or multimedia information, where deep levels of analysis on small or large volumes of data are required

Quality and Qualifications Ireland (QQI) - QQI is an independent State agency responsible for promoting quality and accountability in education and training services in Ireland

Regional Skills Fora - The Regional Skills Fora were established as part of the Government's National Skills Strategy to facilitate employers and education and training providers to work together to respond to the skills needs of their regions

Skillnet Ireland – Skillnet Ireland is the National Agency responsible for the promotion of workforce learning in Ireland

SME – SME's are small to medium sized enterprises, defined as those with less than 250 employees and assumed to have greater resource constraints than larger enterprises

Solas - Solas is the State Organisation with responsibility for funding, planning and co-ordinating Further Education and Training (FET) in Ireland

Section 1

RESEARCH OVERVIEW AND STUDY CONTEXT

INTRODUCTION

The practice problem which inspired this study was that of the researcher's observation of a varying quality of relationships between higher education institutes and industry partners in the design, development and implementation of apprenticeships. The researcher was in the fortunate position of having experienced a high quality collaboration in her first-hand experience of designing the International Financial Services apprenticeships. In considering this study at the outset the researcher took a position within this practice problem that higher education in regard to the apprenticeship model is for the purpose of seeking apprenticeship employment in occupations enshrined in Occupational Profiles approved by the Apprenticeship Council. The researcher is cognisant of the wider neo-liberal framing of education and of the view that especially post the Irish economic recession neo-liberal agendas have been mobilised to promote employability-related competencies linked to career paths connected to sectors with an expectation of driving economic recovery (Holland et al; 2016; Carr and Beckett, 2016). There is a significant concern that education policy has been geared towards directing students towards narrow occupation specific education programmes which will ultimately marginalise disciplines such as the Arts, Humanities and Social Sciences which it can be argued are core to the development of socially just environments and can contribute to widening social and economic divides. Ball (2016) identifies what he calls 'the three 'technologies' of Market, Management and Performance' and argues how they have 'incrementally and inconspicuously but harmfully' changed the subjective experience of education at all levels. Being acutely aware of the differing views in the framing of higher education the researcher, informed by her own professional lived experience and her direct involvement in apprenticeships, has taken a clear position in the context of this specific study as stated above. By its very nature apprenticeship is market driven as without the employer there is no apprenticeship.

At the heart of an apprenticeship is the apprentice. The researcher acknowledges the importance of the voice of the apprentice but as the focus of this study is on the collaboration between higher education institutes and industry she felt that the voice of the apprentice was worthy of a separate area of research and would not be addressed in this study. The researcher's focus on higher education and industry collaboration seeks to

benefit all of the apprenticeship stakeholders which in turn will positively impact the overall experience of the apprentice.

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC). The resultant research questions are: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for higher education institute (HEI) and industry collaboration? The research questions are supported by the following research objectives: (1) Develop a HE apprenticeship education model incorporating roles, responsibilities and accountabilities, (2) Identify the internal and external organisational supports required to implement the HE apprenticeship education model, and (3) Explore the key drivers for the successful enactment of the HE apprenticeship education model. Based on a review of extant literature the researcher develops a preliminary conceptual framework to depict "the key factors, concepts, or variables—and the presumed relationships among them" (Miles and Huberman, 1994) in this research study. An interpretivist paradigm is adopted which is in sympathy with the social constructionist theoretical underpinnings of the study. A single sectoral study is put forward as a suitable method to investigate a contemporary phenomenon, such as enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration, in its natural context, as it allows for the subjective and contextual experiences of the participants to be incorporated. Apprenticeship consortium members and policy stakeholders are the research participants. Semi-structured interviews with 12 participants were carried out by the researcher over a 3 month period from June to August 2019, supported by a review of relevant documentation and researcher reflective entries.

This section begins with an overview of apprenticeship, higher education, and industry and higher education collaboration research before describing the origins of the research study, setting out the aims and objectives together with an overview of the research process and finally presenting the thesis structure.

RESEARCH OVERVIEW

This study explores the literature pertaining to higher education institutes (HEI) approach to apprenticeship education in collaboration with industry. As very little literature specific to this topic exists, the research draws on the extant literature in the domains of Higher Education, HEI and Industry Research Collaboration, Work-based Learning and Apprenticeship. The literature is reviewed with a view to identifying the principles applicable to collaboration in apprenticeship education design, development, accreditation and delivery (Barbolla and Corredera, 2009; Gulbrandsen et al., 2011; Perkmann et al., 2011) in an Irish context. Guiding this study is the preliminary conceptual framework, drawn from the literature review and Boundary Organisation Theory (BOT) which the researcher has selected as an appropriate base on which to build the study.

Globally, higher education is changing rapidly. The literature evidences the complexity of the higher education environment for a multitude of reasons from funding sources through to increased accountability in the delivery of societal and economic contributions. Prysor and Henley (2017) describe as a "perfect storm" the external challenges faced by HEIs resulting in an increased need to understand what defines the boundaries of HEIs. In recent years, a gradual shift from the knowledge economy to a performance economy (Sutin, 2018) has 'seismic and potentially tectonic' (Staley and Trinkle, 2011) implications for HE globally. This has direct relevance to the Irish higher education landscape as the government continues to put higher education at the heart of the economy. Historically, Ireland's approach to Higher Education policy has had a strong emphasis on the vocational nature of higher education with outcomes linked to labour market needs (Clancy, 1989; Loxley and Seery, 2012; Walsh 2014a, 2014b; HEA, 2017; DES, 2018). Paper 1 summarises the key higher education milestones in the Irish context leading to the introduction of the Apprenticeship Action Plan (2016-2020) and sets the context for the introduction of the 'new' consortia-led apprenticeships.

An educated workforce is a key national asset and a source of competitive advantage (Porter, 1990) and for the Department of Education and Skills to realise its stated intention 'to make Ireland the best education and training system in Europe within a decade'

(Action Plan for Education, 2018), the HE system must produce both graduates and life-long learners that will fulfil the skills and knowledge needs of a rapidly changing labour market (OECD 2017; World Bank 2018). A number of HEI-Industry partnerships do exist (Regional Skills Fora Network, 2018; Skillnets Ireland, 2018; Springboard+ 2018), however key HE sector reports note that HEIs need to be more proactive and dynamic in their collaboration with industry (Hunt 2011; Cassells 2016). Current government policy is supportive of such learner initiatives which include, for example, increasing participation in the National Skills Strategy (2025), promoting flexible access to HE, Springboard access and apprenticeships models of education.

Research consistently presents a need for HEIs to establish mutually beneficial partnerships with industry so as to remain at the cutting edge of the very fast pace of change happening in the macro environment (Perkmann et al., 2011, Ankrah and Al-Tabaa, 2015). These collaborative relationships have been found to positively impact management and organisation of both parties (Barnes et al., 2002; Siegel Waldman and Link, 2003), contributing mutual economic (Lehmann & Menter, 2015), institutional (Liew et al, 2013) and social (Ankrah & Al-Tabaa, 2015) gains resulting from the HEI-industry engagement. However, these benefits can only be gleaned when both parties negotiate a balanced socio-economic approach to collaboration, where the learner remains at the heart of the collaborative activity. There is a gap in the higher education-industry collaboration (HE-IC) literature specifically in relation to collaboration on design, development and delivery of apprenticeship education models. The researcher found that significant transferable concepts were available in the literature pertaining to HE-IC research collaborations. Ankrah and Al-Tabaa (2015) synthesised the literature in the research collaboration field and concluded that necessity; reciprocity; efficiency; stability; legitimacy and asymmetry are central to success in HE-IC contexts. Communication, understanding and mutual trust at the various phases of collaborative activity in HE-IC were identified as essential by Plewa et al., (2015). The wider HE-IC literature focuses on the importance of trust in HE-ICs (Schilke & Cook, 2013; Vanneste, Puranam and Kretschmer, 2014) as it is seen as a key variable in determining successful collaboration outcomes. Trust is also a key feature with a focus on how trust is based on repeated patterns of reciprocal behaviours and interactions over time (Ring, 1996; Levin

et al; 2006; Poppo, 2013) leading to an enhanced mutual understanding by all partners (Plewa et al., 2015).

The literature on HEI and industry collaboration has historically been focused on research collaborations. This is partly explained by tradition, as the majority of apprenticeship education provision has been provided by the further education sector (Anderson, Bravenboer and Hemsworth, 2012). The recent body of work in this area from the UK centres on the collaboration between HEIs and industry, in relation to the co-design of apprenticeship education models (Bravenboer, 2016; Carter, 2010; King et al, 2016; Rowe, Perrin and Wall, 2016). The advent of these models bring with them a new approach to multi-stakeholder collaboration to produce apprenticeship education models that fulfil all stakeholder needs (Chankseliani and Relly, 2015; Lambert, 2016; Saraswat, 2016). This new approach seeks to more deeply engage the employer in the programme design process, which challenges the historically preserved role of HEIs as primary masters of programme design. Evidence from the literature suggests that HEIs are grappling with how these HE-IC apprenticeship models can be developed, implemented and enacted in practice. The HE-IC barriers and incentives identified in relation to research collaborations appear to be applicable to collaboration on education programme design, delivery and assessment.

The literature reviewed has alluded to a form of learning that will allow the benefits of HE-IC to accrue to all stakeholders in the collaboration. Work based Learning (WBL) provides an opportunity for HEIs and Industry to work together and to mutually benefit from the strengths that both partners bring to the education collaboration. WBL is gaining popularity as HEIs are being encouraged to work more closely with industry, ultimately resulting in socio-economic gains. WBL is a key tool in the design of HEI-industry apprenticeship education model. A number of definitions of WBL were studied by the researcher but it is the simplicity and brevity of the definition provided by Boud & Solomon (2000, p 13) "Work is the curriculum" that most accurately describes this education approach. The key defining factor is that the curriculum originates in the workplace, with the content being 'negotiated' around the learner's work in the context of their role in their workplace. Apprenticeship is the purist form of work-based learning. An opportunity for HEIs to create closer alignment between graduate competency

development with industry needs (European Commission, 2017; Lester, 2014; OECD, 2017) is a renewed focus on apprenticeship (Richard Review UK, 2012; Apprenticeship Action Plan Ireland, 2016). The definition of Apprenticeship utilised by the Department of Education and Skills (2013; p7) clearly identifies the role of the workplace: "a programme of structured education and training which formally combines and alternates learning in the workplace with learning in an education or training centre. It is a dual system, a blended combination of on-the-job employer-based training and off-the-job training". The value of learning through doing has historically been recognised (Dewey,1938; Lewin,1947; Knowles,1950) and was further developed by Bandura and McClelland (1977), under the auspices of social learning theory. Others too have contributed to the debate (Eraut, Alderton, Cole, and Senker, 1998; Eraut, 2004; Grangeat & Gray, 2007; Hughes, 2004; Kyndt, Dochy and Nijs, 2009) with Raelin (2008) acknowledging that the apprenticeship education system is one of the oldest forms of WBL. Raelin (2008) goes on to suggest that this education system needs to be reinterpreted for the 21st century, reinforcing the value of this current study.

Across all jurisdictions it is acknowledged that apprenticeship education facilitates skills and knowledge development that benefits all stakeholders: apprentice, industry and the wider socio-economy. It also has the capacity to accommodate both male and female apprentices with varying levels of abilities in a broad range of occupations and sectors, as evidenced in countries such as Germany, Austria, Switzerland, Norway, Finland and Australia (Chankseliani et al; 2017). In the countries where apprenticeship makes the strongest contribution to the economy and to society, the apprenticeship model has the support of employers, unions and government (G20, 2012; International Labour Organization (ILO), 2012; L20, 2012). The apprenticeship education model most referenced in the literature, is the dual system model (Buchmann and Park, 2009) originating in Germany. This model combines a structured learning programme with simultaneous work experience, based on a national training curriculum which is updated regularly. In 2012, an overhaul was commissioned by the government which resulted in a more employer led model of apprenticeship education (Richard Review, 2012), acknowledging that apprenticeships have a major role to play in education and training and in filling industry skills gap deficits. Hogarth et al. (2012) conclude that while employers appreciate being involved in the design of these apprenticeship education

programmes, they are also concerned about the administrative responsibility to maintain regular contact with the multitude of stakeholders. A critical success factor is that HEI's infrastructures are agile, flexible and responsive regarding the design, delivery and assessment (Rowe, Perrin, and Wall; 2016), again reinforcing the value of the current study.

In Ireland, the basis of the current model of apprenticeship education was developed in the 1980s and was deployed in the 1990s as Ireland emerged from recession (Harvey and O'Connor, 2001). Until the recent establishment of the Apprenticeship Council (2014) and the launch of the Generation Apprenticeship initiative (2016), both the range and number of apprenticeships was significantly lower than the rest of Europe and was primarily confined to technical occupations. The Department of Education had ambitious targets for new apprenticeship registrations in both the craft and consortia-led apprenticeships by 2020, as documented in the National Skills Strategy 2025 and the Action Plan to Expand Apprenticeship and Traineeship in Ireland (2016-2020). The craft apprenticeship targets were met, but only approximately one third of the consortia-led apprenticeship targets achieved. The key to achieving this target is for employers to embrace the concept of the apprenticeship education models in non-traditional sectors, for prospective apprentices to value the WBL proposition and for the infrastructure to support all the stakeholders to successfully bring more apprenticeships to market.

This review has raised a number of issues that point towards the benefits of HEI and Industry collaboration. The focus on higher education apprenticeships in Ireland (against a backdrop of a global renewed interest in apprenticeship education models) provides an opportunity for HEIs and industry to collaborate. This proposed collaboration is not and will not be without its challenges. Challenges relating to cultural differences between HEI and industry, as well as factors relating to trust, flexibility, accountability and quality control, and lessons can be learned from HE-IC's in the areas of research are highlighted above, with applicable and transferable elements for this study. The literature points to a need for a clearer process for developing, implementing and enacting HE-IC apprenticeship education models, to enable HEIs and industry partners to collaborate effectively.

Having established the research overview to date, the following section seeks to increase understanding of higher education institutes (HEI) approach to apprenticeship education, in collaboration with industry.

RESEARCH EVOLUTION WITH THE CURRENT STUDY

More research is required on HE and Industry collaboration process specific to the apprenticeship context in Ireland. This research aims to contribute to the research gap by focusing on creating a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC). To this end a preliminary conceptual framework is presented at Fig. 1 below (See Paper 1 for further details). The preliminary conceptual framework is adapted from the work of Engestrom (1987).

Preliminary Conceptual Framework

Source: Adapted from Engestrom (1987)
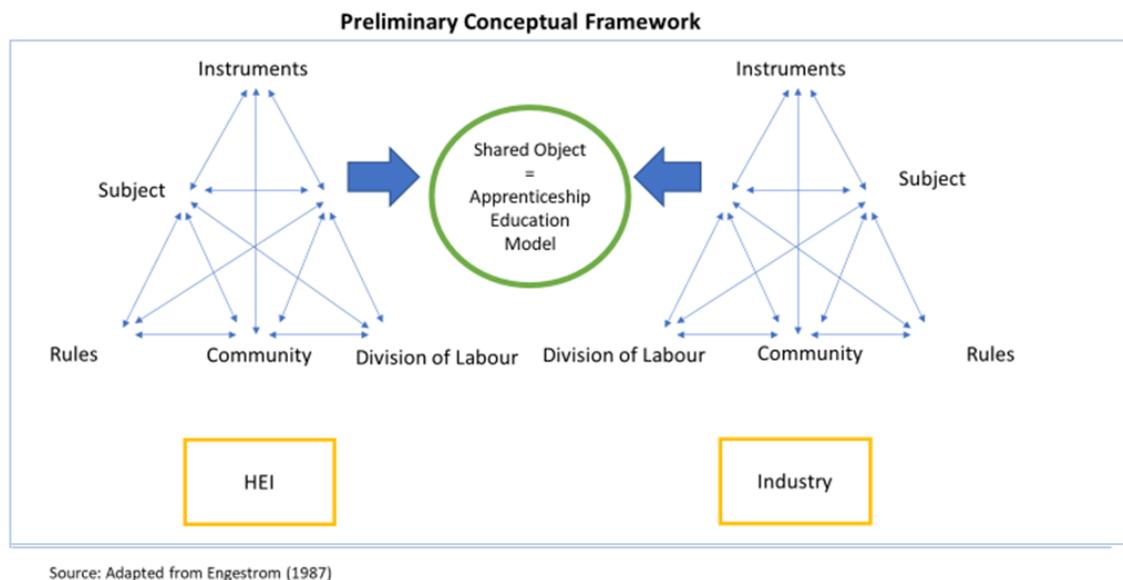
Figure 1: Preliminary Conceptual Framework

Figure 1 depicts "the key factors, concepts, or variables—and the presumed relationships among them" (Miles and Huberman, 1994) in this research study. It is constructed on the building blocks of the topics reviewed via the literature in the paper: HEI & Industry Collaboration, WBL and Apprenticeship education models, and the potential for apprenticeship education models to provide HEI-industry collaboration opportunity. The preliminary conceptual framework is based on Engestrom's (1987) proposition that the activity at the boundary between two activity systems (in this instance HEI and industry)

is the collaborative learning opportunity. Each activity system has its own tensions and contradictions, both within and between the interacting systems. The two activity systems negotiate to form new meanings that extend beyond the boundaries of both, and they generate a shared object of activity which in this study is the HE apprenticeship education model.

ORIGINS OF THE RESEARCH STUDY

This study is in partial fulfilment of the academic requirements of a Doctorate of Business Administration. When the researcher began this study she was Head of Professional Education and Training in a higher education college in Dublin. A central aspect of that role was the design and development of a range of new education programmes to meet industry needs. From 2013 core to that role, was the development of a suite of higher education apprenticeship programmes for the International Financial Services sector, in partnership with Financial Services Ireland. These apprenticeship programmes were the first of the new breed of higher education apprenticeships as prior to that, apprenticeships were the preserve of the further education providers (Apprenticeship Action Plan, 2016). As one of the first higher education providers to develop such an apprenticeship, the researcher worked closely with the national policy stakeholders and became a member of the International Financial Services consortium. The Chair of the Apprenticeship Council made a comment at the very early stages of the development of the new consortia led apprenticeships, that resonated with the researcher and also inspired her. The comment he made was "we are building the bridge at the same time as we walk over it". This statement was much quoted among the policy stakeholders and the early adopter consortia in a positive way, as everyone involved felt like pioneers approaching a new frontier.

It quickly became apparent to the researcher that as apprenticeships are industry led, the collaborative relationship between industry and the education provider was core to the success of individual apprenticeships and to the success of the national campaign. The researcher had the experience of the collaboration process, access to key participants, knowledge of where some of the pitfalls were and a desire to find solutions that potentially would be influenced by the international apprenticeship context and examples of industry and HEI collaboration in other contexts.

Two years into the DBA journey the researcher moved into a different role with the same organisation, that of Director of Development and External Engagement. This role broadened her remit and motivated her to think of how this study could be applied beyond the apprenticeship context to any industry and HEI collaboration. It has been recognised that higher education institute (HEI) and industry collaborations make essential socio-economic contributions to countries, regions and sectors (Ankrah and Al-Tabaa, 2015).

The research takes place against the backdrop of a post-secondary education system that has been undergoing reform that is continually evolving to meet the skills needs of the Irish economy. The post-2008 recession was the catalyst for innovation in programme design for the purposes of labour market activation. In a number of government reports, education was placed at the heart of the country's economic recovery (Loxley and Seery, 2012; Walsh 2014a, 2014b; HEA, 2017; DES, 2018). The seeds of the idea for the Apprenticeship Review in 2013, which reviewed the then existing apprenticeship system in Ireland, were sown at the end of recession and against the landscape of a European apprenticeship renaissance (International Labour Organisation, 2012; OECD, 2012; EU Commission, 2013).

The extension of the apprenticeship system in Ireland to include new sectors, combined with the new approach of consortia led apprenticeships and with apprenticeships now extending up to Masters level, served to create a very exciting opportunity for effective industry and higher education collaboration. The researcher had a strong desire to learn more about how best to add value to the apprenticeships her own organisation were involved in, but also to add value on a national level to the overall apprenticeship system. When selecting a topic for research for her DBA, this was the one the researcher presented and thankfully the DBA team and subsequently her supervisors saw its potential as a valid area for study.

In summary, the introduction of the new consortia led apprenticeships extending into new sectors with higher education level provision, in response to skills needs in the Irish economy and against a backdrop of a European apprenticeship renaissance has, the

researcher believes, created an opportunity for a study which will add value to the current and future apprenticeship landscape.

RESEARCH QUESTION AND OBJECTIVES

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC). The resultant research questions are:

(a) What is the process for developing, implementing and enacting a HE apprenticeship education model?
(b) How can this model serve as a mechanism for higher education institute (HEI) and industry collaboration?

The research questions are supported by the following research objectives:

(1) Develop a HE apprenticeship education model incorporating roles, responsibilities and accountabilities;
(2) Identify the internal and external organisational supports required to implement the HE apprenticeship education model, and
(3) Explore the key drivers for the successful enactment of the HE apprenticeship education model.

OVERVIEW OF THE RESEARCH PROCESS

This study engaged in a number of stages in pursuit of the research question and objectives (figure 2).
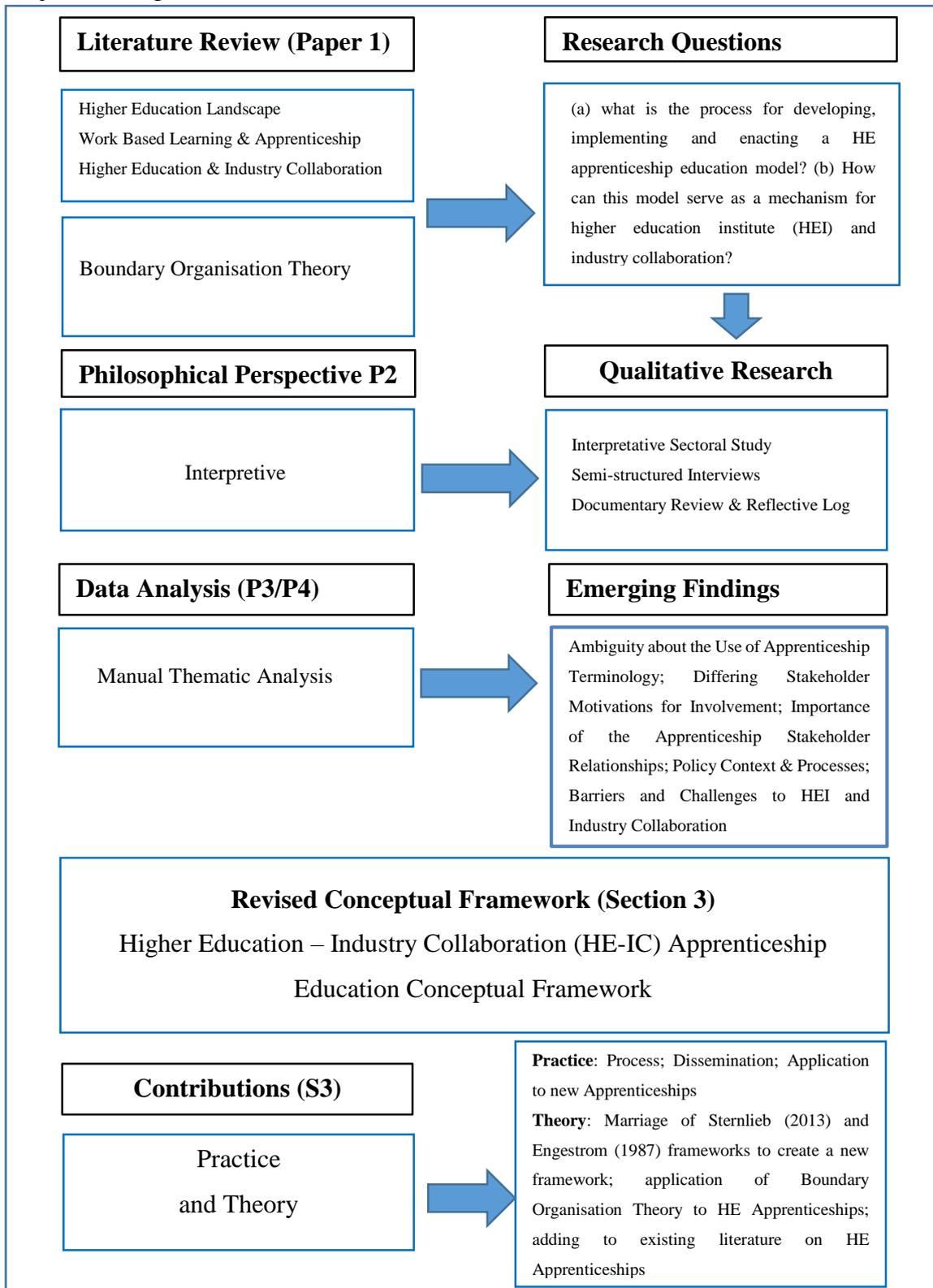
Figure 2 : The Research Process

THESIS STRUCTURE

This thesis consists of four sections and is structured as follows:

<u>Section One</u>: Research Overview and Study Context, provides an introduction to the research study aims and its objectives. It also provides an overview of the research process. It introduces the field of boundary organisation theory as the theoretical basis for the study, the context in which the study takes place and how it relates to the researcher's professional practice.

<u>Section Two</u>: The Cumulative Paper Series provides a bound copy of the four papers produced and examined during the Doctorate in Business Administration (DBA) programme alongside preface notes to explain the research revolution as it occurred between the four papers over the 2-year period:

1. Paper 1 is the conceptual paper and it explores the higher education, WBL, apprenticeship and HE-IC literature, including the preliminary conceptual framework and identifies the research gap. Having discussed alternative options, the paper identifies boundary organisation theory as the theoretical underpinning of the study. It illustrates a preliminary conceptual framework developed by the researcher through engagement with the relevant literature.

2. Paper 2 is the methodology paper and it sets out an interpretivist philosophical position for the study. It outlines the research approaches that were considered prior to a multiple case study as the optimum method. The case study design is elaborated upon, justifying the approach, how participants are to be accessed, and what techniques are to be used for data collection. Thematic analysis is proposed as the qualitative data analysis strategy to be adopted. Finally, ethical and other research consideration are addressed.

3. Paper 3 presents the research design, pilot research findings and main study data collection protocol, all of which are applied in this study. This process involved a number of stages: obtaining ethical approval for the study; development of a data collection plan; recruiting the research participants; conducting the semi-

structured interviews; developing the document protocol for the organisational document review; conducting a search for relevant documents to be reviewed; entries in the researcher's reflective log. This paper also includes the emergent themes resulting from a high level review of the initial findings. It concludes with the next steps required to complete the data collection and commence the data analysis.

4. Paper 4 presents the research findings. To assist with visualising the relationship between themes and subthemes in the context of the research questions, the researcher utilises thematic maps, which consolidates the findings in to five main themes. These themes are: Ambiguity about the Use of Apprenticeship Terminology, Differing Stakeholder Motivations for Involvement, Importance of the Apprenticeship Stakeholder Relationships, Policy Context & Processes, Barriers and Challenges to HEI and Industry Collaboration.

These papers were assessed at agreed intervals by the DBA examiners and each was recommended by the examination panel, based on an acceptable standard being reached. The papers document design and implementation of the research journey and the prefaces offer insights into how the research evolved and the application of examiners comments at each juncture.

Section Three: Discussion, Conclusion and Recommendations, begins with the articulation of key insights based on the research in interaction with the prevailing literature, leading to the presentation of the revised conceptual framework. This is followed by the research conclusions, resultant contributions to knowledge, recommendations for practitioners and researchers, research limitations and suggested areas of further research.

Section Four: Reflective Log extracts. Throughout the process the researcher maintained a reflective log. The reflective log provided a means for recording insights, reflecting on the research process and documenting the evolution of the researcher's thought processes which became a useful aid for theory development. Section Four offers a chronology of extracts exemplifying the research journey through the eyes of this researcher.

In keeping with the ethos of reflective practice (Brannick and Coghlan, 2007), I maintained a reflective log throughout the research. I have used my research log as a means of documenting the changes in directional thinking which evolved throughout the research period. The writing of the cumulative paper series was a reflective process in itself. Extracts from the reflective log are displayed in section four, representing pivotal points in the choices the researcher made. Each offers insight into the researcher's theoretical exploration and evolution as a practitioner- researcher during this research journey.

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Section 2

CUMULATIVE PAPER SERIES

PAPER 1

Student Name	Deirdre Giblin
Student No	20074655
Paper No	Paper 1 Conceptual Paper
Title of Paper	A PROCESS FOR ENACTING AN APPRENTICESHIP MODEL AS A MECHANISM FOR FACILITATING HIGHER EDUCATION AND INDUSTRY COLLABORATION
Date Submitted	15th October 2018

ABSTRACT

It has been recognised that higher education institute (HEI) and industry collaborations make essential socio-economic contributions to countries, regions and sectors. Work-based learning (WBL) is a recognised element of such collaborations, while higher education (HE) apprenticeships are a form of WBL that can work well to the benefit of both HEIs and industry if the required conditions are in place. While there is a large body of research in the areas of HEI and industry collaboration, WBL and apprenticeships, there is a lack of literature combining all three areas as a mechanism for facilitating HEI and industry collaboration in a contemporary Irish context. As the introduction of a HE apprenticeship education model is a key strategy of the Department of Education and Skills (2016), an opportunity exists to design a process for developing, implementing and enacting the HE apprenticeships model to serve as a mechanism for increased HEI and industry collaboration. A single case study approach is proposed as the most suitable method to design and evaluate this process, as it allows for the subjective and contextual experience of the various stakeholders to be incorporated. The contribution of this research will be to enhance understanding as to how a HE apprenticeships model can facilitate collaboration between HEIs and industry.

KEYWORDS

Paper 1: CONCEPTUAL PAPER

INTRODUCTION

This paper explores the literature pertaining to higher education institutes (HEI) approach to apprenticeship education in liaison with industry. The recent introduction of new higher education apprenticeship education models in Ireland has created an opportunity for a new form of collaboration between HEIs and industry (Apprenticeship Action Plan, 2016). To understand the changing institutional boundaries of academia and industry and the "blurring" of these boundaries (Reale & Primeri, 2015) in light of these changes, the underpinning theory selected to guide this study is Boundary Organisation theory (Guston, 2001). Within this realm, the paper reviews HEI-Industry collaborative activity with a view to identifying the principles applicable to collaboration in apprenticeship education design, development, accreditation and delivery (Barbolla and Corredera, 2009; Gulbrandsen et al., 2011; Perkmann et al., 2011) in an Irish context. This paper describes the key elements of HEI-industry apprenticeship education collaboration applying the principles of Boundary Organisation Theory. Research questions ask: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for HEI and industry collaboration? A preliminary Conceptual Framework is presented which identifies the key concepts and the relationships among these concepts. The anticipated contribution to both theory and practice is referenced, as are the proposed next steps in this research study.

HIGHER EDUCATION LANDSCAPE AND POLICY OVERVIEW

Historically, Ireland's approach to Higher Education policy has had a strong emphasis on the vocational nature of higher education with outcomes linked to labour market needs (Clancy, 1989). The Investment in Education Report (1965) represented a paradigm shift in education policy in Ireland. By the late 1960s policy formulation was influenced by human capital theory, advocating the investment in the development of people and its positive impact on the economy (O'Sullivan, 2005; Walsh and Loxley, 2015). Ireland's entry to the European Economic Community in 1973, among other factors, also

influenced the establishment of the Regional Technical Colleges [1] and the National Institutes of Higher Education [2] (1969-1997), each of which made a significant contribution to the Irish HEI landscape (Walsh, 2009). These new educational institutions were established to meet the needs of a rapidly expanding industrial economy (Clancy, 1989; Walsh, 2014a) encouraging greater ties between HEIs and industry in the delivery of labour market needs.

Fast forward to 2000, and the adoption of the Lisbon Agenda[3], whose objective has been to make Europe 'the world's most competitive and dynamic knowledge-based economy and society' as articulated in the Presidency Conclusions of the Lisbon European Council (Lisbon European Council, 2000). Consolidated by the OECD review of Ireland's higher education system (OECD, 2004), various government reports have recommended how this objective should be materialised in the Irish context (Hunt, 2011; Cassells, 2016), though these documents have been criticised for being "more a synthesis of existing policies and previous expert group reports than a manifesto for radical transformation of Irish higher education" (Walsh & Loxley, 2015:1128). The Action Plan to expand Apprenticeship and Traineeship in Ireland (2016-2020) has addressed some of the gaps in HE apprenticeship offerings, propelling the need for, and value of the current study. Figure 1 summarises the key higher education milestones in the Irish context leading to the introduction of the apprenticeship action plan.

[1] The Regional Technical Colleges evolved into Institutes of Technologies currently going through a merger process and anticipated to become Technological Universities (2019-21)
[2] The National Institutes of Higher Education evolved into Universities
[3] An action and development plan devised in 2000 for the economy of Europe

Figure 1: Key Milestones in HE in Ireland from 1962 to 2018

In recent years, a gradual shift from the knowledge economy to a performance economy (Sutin, 2018) has 'seismic and potentially tectonic' (Staley and Trinkle, 2011) implications for HE globally. Factors suggesting such a change include: increased global labour mobility; changing needs and profiles of students; a refocus on middle skill jobs; the need for abstract reasoning and specialised skills among graduates; a re-emphasis on lifelong learning and a shift in the perceived value of HEIs (Staley and Trinkle, 2011; Immerwahr, Johnson and Gasbarra, 2008). Each of these criteria have an impact on the provision of higher education.

HIGHER EDUCATION IN IRELAND AND THE PERFORMANCE ECONOMY

The government of Ireland and its policy makers have put HE at the heart of its economic development plans (Loxley and Seery, 2012; Walsh 2015; HEA, 2017; DES, 2018) in consideration of the emerging performance economy underpinned by the aforementioned current and future skill requirements. Clancy (2015) is critical of the actions of policy makers to transform HEIs into organisations that deliver more directly on national development objectives believing that they are overly focussed on current labour market needs, yet acknowledges that this utilitarian type of model is a 'globally favoured model':

Higher education not only has become responsible for the development of human capital but is positioned at the heart of the 'knowledge triangle' of education, research, and innovation designed to improve competitiveness and economic growth' (pg: 2)

An educated workforce is a key national asset and a source of competitive advantage (Porter, 1990) however if the Department of Education and Skills is to realise its intention 'to make Ireland the best education and training system in Europe within a decade' (Action Plan for Education, 2018) the HE system must produce both graduates and life-long learners that will fulfil the skills and knowledge needs of a rapidly changing labour market (OECD 2017; World Bank 2017). Anecdotal evidence suggests that Ireland has a high standard and quality of higher education, however a 6.5% participation rate among adult learners (25-64 years) falls well below the EU average of 10.7% (EU, 2015). Similar differential rates are reported for those learners in employment referred to as part time learners in this paper. To address these learner participation anomalies HEIs recognise that they must be outward facing and willing to engage with industry in the delivery of training, development and education programmes that meet the needs of the evolving labour market.

A number of HEI-Industry partnerships do exist (Regional Skills Fora Network, 2018[4]; Skillnets Ireland, 2018[5]; Springboard+ 2018[6]) however key HE sector reports note that HEIs need to be more proactive and dynamic in their collaboration with industry (Hunt 2011; Cassells 2016) to help bring adult and part-time learner participation into line with EU and OECD averages. Current government policy is supportive of such learner initiatives which include, for example, increasing participation in the National Skills Strategy (2025), promoting flexible access to HE, Springboard access and apprenticeships models of education. In addition, continuing technological advances in areas such as Artificial Intelligence, Robotics and Automation, together with the enactment of new

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[4] The Regional Skills Fora were established as part of the Government's National Skills Strategy to facilitate employers and education and training providers to work together to respond to the skills needs of their regions

[5] Skillnet Ireland is the National Agency responsible for the promotion of workforce learning in Ireland

[6] Springboard+ is co-funded by the Irish Government and the European Social Fund as an employability, inclusion and learning measure

policies will have specific impacts on the skills that graduates of the future will require (West, 2015). However, as with many EU and national policies, these are primarily top-down government led (Trowler, 2002) with subsequent research being focused on the response of policy recipients and its implementation (Bourke, Mentis & O'Neill, 2013; Ensor, 2015). Caution must be exercised here as it is the enactment of education policy that will garner anticipated results. Is the solution to these tensions to be found in the collaboration between HEI's and industry when delivering apprenticeship models of adult learning and education?

LEARNING FROM HEI-INDUSTRY RESEARCH COLLABORATIONS

Research consistently presents a need for HEIs to establish mutually beneficial partnerships with industry so as to remain at the cutting edge of the very fast pace of change happening in the macro environment (Perkmann et al., 2011; Ankrah and Al-Tabaa, 2015). These collaborative relationships have been found to positively impact management and organisation of both parties (Barnes et al., 2002; Siegel Waldman and Link, 2003), contributing mutual economic (Lehmann & Menter, 2015), institutional (Liew et al, 2013) and social (Ankrah & Al-Tabaa, 2015) gains resulting from the HEI-industry engagement. However, these benefits can only be gleaned when both parties negotiate a balanced socio-economic approach to collaboration, where the learner remains at the heart of the collaborative activity.

The majority of the higher education-industry collaboration (HE-IC) literature is specific to research collaborations and not directly in the area of collaboration on apprenticeship education models and related programme design, development and delivery, yet there appears to be significant transferable concepts and principles that are worthy of review and consideration. In synthesising previous literature in the field of HE-IC, Ankrah and Al-Tabaa (2015) illuminated the motivations for HE-IC to include - necessity; reciprocity; efficiency; stability; legitimacy and asymmetry which can combine in different ways in different HE-IC contexts. Successful collaboration is dependent on a number of factors, which occur at each phase of the collaborative activity in HE-IC (Plewa et al., 2015). Figure 2 exhibits these phases as: agreeing to work together (pre-linkage), a contract (establishment), delivery of the project (engagement), ongoing partnership (advancement) and potential future cooperation (latent phase).
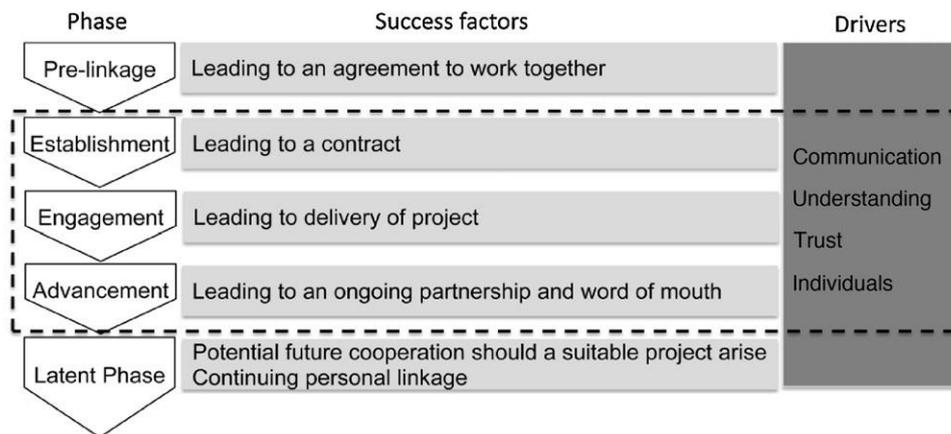
Source: Plewa et al, 2015

Figure 2: HEI-Industry Collaboration Phases

Figure 2 depicts the drivers of successful HE-IC as communication, understanding, and trust in each other. The wider HE-IC literature focuses on the importance of trust in HE-ICs (Schilke & Cook, 2013; Vanneste, Puranam and Kretschmer, 2014) as it is seen as a key variable in determining successful collaboration outcomes. This research is especially focused on how trust is based on repeated patterns of reciprocal behaviours and interactions over time (Ring, 1996; Levin et al; 2006; Poppo, 2013) leading to an enhanced mutual understanding by all partners (Plewa et al., 2015).

However, not all HE-ICs are a success. Liew et al. (2013) cited a number of studies that suggest only a fifth of HE-ICs have resulted in industry applicable outcomes and conclude that one of the key contributing factors is the 'Outcome-Impact Gap' where both the collaborating HEI and industry partner(s) have different sets of expectations and requirements. These findings suggest phase 1 (figure 2, pre-linkage) is not always pursued in HE-ICs to the detriment of successful collaborative activity. In addition, different HE-ICs have different Key Performance Indicators (KPI), which ideally should be mutually agreed with the collaborating partners. Liew et al, (2013) concluded that a strong advocate and working group are necessary for a successful HE-IC outcome, reinforcing the balance sought in Plewa et al.'s (2015) framework as exhibited in figure 1.1. Lehman and Menter (2015) extended collaboration KPIs to incorporate how regional wealth can be created by HE-ICs and concluded that HEIs and regional wealth are closely interlinked by following

a 'co-evolutionary path' with a strong focus on the role of local government and how they work with HEI managers.

Many of the identified challenges relate to a misalignment of partner expectations and requirements, aggravated by the absence of mutually agreed KPIs. Rajala and Vadi's (2017) study highlighted the use of the concept of boundary crossing from organisational theory as a mechanism that assists in providing insights into HE-ICs of varying success, a view supported by Santos and Eisenhardt (2005) and Mulkeen et al. (2017) in terms of multiple stakeholder expectations. In moving forward to look more specifically at HE-IC through an apprenticeship education lens there is relevancy in Plewa et al.'s (2015) representation of HE-IC Phases at Figure 2 that will bring value to the researcher's objective to propose a HE-IC apprenticeship education model.

HE-IC APPRENTICESHIP EDUCATION MODEL DESIGN

Stated above, the literature on HEI and industry collaboration has historically been focused on research collaborations. This is partly explained by tradition, as the majority of apprenticeship education provision has been provided by the further education sector (Anderson, Bravenboer and Hemsworth, 2012). In the UK context there has been very little incentive for the HEIs to get involved in this form of education historically due to education policy directing apprenticeship education into vocational education environments. This perspective is changing with the advent of apprenticeship education policies, a reality emulated in the Irish context (Action Plan to expand Apprenticeship and Traineeship in Ireland, 2016-2020). Concurring with this HE-IC evolution, a UK government review of HE-ICs stated:

> Higher-level apprenticeships and work-based pathways have the potential to address the needs of employers and meet the aspirations of individuals. These could be developed to provide a highly valued alternative for school leavers who wish to combine work with gaining a higher qualification. Work-based pathways to higher qualifications have the potential to be a prominent feature of the HE landscape, addressing some of the long-term skills needs of employers and the aspirations of individuals (Wilson, 2012, p. 46).

In recognition of this shift in policy, the recent body of work in this area centres on the collaboration between HEIs and industry in relation to the co-design of apprenticeship education models (Bravenboer, 2016; Carter, 2010; King et al,2016; Rowe, Perrin and Wall, 2016). The advent of these models brought with them a new approach to multi-stakeholder collaboration to produce apprenticeship education models that fulfil all stakeholder needs (Chankseliani and Relly, 2015; Lambert, 2016; Saraswat, 2016). This new approach seeks to more deeply engage the employer in the programme design process which challenges the historically preserved role of HEIs as primary masters of programme design. Evidence from the literature suggests that HEIs are grappling with how these HE-IC apprenticeship models can be developed, implemented and enacted in practice.

Mulkeen et al (2017) identified several themes as a result of their interviews with stakeholder representatives involved in HEI-Industry collaboration activity focused on apprenticeship programme development. They found a consistent lack of clarity in relation to ownership of all aspects of apprenticeship programme including - programme quality; the need for higher levels of employer engagement; requirement for HEIs to improve processes and levels of support when engaging with industry; the level and depth of rethinking of traditional boundaries required; and a focus on workplace mentorship. Their study cited the work of Bravenboer (2016), a researcher at the forefront of the development of the HEI apprenticeship education models. Bravenboer has been consistent in his view that HEIs have a pivotal role to play in the co-design of apprenticeship programmes (Anderson, Bravenboer and Hemsworth, 2012; Bravenboer, 2016). However, Anderson, Bravenboer and Hemsworth (2012) observed that very few universities – only two – were involved in the first round of new apprenticeship development in the UK in 2012 and that none participated in the second round. They argue that 'universities can bring uniquely valuable strengths to the development of higher apprenticeship programmes' (pg. 240) and present a case study of the development of a new HEI apprenticeship education programme in construction operations management. Their research identifies the barriers to HEIs engaging in co-creating programmes. They concur with those identified by Mulkeen et al (2017) with the addition of: challenge of the apprenticeship education programmes needing to deliver on knowledge and competency learning outcomes; the need to view the acquisition of knowledge through a WBL lens from a HEI perspective and further incentives needed for

employer engagement. Of interest to the current study is the inclusion of a WBL lens, creating a means through which HE-IC can inform the apprenticeship education model in practice.

BARRIERS AND INCENTIVES TO HEI INDUSTRY COLLABORATION

The HE-IC barriers and incentives identified in relation to research collaborations appear to be applicable to collaboration on education programme design, delivery and assessment. Depicted below is a tabulated representation of the findings from Ryan, Wafer & Fitzgerald (2008) whose study identified barriers and incentives to HE-IC (table 1)

Industry View Barriers	HEI View Barriers	Industry View Incentives	HEI View Incentives
HE process and governance at odds with those required by industry; Poor HE process for industry interaction, not supported by management; Complex negotiations and time-consuming; Cultural differences, (e.g. industry deadlines versus HE timescales)	Lack of HE support – policy, ambiguity, bureaucratic approach to industry engagement, not supportive	Outsourcing education and training needs or expanding R&D, human capital requirements	Leveraging funds for research, enhancing student numbers
HE bureaucracy – perceived to be slow, difficult to navigate	Impediment to career progression	Involvement in 'blue sky' research, allowing best mix of applied and blue sky element	Exposure of students to industry and possible employment
Limited appropriate state supports	Time pressure – already heavily committed, particularly on teaching	Access to funding mechanisms	Obligation to society/development of jobs and economy

Confidentiality issues and lack of secure facilities	Constraints on publications, IP challenges	Leverage of (co-created) knowledge	Relevance – real-world technologies, experiences, enriches teaching
Difficulty of identifying appropriate experts	Punishing – large projects require more internal staff resources, often creating competition for internal resources	Access to specialised equipment, expertise	Personal gain – grants for students, patent potential or travel grants
Easy availability of competitive services outside Ireland	Lack of understanding of industry	Extended networking opportunities	Leveraging funds for research

Adapted from: Ryan, Wafer and Fitzgerald, 2008

Table 1: Barriers and incentives to promote HEI-Industry collaboration

In support of the documented HE-IC incentives within table 1, the socio-economic benefits of HEI-IC have been well researched (Ankrah et al, 2013; Bruneel, D'Esteb and Saltera, 2017; Guerrero et al, 2015; Gustavsson, Nuur and Söderlind, 2016) and are echoed in national policy documents (National Competitiveness Council, 2016). The common denominators of the impact of successful HE-ICs have been identified as creating competencies to tackle social challenges, driving national and regional economic growth, improving the national and regional climate for innovation, improving work readiness of graduates, enhancing industry related elements of curricula, facilitating work experience opportunities for students , positively impacting life- long learning opportunities for employees of industry partners and providing access to mutually beneficial funding opportunities.

The literature reviewed thus far has alluded to a form of learning that will allow the benefits of HIC to accrue to all stakeholders in the collaboration. Work based Learning (WBL) provides an opportunity for HEIs and Industry to work together and to mutually benefit from the strengths that both partners bring to the education collaboration. WBL is gaining popularity as HEIs are being encouraged to work more closely with industry,

affording each party access to the incentives exhibited in table 1.1, ultimately resulting in socio-economic gains. The current study assumes that WBL is a key tool in the design of HEI-industry apprenticeship education model.

WORK BASED LEARNING AND APPRENTICESHIP EDUCATION MODELS

WBL has been defined by Boud, Solomon and Symes (2001) as "being used to describe a class of university programmes that bring together universities and work organizations to create new learning opportunities in workplaces" (pg. 4). Others too have offered alternative definitions, with the agreed commonality being that the learning happens at work while doing one's job and results in development across a range of knowledge, skills and behaviours (Billett, 2004; Marsick & Watkins, 1992; Wielenga-Meijer, 2010). WBL programmes share six characteristics (Billett, 2004; Boud and Solomon, 2000; Marsick and Watkins, 1992; Wielenga-Meijer, 2010):

- a partnership between an external organisation and an educational institution is specifically established to foster learning
- learners involved are employees of, or are in some contractual relationship with an external organisation
- the programme derives from the needs of the workplace and the learner rather than being controlled by the disciplinary curriculum because work is the curriculum
- the start of the programme and educational level is established after learners have engaged in a process of recognition of competencies and identification of learning needs rather than relying on educational qualifications
- a major element of WBL is that learning projects are undertaken in the workplace;
- the educational institution assesses the learning outcomes of the negotiated programmes

"Work is the curriculum" (Boud & Solomon, 2000:13) is a very simplistic view of this education approach, but it is the essence of WBL. It is what sets it apart in that the content of the curriculum originates in the workplace and the detail of the content is 'negotiated' around the learner's work in and of their workplace. The emphasis of WBL is, as the

name implies, on learning not on teaching (Chapman and Howkins, 2003). Learning is happening in a work context and happens while the learner is conducting his/her job (Marsick and Watkins, 1992). It is assumed that the learners acquire new skills, knowledge and competencies while engaging in work-based activities and interactions (Wielenga-Meijer, 2010; Billett, 2014) guided by HEIs. Applying these principles, WBL integrates work-based learning with HE quality and accreditation processes (Flanagan et al. 2000) while developing life-long learning skills encouraging learners to become ultimately responsible for their own learning (McKee and Burton, 2005).

Apprenticeship is an acknowledged form of work-based learning. As alluded to earlier, in educating the future workforce, it has been widely acknowledged HEIs need to improve alignment of graduate competency development with industry needs (European Commission, 2017; Lester, 2014; OECD, 2017). One such means is through a renewed focus on apprenticeship education programmes delivered by HEIs (Richard Review UK, 2012; Apprenticeship Action Plan Ireland, 2016), in assumed collaboration with industry. Under this mantel, apprenticeship is defined as a "programme of structured education and training which formally combines and alternates learning in the workplace with learning in an education or training centre. It is a dual system, a blended combination of on-the-job employer-based training and off-the-job training" (Department of Education and Skills (2013: p7).

Neither WBL nor apprenticeship are new phenomena. Dewey (1938), Lewin (1947) and Knowles (1950) all acknowledged the value of learning through doing, a concept further developed by Bandura and McClelland (1977) under the auspices of social learning theory. Others too have contributed to the debate (Eraut, Alderton, Cole, and Senker, 1998; Eraut, 2004; Grangeat & Gray, 2007; Hughes, 2004; Kyndt, Dochy and Nijs, 2009) with Raelin (2008) acknowledging that the apprenticeship education system is one of the oldest forms of WBL. Raelin (2008) goes on to suggest that this education system needs to be reinterpreted for the 21st century, reinforcing the value of this current study. As apprenticeship education models expand beyond the traditional sectors such as carpentry, plumbing and bricklaying for example, Raelin (2008) cautions about the need to build in more development potential, effort recognition, and reward for cognitive and implicit knowledge in participating apprentices. These views concur with Billett (1996), Ellström

(2001) and Ashton (2004), reinforcing the need to create learning processes that are dynamic enough to deal with the constant change of the working environment. Raelin's (2008) study focuses on what he calls the 'meta-competence' of learning to learn and advises that the weighting of apprenticeship WBL programmes should be towards the principles of learning to learn as opposed to role specific skills and knowledge (ibid). He also advocates that for WBL to be successful the workplace needs to be recognised as the primary place of learning and that the role of the teacher and student are 'reimagined' to take consideration of this. In WBL and specifically in apprenticeship education, many people fulfil elements of the teacher's role – line manager, peer, HEI and/or industry subject matter expert, heads of functions, HEI/industry mentors, industry trainers to name but a few.

A further debate in this area is the current global skills shortage and how this may be overcome through education and training (Ireland's National Skills Strategy, 2025; OECD Assessing and Anticipating Changing Skills Needs, 2017; Action Plan to Expand Apprenticeship and Apprenticeship 2016-2020). Many have suggested that HEIs are producing graduates that are detached from the needs of the workplace (Eraut 2004, Stenstrom 2006, Tynjala, 2006, Walsh, 2009) a view reinforced by the recent OECD Review of Higher Education in Ireland (2014) and the National Strategy for Higher Education to 2030. WBL, and more particularly apprenticeship education models, may bridge that gap (Raelin, 2008).

ALTERNATIVE APPROACHES TO WBL & APPRENTICESHIP ACCREDITATION

WBL has not been without its critics. Marsick and Volpe (1999) aligned it with 'informal learning' and concluded that it was too unstructured and informal to be of value. One suggestion to help alleviate these criticisms has been to formally accredit WBL (Dealtry, 2003). Accreditation in this regard has been defined as:

> The process by which an awarding body evaluates a programme of study (learning) to formally recognise the achievement of specified learning outcomes at a particular level (Prince, 2003)

Dealtry (2003), however, cautioned against being overly prescriptive in any 'career-based accreditation system'. Prince (2003) further suggested that the purpose of accreditation was not to measure inputs but to measure outputs through a quality approved assessment process.

The OECD and the European Commission are actively promoting apprenticeship education models and work-based learning initiatives, based on evidence collected by both entities on the positive impact of industry and education partnerships through the application of these collaborative education approaches in practice. Even taking into account the variables across different jurisdictions, a 2013 European Commission report concluded that apprenticeships result in better employment outcomes for the under 24s in each studied country. This is corroborated by employment outcomes presented at a G20-OECD-EC conference in 2014 with employment outcomes of 80-95% for the United States, Brazil and Japan. A Barclays (2016) report in the UK stated that there is very little difference between employment outcomes and lifetime earnings of apprentices and HEI graduates, reinforcing the socio-economic value of WBL on individual learners.

Across all jurisdictions it is acknowledged that apprenticeship education facilitates skills and knowledge development that benefits all stakeholders: apprentice, industry and the wider socio-economy. It also has the capacity to accommodate both male and female apprentices with varying levels of abilities in a broad range of occupations and sectors as evidenced in countries such as Germany, Austria, Switzerland, Norway, Finland and Australia (Chankseliani et al; 2017). In the countries where apprenticeship makes the strongest contribution to the economy and to society, the apprenticeship model has the support of employers, unions and government (G20, 2012; International Labour Organization (ILO), 2012; L20, 2012).

The EU Guide on Apprenticeships for Policy Planners and Practitioners (2013 pg. 11-26) identified a number of key success factors for the successful operation of apprenticeships:

- Robust Quality Assurance

- High-quality Guidance, Support and Mentoring of Apprentices

- Appropriate Matching of Apprentice to Host Organisation (Company)

- Combination of Theoretical, School-Based Training with Practical Work-Related Experience

- Existence of an Apprenticeship/Traineeship Agreement

- Certification of Acquired Knowledge, Skills and Competences

- Tailored and Flexible Approaches to the Needs of Vulnerable Young People

The apprenticeship education model most referenced in the literature is the dual system model (Buchmann and Park, 2009) originating in Germany. This model combines a structured learning programme with simultaneous work experience, based on a national training curriculum which is updated regularly. While traditionally popular as a professional career route, there are indications that Germany is beginning to suffer from some of the same problems as North America in terms of the mismatch between supply and demand for apprenticeship training (Zwick, 2007). In the UK a number of reconfigurations of apprenticeships have been attempted by successive governments from the mid 1990's in pursuit of this balance.

By the early 2000s apprenticeships accounted for 20% of youth employment in the UK (Fuller and Unwin, 2003) but remained mostly confined to traditional trades (Brockmann et al, 2010). In 2012, an overhaul was commissioned by the government which resulted in a more employer led model of apprenticeship education (Richard Review, 2012), acknowledging that apprenticeships have a major role to play in education and training and in filling industry skills gap deficits. Hogarth et al. (2012) conclude that while employers appreciate being involved in the design of these apprenticeship education programmes, they are also concerned about the administrative responsibility to maintain regular contact with the multitude of stakeholders. A critical success factor is that HEI's infrastructures are agile, flexible and responsive regarding the design, delivery and assessment (Rowe, Perrin, and Wall; 2016), reinforcing the value of the current study.

VISION OF APPRENTICESHIP EDUCATION FOR IRELAND

In Ireland, the basis of the current model of apprenticeship education was developed in the 1980s and was deployed in the 1990s as Ireland emerged from recession (Harvey and

O'Connor, 2001). Until the recent establishment of the Apprenticeship Council (2014) and the launch of the Generation Apprenticeship initiative (2016), both the range and number of apprenticeships was significantly lower than the rest of Europe and was primarily confined to technical occupations. The Department of Education has an ambitious target of 31,000 cumulative new apprenticeship registrations by 2020 as documented in the National Skills Strategy 2025. The key to achieving this target is for employers to embrace the concept of the apprenticeship education models in non-traditional sectors, for prospective apprentices to value the WBL proposition and for the infrastructure to support all the stakeholders to successfully bring more apprenticeships to market. There is a clear expectation that broadening the range of apprenticeships on offer is expected to address the high rates of youth unemployment as the unemployment rate for 20 – 34 year-olds is significantly higher (24%) than the EU average (16.5%) (Cedefop, 2014).

HIGHER EDUCATION APPRENTICESHIPS AS A COLLABORATION OPPORTUNITY?

This paper has raised a number of issues that point towards the benefits of HEI and Industry collaboration. The focus on higher education apprenticeships in Ireland (against a backdrop of a global renewed interest in apprenticeship education models) provides an opportunity for HEIs and industry to collaborate. This proposed collaboration is not and will not be without its challenges, as acknowledged in this paper. Challenges relating to cultural differences between HEI and industry, as well as factors relating to trust, flexibility, accountability and quality control, and lessons can be learned from HE-IC's in the areas of research are highlighted above, with applicable and transferable elements for this study. The literature points to a need for a clearer process for developing, implementing and enacting HE-IC apprenticeship education models to enable HEIs and industry partners to collaborate effectively. To address this need the resultant research questions that this study aims to answer are:

(a) What is the process for developing, implementing and enacting a HE apprenticeship education model?
(b) How can this model serve as a mechanism for HEI and industry collaboration?

(c) Are the new higher education apprenticeships a mechanism for tangible HEI and industry collaboration?

Guiding this study is the following preliminary conceptual framework, drawn from the preceding literature review (figure 3).

Preliminary Conceptual Framework

Source: Adapted from Engestrom (1987)
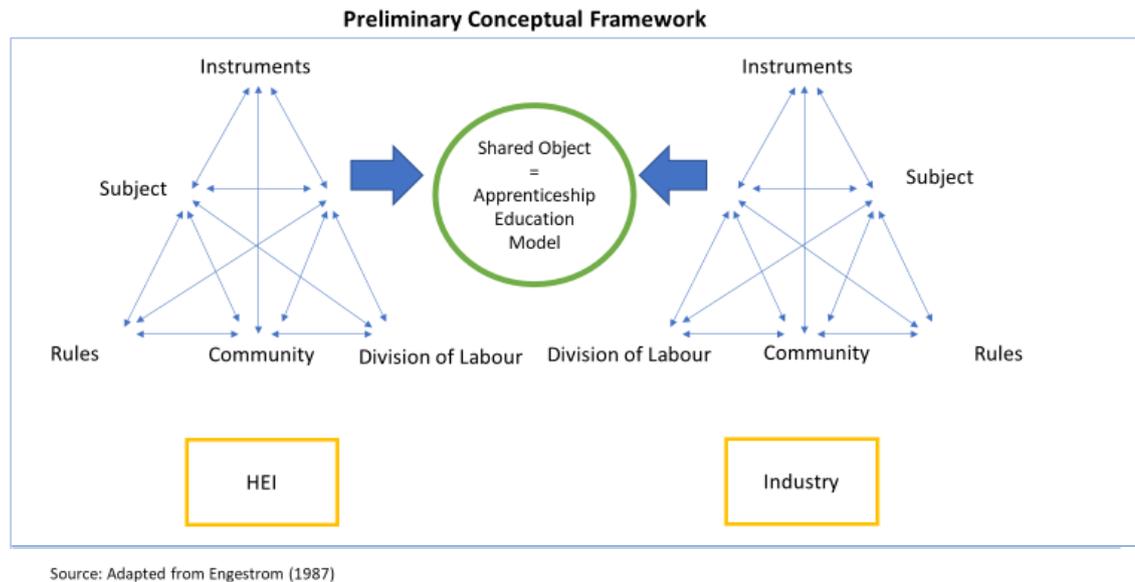
Figure 3: HE-IC Apprenticeship Education *Conceptual Framework*

Figure 3 depicts "the key factors, concepts, or variables—and the presumed relationships among them" (Miles and Huberman, 1994) in this research study. It is constructed on the building blocks of the topics reviewed via the literature in the paper: HEI & Industry Collaboration, WBL and Apprenticeship education models, and the potential for apprenticeship education models to provide HEI-industry collaboration opportunity. The preliminary conceptual framework is based on Engestrom's (1987) proposition that the activity at the boundary between two activity systems (in this instance HEI and industry) is the collaborative learning opportunity. Each activity system has its own tensions and contradictions both within and between the interacting systems. The two activity systems negotiate to form new meanings that extend beyond the boundaries of both and they generate a shared object of activity which in this study is the HE apprenticeship education model.

BOUNDARY ORGANISATION THEORY AS A BASIS FOR DISCOVERY

As highlighted through this paper, global higher education is changing rapidly. The literature evidences the complexity of the higher education environment for a multitude of reasons from funding sources through to increased accountability in the delivery of societal and economic contributions. Prysor and Henley (2017) describe as a "perfect storm" the external challenges faced by HEIs and say that this has resulted in "increased relevance of the traditional understanding of the defining boundaries of a university". With reference to the work of Cross, Ernst and Pasmore (2013) and Lee, Magellan Horth and Ernst (2014). Prysor and Henley (2017) discuss the importance of psychological and emotional boundaries as well as horizontal, vertical, cultural, and geographical boundaries when engaging with the challenges and opportunities affiliate to this new environment. Fumasoli and Huisman (2013) and Reale and Primeri (2015) reinforce how the changes affecting HEIs impact on the boundaries between them and other entities, from required new alliances through to funding becoming more competitive. Today's HEIs interact at their boundaries with many different organisations (Klerkx and Leeuwis, 2008) as a result. This leads the researcher to believe that Boundary Organisation Theory (BOT) is an appropriate basis on which to build the current study.

There are many definitions of Boundary Organisations and Boundary Organisation Theory from authors such as Franks (2010), Santos and Eisenhardt (2005) and Kozakiewicz and Cyfert (2012) among others. This researcher has chosen the definition below of Boundary Organisations from Guston et al (2001) for the purposes of this study:

> Boundary organizations are institutions that straddle the shifting divide between politics and science. They draw their incentives from and produce outputs for principals in both domains, and they internalize the provisional and ambiguous character of the distinctions between these domains. It is hypothesized that the presence of boundary organizations facilitates the transfer of usable knowledge between science and policy.

And the definition of Boundary Organisation Theory from Franks (2010):

> Boundary organisation theory is based on studies of organisations that are responsible for negotiating resolutions to often long-standing, complex problems and involve multiple stakeholders who have divergent interests. It profiles the structure, organisation and working practices of these successful negotiating organisations.

Boundary Organisation Theory has been applied in a number of diverse sectors and has been utilised particularly prevalently in the area of environmental policy and the sciences. More recently, the theory has been used as a framework to understand the changing institutional boundaries of academia and industry and the "blurring" of these boundaries (Reale & Primeri, 2015) reinforcing its applicability in the current research context.

Application of BOT in a Higher Education Context

In relation to BOT's application in higher education Emad and Roth (2008; pg. 3) discuss the "conflicts and contradictions between policy-maker objectives and end-user implementation". In their case study on vocational education reform in the marine sector they use a BOT framework to "remove tensions and challenges for policy implementation". They focus in on the concept of "boundary objects" as a tool to both analyse the policy and to "propose a solution to remove the contradictions" that they have detected in the system.

Parker and Crona (2012) take BOT and reconceptualise it within what they see as the "current university environment". They explain how BOT is relevant in the specific HE environment and then apply BOT to their specific case study of Arizona State University's Decision Centre for a Desert City and its stakeholders. One of the objectives of the study was to demonstrate how the effective use of BOT facilitates collaboration in HEI environments when dealing with stakeholders with divergent views and competing priorities. Parker and Crona propose a variation on BOT which they call the 'Landscape of Tensions Model'. They concluded that it was unrealistic to expect that boundary management could achieve balance between science and policy. Instead they proposed that boundary management should be seen as an ongoing dynamic process to reconcile the multiple tensions of the stakeholders. This model takes a stakeholder perspective and

is therefore more realistic in recognising that stability is only ever achieved temporarily and in relation to differing specific variables.

Taking BOT a step further Rajalo and Vadi (2017) focus on the specific importance of boundary spanning in HE-ICs. They propose in their study that there is insufficient information available as to how HE-ICs are managed which significantly impacts the success of the collaboration. A further focus of their study is the recognition of innovation as both a process and an outcome and the unit of analysis being identified as the innovation collaboration process. Much of the literature on HE-ICs concentrates on striving to understand how some collaborations thrive and why so many fail.

Original Contribution by using Boundary Organisation Theory

As referenced above BOT has been utilised in higher education contexts but there is very little evidence of BOT being applied explicitly to providing a process for developing, implementing and enacting HE apprenticeship education models. At the heart of the proposed research questions are the challenges and opportunities or perceived challenges of the integration of academia and industry to create a successful strategy to embed the new higher education apprenticeship education models as a mechanism for HEI and industry collaboration.

Why choose Boundary Organisation Theory for this study?

A range of other theories were considered in the process to select a suitable theory such as Social Learning Theory, Communities Practice Theory, Expansive Learning Theory and Stakeholder Management Theory. As BOT is based on studies of organisations that are responsible for negotiating resolutions to complex problems and involve multiple stakeholders who have divergent interests it was selected as the theory that best suited the needs of this study. BOT can profile the structure, organisation and working practices of successful negotiating organisations which will enable the researcher to deliver answers to the research questions and to provide a process for developing, implementing and enacting HE apprenticeship education models as a mechanism for HEI and industry collaboration. As BOT has been utilised effectively for the development of educational policy (Emad and Roth,2008), diffusion of practical information and the improvement of

trans-disciplinary understanding of scale (Keshkamat, 2012), it was deemed the most effective and useful of all theories considered in light of the research aims.

ANTICIPATED CONTRIBUTION TO THEORY AND PRACTICE

As this study evolves it is anticipated that it will contribute to both the theoretical and applied discourse to enable the stakeholders and in particular HEIs in collaboration with industry partners to capitalise on this significant collaboration opportunity by proposing a process to develop, implement and enact a HE-IC apprenticeship education model. From a theoretical perspective based on identified research to date this is the first time that Boundary Organisation Theory will have been applied to the Higher Education Apprenticeships. This study aims to add to the existing body of work on reconceptualising the co-design of HE apprenticeship education in an Irish context. The intention is to add to the existing body of literature and to examine how the introduction of higher education apprenticeship education models in Ireland presents an opportunity for HEI and industry collaboration. It is anticipated that the resultant research will identify factors that can enhance HEI-industry collaboration to the benefit of national and regional socioeconomics. The anticipated practical contribution is the proposal of a process of developing, implementing and enacting HE-IC apprenticeship education models.

RESEARCH APPROACH – INITIAL THOUGHTS

The philosophical perspective of the researcher has been identified as being in the interpretivist paradigm. This directly impacts the researcher's approach to the construction of the conceptual framework (figure 1.3) for the study. The research approach being considered is the case study methodology as it best fits with this specific study and research questions, as it is set in a real-world context where there appear to be challenges at the boundaries between the higher education institution and industry in relation to the aforementioned apprenticeship education models. The works of Guba & Lincoln (1982), Merriam (1988), Stake (2003) and Yin (2014) were studied among other authors advocating the increasingly popular use of case studies in deciding on how to apply the case study methodology to this specific study.

According to Guba & Lincoln 1982 (pg.105) the selection of a philosophical paradigm is of utmost importance as it is the "basic belief system or world view that guides the investigation". This study is firmly situated in the interpretivist paradigm based on the personal philosophical position of the researcher and the perceived suitability of the paradigm to seeking understanding of the research area. At an early stage in the initial research the researcher realised that she was seeking to understand as opposed to explain. The researcher's values and interests also become part of the research process as the qualitative researcher is the main research tool (Smith 1983), a reality faced by the researcher as a practitioner in the HEI environment, tasked with comprehending and enacting the new apprenticeship education policy in Ireland in her higher education institute.

CONCLUSION

As a result of reviewing the literature in the areas of HE-IC, WBL and apprenticeship education models, it has become apparent to the researcher that there is potential to further the process of developing, implementing and enacting HE apprenticeship education models in collaboration with industry. The benefits of gaining such an understanding would enhance the likelihood of successful outcomes for HEI and Industry collaborating on apprenticeships with positive outputs for apprentices, HEIs and Industry, and the socio-economic well-being of national and regional economies. A preliminary conceptual framework is proposed (figure 3) encompassing the key elements reviewed in this paper as a means to gaining further understanding of the concept to be studied. Boundary Organisation Theory has been proposed as the underpinning theory for this study as the learning gained from HE-IC research collaborations points to success factors being driven by clarity of what happens at the border of HEIs and Industry. An interpretative case study approach is proposed as it may enable the contextual and subjective experiences of the participants to come to the fore. As further insights are revealed the understanding can be shared and practiced by other apprenticeship education stakeholders in pursuit of an optimised HE-IC apprenticeship model.

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PAPER 2

Student Name	Deirdre Giblin
Student No	20074655
Paper No	Paper 2 Methodology and Research Design
Title of Paper	A PROCESS FOR ENACTING AN APPRENTICESHIP MODEL AS A MECHANISM FOR FACILITATING HIGHER EDUCATION AND INDUSTRY COLLABORATION
Date Submitted	March 11th 2019

ABSTRACT

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration. The resultant research questions are: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for HEI and industry collaboration? Explored in this paper is the research method to be applied in this study. An overview of the adopted Boundary Organisation Theory is presented with a preliminary higher education-industry collaboration conceptual framework which guides the current study. Consistent with the social constructionist underpinnings of the study, an interpretivist paradigm is adopted. A multi-case study approach is proposed as the most appropriate method to explore a contemporary phenomenon in its natural context. Both the subjective and contextual experiences of the participants can be incorporated with this approach. The primary technique for data collection will be semi-structured interviews which will be supported by the researcher maintaining a reflective log and also documentary review. The proposed qualitative data analysis strategy is inductive thematic analysis. Ethical and other research considerations are addressed before concluding with the research trajectory

KEYWORDS

Interpretive multiple case study, higher education apprenticeships, higher education and industry collaboration, semi-structured interview, thematic analysis

Paper 2: RESEARCH METHODOLOGY

INTRODUCTION

This paper presents the research methodology pertaining to the current study context; that of higher education institutes (HEI) approach to apprenticeship education in liaison with industry. As a result of reviewing the literature in the areas of higher education-industry collaboration (HE-IC), work-based learning (WBL) and apprenticeship education models, it has become apparent to the researcher that there is potential to further the process of developing, implementing and enacting higher education apprenticeship models in collaboration with industry. The benefits of gaining such an understanding would enhance the likelihood of successful outcomes for HEI and industry collaborating on apprenticeship education, with positive outputs for apprentices, HEIs and industry, and the socio-economic well-being of national and regional economies. Thus, this research aims to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration. The resultant research questions are: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for HEI and industry collaboration?   The research questions are supported by the following research objectives: discovery of the most favourable circumstances for the development of a HE apprenticeship education model including the importance of clarity around roles, responsibilities and accountabilities; identification of the internal and external organisational supports required to implement and apprenticeship education model; exploration of the key drivers for the successful enactment of the HE apprenticeship education model.

Boundary Organisation Theory (BOT) has been proposed as the underpinning theory for this study as it helps us understand the changing institutional boundaries of academia and industry and the "blurring" of these boundaries (Reale and Primeri, 2015) when pursuing HE-IC. Its application also facilitates "the study of multiple stakeholders who have divergent interests and profiles the structure, organisation and working practices of these successful negotiating organisations" (Franks, 2010) in pursuit of an optimised approach to apprenticeship education.   The researcher engaged with the relevant literature pertaining to higher education institutes (HEI) approach to apprenticeship education in

liaison with industry to develop a preliminary conceptual framework (Figure 1) which will be utilised in this study.
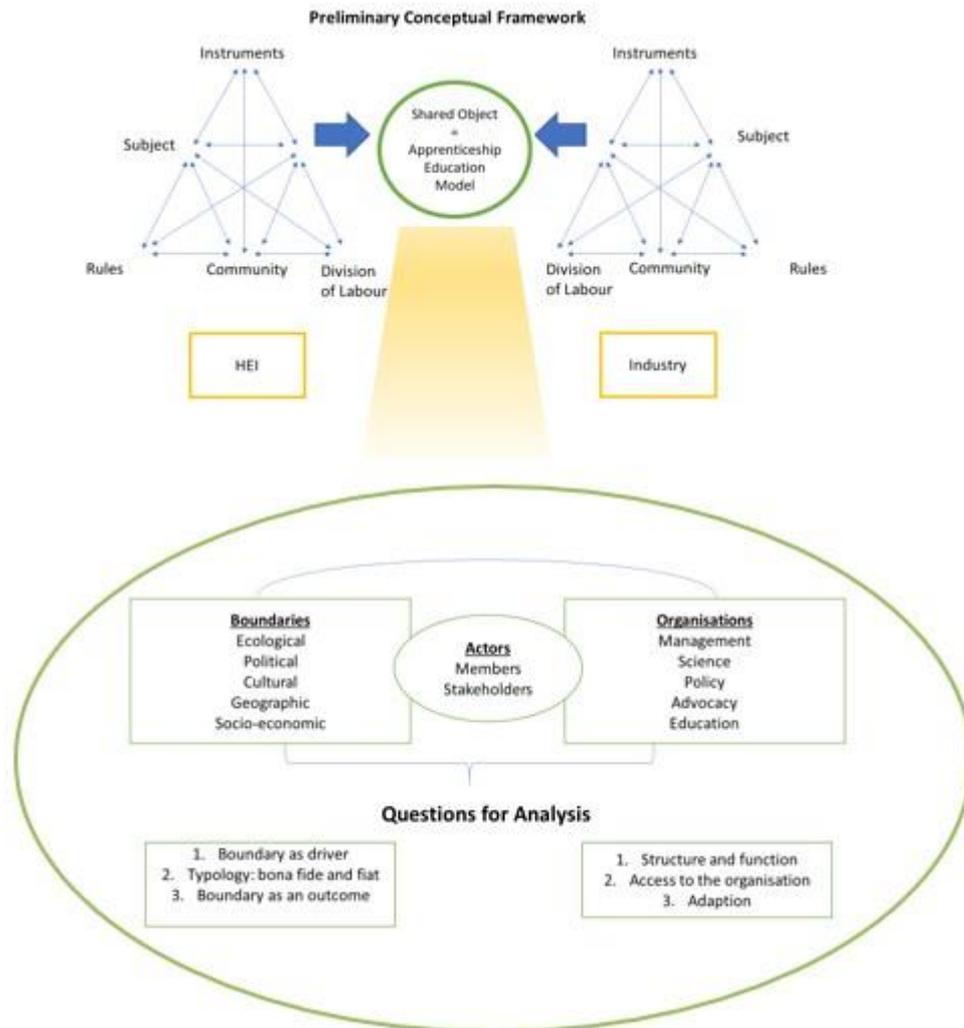
Figure 1: HE-IC Preliminary Conceptual Framework

The preliminary conceptual framework (Figure 1) is partly based on Engestrom's (1987) proposition that the activity taking place at the boundary between the two activity systems (in this instance HEI and industry) is the collaborative learning opportunity. Within each activity system there are contradictions and tensions both within and between the interacting systems. New meaning is formed by the two activity systems negotiating beyond the boundaries of both, to generate a shared object of activity which in this study is the HE apprenticeship education model. It also incorporates the conceptual framework

designed by Sternlieb et al (2013) to analyse transboundary organisations, which in the context of this research it is proposed to apply it to the 'Shared Object' of the Apprenticeship Education Model.

The remainder of the paper is structured as follows: It outlines the philosophical position of the study. The research approaches that were considered and explored before selecting the most appropriate method of an interpretive multiple case study are set out. The suitability of various aspects of case study design are analysed before justifying the selection of the multiple case study approach. Also presented is an overview of how participants will be accessed, and the proposed data collection methods. Semi-structured interviews are explored as the main data collection method with the supporting methods of documentation review and the maintenance of a reflective log are also outlined. The proposed qualitative data analysis strategy to be utilised is thematic analysis. Finally, ethical and research considerations and limitations are addressed, prior to outlining the research trajectory.

Philosophical Underpinnings

The researcher considered whether the objectivist or subjectivist approach would be most appropriate to fulfilling the objectives of this study and in doing so recognised the two approaches as a continuum (Burrell and Morgan, 1979; Holden and Lynch, 2004). The researcher is drawn towards the more subjectivist or interpretivist end of the continuum as she identifies with the view that there are many forms of reality (Lee and Baskerville, 2003; Carcary, 2009) and that individuals can construct their own forms of these realities (Gephart, 2004). The variables that either facilitate or hinder the movement of information across the boundaries of higher education and industry in the apprenticeship context are viewed through the subjective experience of individuals. Where differing ideas and perspectives exist, collaborative dialogue can result in the creation of a new, informed and shared knowledge in a context where individuals exercise their free will (Morgan and Smircich, 1980; Brown and Duguid, 1991; Meznar,1995; Easterby-Smith et al., 2000).

As the researcher is aiming in this study to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry

collaboration, she is seeking to understand the social reality that is created by the subjective experience of the individuals. Individuals construct understanding collaboratively to create a shared experience of reality (Campbell, 2000). Understanding more about the processes, systems, culture and conditions that influence the realities of individuals seeking to collaborate from the worlds of higher education and industry in the context of apprenticeship education design and development will facilitate the answering of the research questions. The most common form of interaction involves conversations in informal and formal settings and as proposed by Berger and Luckman (1966), individual's social realities are maintained and reconstructed by conversations. The researcher will be seeking to understand these conversations and the impact they have on the collaboration of the two parties identified.

Alternative Methods

This research is positioned within the interpretivist paradigm which allows the researcher to: "reflect upon the broader epistemological and philosophical consequences of their perspective" (Perren and Ram, 2004:95). This paradigm acknowledges that the world needs to be understood from a subjective point of view and that the phenomenon being explored needs to be understood from the frame of reference of the participant and with the awareness that she, as a researcher, is also an insider in the wider apprenticeship ecosystem. Within the interpretivist paradigm reality is a social construction by human actors (Burrell and Morgan, 1979). In considering the research approaches below, the researcher's philosophical assumptions reflect on her stance toward the nature of reality (ontology), how the researcher knows what she knows (epistemology), the role of values in the research (axiology), the language of research (rhetoric), and the methods used in the process (methodology) (Guba and Lincoln, 1989; Creswell, 2007), as outlined in Table 1.

Table 1: Interpretivist Philosophical Assumptions with Implications for Practice

Assumption	Question	Characteristics	Implications for Practice
Ontological	What is the nature of reality?	Reality is subjective and multiple as seen by participants in the study	Researcher uses quotes and themes in words of participants and provides evidence of different perspectives
Epistemological	What is the nature of the relationship between the researcher and that being researched?	Researcher attempts to lessen distance between himself or herself and that being researched	Researcher collaborates and spends time in the field with participant and becomes an 'insider'
Axiological	What is the role of values?	Researcher acknowledges that research is value-laden and that biases are present	Researcher openly discusses values that shape the narrative and includes his or her own interpretation in conjunction with the interpretations of participants
Rhetorical	What is the language of research?	Researcher writes in a literary informal way using the personal voice and qualitative terms and limited definitions	Researcher uses an engaging style of narrative, may be first person narrative, and employs the language of qualitative research
Methodological	What is the process of research?	Researcher uses inductive logic, studies the topic within its context and uses an emerging design	Researcher works with particulars (details) before generalisations, describes in detail the context of the study, and continually revises the questions from experiences in the field

Adapted from Creswell 2007

In an attempt to bridge philosophy and practice, Creswell (2007) reviewed the practical implications of philosophical assumptions (Table 1). This 'bridge' as presented by Creswell (2007) assisted the researcher in selecting the appropriate research method for this study. The researcher considered the following qualitative approaches: action research, ethnography and case study. To further assist the researcher in her selection of the most appropriate research method she adapted an approach taken by Creswell (2007) in contrasting the characteristics of the shortlisted approaches. This enabled the researcher to consider the practical implications of design, unit of analysis, data collection and analysis, and reporting related to each method (Table 2).

Table 2: Contrasting Characteristics of Shortlisted Approaches

Characteristics	Action Research	Ethnography	Case Study
Focus	Requiring the researcher to actively involve participants in a change initiative	Describing and interpreting a culture-sharing group	Developing an in-depth description and analysis of a case or multiple case studies
Type of Problem best suited for design	Requiring the creation of a new project in which the participants would agree to engage in a project with the researcher	Describing and interpreting the shared patterns of a culture of a group	Providing an in-depth understanding of a case or cases
Discipline Background	Drawing from education and sociology	Drawing from anthropology and sociology	Drawing from psychology, law, medicine and political science
Unit of Analysis	Studying the new project	Studying a group that shares the same culture	Studying an event, a programme, an activity or more than one individual
Data Collection Forms	Using multiple sources such as field research notes, case studies, interviews, observations, surveys, reflective journal	Using primarily observations and interviews but probably collecting other sources from extended time in the field	Using multiple sources such as interviews, observations, documents, artefacts and reflective journal
Data Analysis Strategies	Analysing data through describing the new project, collating data under common themes (coding for commonalities), tabulating the frequency	Analysing data through description of the culture sharing-group; themes about the group	Analysing data through description of the case as well as cross-case themes
Written Report	Presenting data from the researcher's experience in the field	Describing how a culture-sharing group works	Developing a detailed analysis of one or more cases

Justification of the Chosen Method

Taking a philosophical stance on each one of the following assumptions: ontological, epistemological, axiological, rhetorical and methodological helps inform the researcher in order to select a method from the shortlist presented (Table 2). This in turn shapes the individuals studied; the types of questions and problems examined; the approaches to data collection, data analysis, writing, and evaluation (Creswell, 2007). For example, in

seeking to minimise the distance between the researcher and the phenomenon, and recognising the fact that this researcher is already 'in the field', ethnography would initially appear to be an appropriate method, facilitating full immersion in the field to explore the culture of the group and their social interactions (Klein and Myers, 1999; Willis and Trondman, 2000). To successfully fulfil a good ethnographic study, it requires a prolonged stay by the insider at the research site (Wolcott, 1994) to achieve the "objective separateness" (Guba and Lincoln, 1989:94) between the researcher and those being researched. The time and commitment needed to move further into the field in this way would not be facilitated by the researcher's existing professional role or the timeframe of this research programme. A requirement of the action research approach is to actively involve participants in a change project (Brannick and Coghlan, 2007). The researcher has concluded that neither action research or ethnography are the optimum approach to fulfil the objectives of this study based on the following factors: the time constraints of the DBA programme, researcher's professional commitments and the researcher's familiarity with the pressure upon the key participants to deliver on ambitious targets to bring new higher education apprenticeships to market. However, there are elements of ethnography and 'insiderness' (Brannick and Coghlan, 2007) in the proposed study. As explored elsewhere in this paper the researcher has positioned herself as insider in this study, so her presence is apparent and her reporting of the phenomenon explicitly represents her interpretation as well as the voices of the participants (Denzin, 1999).

Having considered each approach, and in light of the characteristics highlighted in Table 1, the researcher considers the case study approach an optimum method to successfully pursue the research aim. The case study method lends itself to exploring in detail a phenomenon in its natural context (Crowe et al., 2011), therefore is a method worthy of further exploration to finally determine its level of appropriateness. The case study method "explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed in-depth data collection involving multiple sources of information "… and reports a case description and case themes" (Creswell, 2007:97). Case studies are particularly suited to facilitating the answering of questions starting with a 'what' or a 'how' (Meyer, 2001; Yin 2014). Of the two research questions for this study, one is a 'what' question: (a) what is the process for developing,

implementing and enacting a HE apprenticeship education model? The other is a 'how' question: (b) How can this model serve as a mechanism for HEI and industry collaboration?

To understand the changing institutional boundaries of academia and industry and the "blurring" of these boundaries (Reale and Primeri, 2015), is a social phenomenon. The case study method is ideally aligned with studying such a phenomenon (Eisenhardt and Graebner, 2007; Yin, 2014) assisting with the understanding of its processes and context (Meyer, 2001). The research objective is to review HE-IC activity with a view to identifying the principles applicable to collaboration in apprenticeship education design, development, accreditation and delivery (Barbolla and Corredera, 2009; Gulbrandsen et al., 2011; Perkmann et al., 2011) in an Irish context. While the case study approach enables the researcher to study this, it does not require full emersion as action research requires, therefore deeming it the most suitable and relevant approach to fulfil the requirements of the research.

Overview of the Case Study Method

As mentioned above, case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audio visual material, documents and reports), and reports a case description and case-based themes. For example, several programs (a multi-site study) or a single program (a within-site study) may be selected for study. The literature offers a number of definitions (Miles and Huberman 1994; Merriman, 1998; Green and Thorogood, 2009; Stake, 2010) but it is a recent iteration presented by Kelliher and McAdam (2018) that resonates with this researcher. They define an interpretive case study as 'an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomena and context are not clearly evident' (Kelliher and McAdam, 2018: 1321).

Case studies may be approached in different ways depending on the epistemological standpoint of the researcher, that is, whether they take a critical (questioning one's own and others' assumptions), interpretivist (trying to understand individual and shared social

meanings) or positivist approach (orientating towards the criteria of natural sciences, such as focusing on generalisability considerations) (Stake, 1995; Yin, 2014). In this instance, the researcher is trying to understand individual and shared social meanings in the HE-IC context, reinforcing the interpretivist lens informing this study. Stake (1995) proposes that that there are three types of case study under this lens: the single instrumental case study, the collective or multiple case study, and the intrinsic case study. In a single instrumental case study, the researcher selects one bounded case to illustrate an issue or concern. In a collective case study, also known as a multiple case study, the researcher selects multiple case studies to illustrate the identified issue. The final type is an intrinsic case study where the focus is on the case itself because the case presents an unusual or unique situation. These are not necessarily mutually exclusive categories (Crowe et al., 2011), however this study requires multiple perspectives to illustrate the HE-IC context, leading the researcher to the multiple case method in this instance.

Strengths and Weaknesses of the Case Study Method

The literature offers both sides to the debate of the strengths and weaknesses of the case study approach (Wellington, 2000; Denscombe, 2003; Thomas, 2011). In the literature terms such as 'accessible', 'insightful', 'illustrative' and 'unique' are used to describe the strengths of the approach. As this researcher favours the case study approach it is imperative that she understands the challenges with a view to either avoiding or mitigating them. Commonly cited weaknesses of the case study are typically levelled using the terms 'generalisability' and 'validity' which are more often associated with quantitative methods; however, this perspective is increasingly viewed as an inappropriate basis on which to assess interpretive research (Kelliher and McAdam, 2018). Generalisability is not required from the case study method as it is the use made of its findings and the interpretation of those findings that are defining features of the method (Gomm and Hammersley, 2000; Thomas, 2011; Yin, 2014). Sampling is another issue often cited in relation to case studies, rather than the trustworthiness criteria more relevant to the interpretive case approach (Lincoln and Guba, 1985). The researcher contemplating using the case study method needs to have a range of skills as stated by Wellington (2000; 100) "He or she should have a deep understanding of the relevant literature, be a good question-asker, listener and observer, be adaptable, flexible and have

an inquiring and unbiased mind". Skate (2005:460) advises that "the purpose of a case report is not to present the world, but to represent the case", which emphasises the need for the report to be credible under the principles of trustworthiness as discussed later in the paper.

Justification for selecting multiple case studies

Initially a single case study design was contemplated but further consideration was then given as to how best to serve and achieve the research aim. Based on feedback received from academic and professional peers, a multiple case study approach is adopted. The researcher proposes to select a number of case studies representing a number of phases of the HE–IC model as presented by Plewa et al. (2015), exhibited in Figure 2.
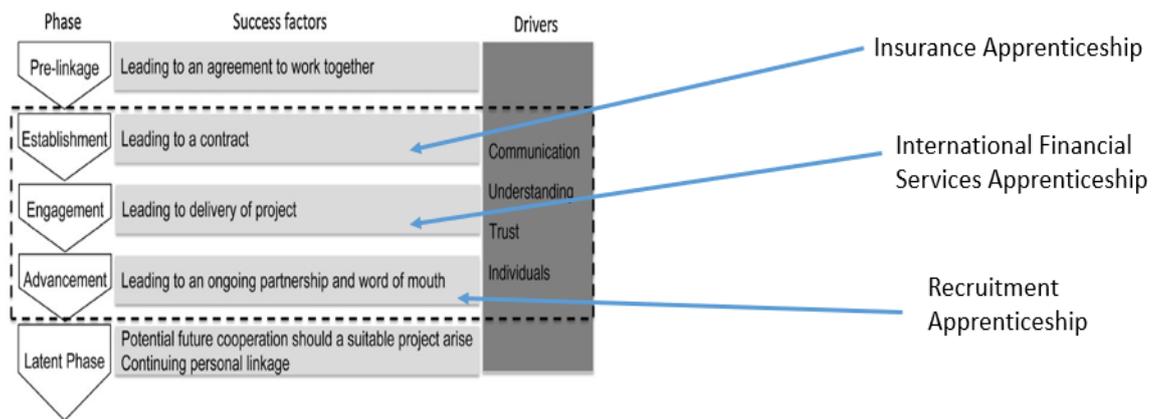
Source: Plewa et al. (2015)

Figure 2: Phases of HEI-Industry Collaboration

The three selected case studies represent different phases of HEI-Industry Collaboration. Value can be created in studying multiple cases in the context of this research project as it will facilitate the understanding of the differences and the similarities between the selected cases at each of the phases (Stake, 1995: Anthony and Jack, 2009). The objective is to analyse the data within each case study and then contrast and compare across the multiple case studies (Yin, 2014). Multiple case studies are also seen to be more robust from a credibility perspective (Kelliher and McAdam, 2018). They facilitate wider exploration of the research questions (Eisenhardt and Graebner, 2007).

Multiple Case Study Design

In designing the multiple case study, a number of elements need to be considered such as: determining the case/unit of analysis, binding the case, designing a case study protocol and reporting the case study. Determining what the unit of analysis (case) is can be challenging.

Miles and Huberman (1994) define a case as, "a phenomenon of some sort occurring in a bounded context and state that the case is, "in effect, your unit of analysis" (Miles and Huberman, 1994: 25). While each case in this research study is a bounded environment (Huberman, 1994), it is individuals that are to be studied within this social context, thus the unit of analysis is deemed to be the individual.

An important point for the researcher to consider is what the case will *not* be, therefore the boundaries of the case need to be defined. As with choosing the overall area of research for this study, there is a danger that the case can be defined as too broad with too many objectives to be managed within the confines and limitations of this study. Yin (2014) and Stake (1995) advocate the importance of placing boundaries on a case in order to mitigate against this happening. The literature suggests a number of ways to bind a case which include: (a) by time and place (Creswell, 2007); (b) time and activity (Stake, 1995); and (c) by definition and context (Miles and Huberman, 1994) the objective being to bind the case in such a way that it remains both reasonable within scope and is achievable by a single researcher in a reasonable time period.

Once each of the cases for the multiple case study has been determined and the boundaries placed on each, it is important to consider the additional components required for designing and implementing a rigorous approach to the empirical study. This includes: the application of the HE-IC conceptual framework [Figure 1] (Miles and Huberman, 1994), development of the research questions and the criteria for interpreting findings (Yin, 2014). Miles and Huberman (1994) focus on the purposes of the preliminary conceptual framework in determining the following: identifying who will and will not be included in the study, describing what relationships may be present based on logic, theory and/or experience, and providing the researcher with the opportunity to categorise findings into intellectual "bins" (Miles and Huberman, 1994:18).

Several procedures are available for conducting case studies including Merriam (1998), Stake (1995), and Yin (2014). As advised by Yazan (2015:150) this researcher will "eclectically combine elements (e.g., different research techniques and strategies) from each approach that best serve and support their design". Stake (1995) contends that "there are multiple perspectives or views of the case that need to be represented, but there is no way to establish, beyond contention, the best view" (Stake, 1995: 108). Stake's flexible approach to case study design is attractive to the researcher but the need for a detailed roadmap (Yin, 2014) is also appreciated. Of the three methodologists reviewed by Yazan (2015), Merriam (1998) provides the most detailed guidance on how to approach case study design, combining the approaches of Yin (2014) and Stake (1995).Taking guidance from Merriam (1998), the researcher has developed a detailed plan (Appendix 1) in pursuit of research trustworthiness including a case study or research protocol (Yin, 2014), incorporating the data collection plan.

Data Collection Plan

Data collection techniques utilised in case studies include interviews, focus groups, observation, document analysis and records (Eisenhardt, 1989; Meyer, 2001; Eisenhardt and Graebner, 2007; Yin, 2014). Multiple research techniques utilisation contribute towards the overall trustworthiness of the research by crystallising the data and supporting the study findings from a range of sources.

To fulfil the research aims of this interpretive case study and to answer the research questions, the researcher has decided to employ a range of data collection techniques: semi-structured interviews, documentation review and the maintenance of the researcher's own reflective log. The interview guides will be based on the themes extracted from preceding literature review. The researcher plans to construct two interview guides before commencing on data collection. The rationale for the two guides being that one cohort of interviewees have been selected because of their practical experience as HEI and industry professionals of HE apprenticeships and the other cohort are policy makers. Preliminary Interview Themes for the two cohorts are at Appendix 2.

Semi-structured interviews as the primary research technique

While researchers have advocated that interviews can be viewed as special conversations (Holstein and Gubrium, 1997; May, 2001; Denscombe, 2003) it is also argued (Rapley, 2007) that it is more beneficial to the researcher to view interviews as conversations where the researcher has the appropriate level of control. Interviews have the ability to capture complex context-specific data while extending the interviewees view of the situation to the researcher (Myers and Newman, 2007; Carcary, 2009; Qu and Dumay, 2011). The requirements of the study for understanding and sensemaking are fulfilled by the interviewees providing insights into their diverse realities (Bryman and Cassell, 2006; Carcary, 2009). There are a variety of interview types as advised by the literature: structured, unstructured, semi-structured, formal, informal, one to one, group (Holstein and Gubrium, 1997; May, 2001; O'Leary, 2010).

The semi-structured interview has been selected as the main data collection method to capture the participants experiences of the phenomenon. It allows for a flexible way of collecting responses to the questions from the participants while gaining an insight into their perspectives and their perceptions (Qu and Dumay, 2011). The benefits of using the interview guides allows the researcher to be consistent in her application of the thematic approach (Qu and Dumay, 2011), allows for the unique responses of the participants to come through and also allows for the participants to raise something that does not directly relate to the questions that may be of value to the study (Myers and Newman, 2007; Brinkmann and Kvale, 2015).

While the researcher is familiar with many of the participants, the style she will be adapting for consistency will be a semi-formal style of interviewing. The researcher needs to be cautious about being an insider and the concept of insider familiarity will be kept in mind (DeWalt and DeWalt, 2002; Mercer, 2007; O'Leary, 2010) as there is a possibility of this familiarity resulting in questions not being asked, issues not being explored, assumptions being made and views not being challenged. The issue of researcher as insider will be discussed further later in this paper.

The researcher needs to be aware of the potential challenges in the interviewing process: establishing trust and rapport, access to the right participants, lack of time allocated by interviewer or participant, interviewee acting differently because of the artificial nature of the interview, ambiguity in use of language, awareness that the researcher and the interviewee are possibly creating new knowledge (Dickson-Swift et al., 2007; Myers and Newman, 2007).

Researcher's experience in interviewing based on her Human Resources background

As a former human resources professional the researcher's experience of conducting interviews, albeit in a different context, is a benefit to conducting the semi-structured interviews. She will seek to: establish rapport, build trust, note and take cues from the participants body language, asking open expansive questions when appropriate followed by probing questions when required and repeating, clarifying or rephrasing questions as needed, following up unexpected comments and seeking more information (Myers and Newman, 2007; Qu and Dumay, 2011). The participant will be encouraged to do most of the talking while also being encouraged to remain focused. The researcher will manage the time to ensure that all the necessary questions are answered while allowing enough flexibility for the participant to provide insights unique to their situation (Walsham, 2006; Patton, 2015).

Supporting data collection techniques

The researcher will also gather documentary evidence for each of the cases. It is envisaged that the documentation will be gathered from the parties involved in the apprenticeship process, including policy makers, implementers and enactors. Each apprenticeship will have a set of documents governing its operation and the documents that the researcher is specifically interested in reviewing are those that specify the roles and responsibilities for both the industry and academic partners. As advised by Yin (2014) the researcher needs to be aware that each document accessed and reviewed could possibly have been prepared for another purpose and audience, and therefore may contain an element of bias. Time will be scheduled in the researcher's diary for documentary review.

The role of the researcher is integral to interpretive case study, therefore the researcher has selected the final data collection technique as the maintenance of a reflective log. The log will also assist the researcher in working through any challenges experienced as an insider researcher (which is explored further in this paper). The researcher will record her experience and thoughts of conducting the research with the objective of increasing her self-awareness of the research process (Koch, 1994; Carcary, 2009). The reflective log will be useful in recording the researcher's observations and thoughts of the interview process, in particular the inherent challenges and possible improvements (Walsham, 1995; Holstein and Gubrium, 1997; Brinkmann and Kvale, 2015). Practical guidance has been taken from Kelliher and McAdam (2018) in relation to the maintenance of a reflective log motivating the researcher to record her reflections within a 72- hour period of the relevant interaction. The researcher also needs to balance the fact that the HE-IC conceptual framework (Figure 1) could possibly limit the inductive approach when exploring the case phenomenon. To mitigate this possibility, the researcher will record her thoughts and decisions and also discuss them with other researchers to determine if her thinking has become too influenced by the framework. These researchers will be sourced from the researcher's DBA class and from her National College of Ireland research colleagues.

Reporting a Case Study

The objective of the reporting of an interpretive case study is to enable the reader to feel as if they had been an active participant in the research and can determine whether or not the study findings could be applied to their own situation (Baxter and Jack, 2008). It is a requirement of the case study report for the researcher to describe the context within which the phenomenon is occurring as well as the phenomenon itself. The report should remain focused on answering the research questions. Yin (2014) advises that in order to fully understand the findings, they should be compared and contrasted to the relevant body of literature so as to situate the new data into pre-existing data. Yin (2014) also suggests six methods for reporting a case study: linear, comparative, chronological, theory building, suspense, and unsequenced.

Requirements of reporting the case study place a responsibility on the researcher to ensure that: (a) the case study research questions are clearly written and the questions are

substantiated; (b) that the case study design is appropriate for the research questions; (c) that purposeful sampling strategies appropriate for each case study have been applied; (d) that the data is collected and managed systematically; and (e) the data is analysed correctly. Kelliher and McAdam (2018) provide very specific guidance on how to report multiple interpretive case study findings with an emphasis on reporting the study in narrative form akin to story-telling, substantiated by the evidence gathered from interviews, observation, document review and reflective logs. This approach is adopted in the current study

Selection of case studies

Purposive sampling is utilised to distinguish which case studies would assist most in fulfilling the research aim. Tongco defines purposive sampling as 'selecting units (e.g. individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study's questions' Tongco (2007:77). Availability and willingness to participate in the study are also key to the selection process (Spradley, 1979; Bernard, 2002). As advised by Kelliher and McAdam (2018), the purposeful approach requires 'both discretion and judgement', and in this case, the researcher identified three case environments based on selection criteria stated earlier in this paper. The selected case studies are:

1. The Insurance Practitioner Apprenticeships

2. The International Financial Services Apprenticeships

3. The Recruitment Consultant Apprenticeships

In making sampling decisions about which cases to choose for the study, a number of factors are considered, one of which is time limitations (Yin, 2014). In consideration of the timelines the researcher intends for the study to be conducted over a six- month period in the latter half of 2019. A further consideration is the ability to gain access to the required participants. In this regard contact has been made with the HEI lead of each of the HE-IC cases to gain permission to access each respective HE-IC industry and

Academic members of the team for interviews. The Apprenticeship Council[7], the Higher Education Authority[8] (HEA) and Solas[3] have been consulted in the selection of HE-IC Apprenticeship teams as case studies. The selection criteria for the case studies is as follows:

- Higher Education Apprenticeships as opposed to Further Education Apprenticeships

- Representative of different stages on the Plewa et al. (2015) HE–IC Model (Figure 1)

- Ease of access to willing and knowledgeable participants/interviewees • No issues or concerns in relation to confidentiality and GDPR[4]

Selection of interviewees

The selection of the interviewees will initially consist of four participants from each selected HE-IC team: two representing Industry and two representing Academia. Three HE apprenticeships listed above will be studied and the participants will also be interviewed from the broader apprenticeship landscape stakeholders. At this stage it is anticipated that 30 participants will be interviewed. As the study progresses the final sample size may change which is acceptable in the context of an interpretive case study where sample sizes are not defined (Patton, 2015). The anticipated 30 participants are at the higher end of the scale advised by Brinkmann and Kvale (2015). The researcher proposes to study the International Financial Services apprenticeships and the relevant apprenticeship landscape stakeholders such as representatives of the Apprenticeship Council, Solas, HEA and the Department of Education and Skills as a pilot study.

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[7] The establishment of the Council was a key action in the implementation of recommendations from a 2014 Review of Apprenticeship Training in Ireland (see www.apprenticeship.ie)
[8] The HEA leads the strategic development of the Irish higher education and research system (www.hea.ie)
[3] Solas is the State Organisation with responsibility for funding, planning and co-ordinating Further Education and Training (FET) in Ireland
[4] GDPR stands for General Data Protection Regulation and is a legal framework that sets guidelines for the collection and processing of personal information of individuals within the European Union (EU)

Interview Protocol

The protection of all parties to the interview process is of paramount importance as is the integrity of the data that has been collected. To ensure this, Stake (1995) suggests using an interview protocol which states the purpose of the interview, how the interview is structured, the ordering and design of the questions and the logistical considerations. While the purpose of the interview is to collect data to assist the researcher it also respects that each participant has different beliefs and perceptions. Flexibility in the interview structure and schedule will facilitate the contribution from participants to respond with the information they feel answers the questions posed. While the researcher will inform the interviewee about the purpose of the research she will be careful not to create bias in the responses of the interviewees. The researcher will explain the participants' information sheet and consent form (Appendix 3) which will be signed (or otherwise), based on agreement with the participant. The relevant interview guide will be followed. The researcher will ask permission of the interviewee to record the interview for transcription after the interview. If any interviewee expresses concern with recording, notes will be taken instead. Each interviewee will be provided with a copy of the transcript for review.

Data Collection Approach

There is value in establishing a data collection protocol (Barratt, Choi, and Li, 2011; Ketokivi and Choi, 2014; Kelliher and McAdam, 2018) as it enhances rigor by establishing a 'systematic data collection process and allows for a chain of evidence to emerge during the study'. While Kelliher and McAdam's (2018) study was longitudinal and therefore differs in time frame from this study, there are elements of their data collection protocol that can usefully be applied to this study such as: the establishment of case selection criteria, definition of duration of data collection period, use of semi-structured interviews, use of reflective log and document review as supporting research methods and data management. The researcher will establish such a protocol before commencing data collection.

To establish trust with the participant from the outset, the informed consent form (Appendix 3) will be sent in advance of the interview. It includes the following: an explanation of the purpose of the study, a statement that their employer is aware of and

supports the study and their participation in it, assurances about confidentiality and the logistical details of the interview such as time, place, duration. The option not to participate is clearly explained. The interviews will be conducted at a place of the participants choosing. At the beginning of the interview the researcher will explain the purpose again (Myers and Newman, 2007), ask for recording permission and offer to answer any questions the participant may have regarding any element of the interview process (Brinkmann and Kvale, 2015).

Recording of the interview will allow the researcher to fully engage in the interview without being distracted by concern for accuracy which will contribute to the richness of the data gathered (Walsham, 1995; Meyer, 2001; Walsham, 2006). The interview responses will be transcribed by the researcher and this becomes the first stage of the data analysis process. The participants will then be asked to review the transcribed interviews for accuracy and clarification.

Data Management Approach

The proposed data analysis strategy for this study is inductive thematic analysis enabling the researcher to analyse the ways participants understand, relate to and behave towards the phenomenon under consideration (Ryan and Bernard, 2003; Braun and Clarke, 2006; Fereday and Muir-Cochrane, 2006). Inductive thematic analysis is a good fit with the social constructivist theoretical underpinning of the study, the interpretive philosophical approach and the methodological approach (Braun and Clarke, 2006). It also allows for multiple points of view and perspectives to be understood. The understanding of the experiences of the participants, subjective and contextual, emerges relating to meanings that are shared socially (Crowe et al., 2011).

Selection of inductive thematic analysis

The selected thematic analysis approach is inductive and will identify, analyse and report themes within the data collected (Fereday and Muir-Cochrane, 2006; Braun and Clarke, 2006). As this is an interpretive study the analysis will be iterative, moving between the various elements of the study with the objective of collating the data under similar themes (Eisenhardt, 1989; Corbin and Strauss, 1990; Braun and Clarke, 2006). The researcher plans to use NVivo to conduct the thematic analysis on all of the data sources and she is aware of the importance of staying close to the data even while using software and remaining in control (Vander Putten and Nolen, 2010).

Phases of thematic analysis

As presented by Braun and Clarke (2006:87) these are the recommended phases of thematic analysis for researchers to utilise when conducting thematic analysis: familiarisation with the data, generation of initial codes, search for themes, review of themes, naming themes and producing the report. The emerging themes will be represented on a conceptual map by the researcher as recommended by Miles and Huberman (1994), Basit (2003) and Weng (2012) which will potentially result in the design of a revised conceptual framework. Braun and Clarke's (2006) table reproduced below at Table 3 implies a step by step approach but in reality the researcher may move back and forth through the phases with the purpose of generating credible and meaningful interpretations. The intention will be to apply the guide to thematic analysis 'flexibly to fit the research questions and data' (Braun and Clarke 2006:16).

Table 3: Phases of Thematic Analysis

Phase	Description of the process
1. Familiarising yourself with your data	Transcribing the data, reading and re-reading the data, noting down initial ideas
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each theme
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back to the research questions and literature, producing a scholarly report of the analysis

Source: Braun and Clarke, 2006:35

Use of audit trail for transparency and rigour

The researcher will maintain an audit trail to ensure transparency, rigour and trustworthiness in how the thematic analysis is conducted (Lincoln and Guba, 1985; Corbin and Strauss, 1990) and to maintain the connection between the results drawn from the analysis and the source data (Fereday and Muir-Cochrane, 2006; Elo and Kyngas, 2008). As referred to earlier, colleagues and peers who are independent of the study will be asked to review the results of the analysis and a draft of the case study report (Cutcliffe and McKenna, 2002; Crossan and Berdrow, 2003; Kelliher, 2005; Gibbert and Ruigrok, 2010).

The Pursuit of Research Trustworthiness

Kelliher and McAdam (2018) propose multiple data sources 'provide for the pursuit of trustworthy data', an approach confirmed by Bowen (2008) and Lincoln and Guba (1985). Yin (2014) concurs while Denzin and Lincoln (2000) propose that the aim of the qualitative researcher is to be trusted to produce reliable representations as distinct from quantitative researchers aiming to create generalisability. Building on that viewpoint, trustworthiness and credibility can also be generated from interaction between the

researcher and the participants and the co-production of the new data from that interaction (Corbin and Strauss, 1990; Flick, 2009; Guercini et al., 2014; Elo et al., 2014; Yin, 2014). As an interpretivist, this researcher is attracted to the geological concept of 'crystallisation' (Richardson, 2000; Frambaugh-Kritzer, 2012, Ellingson, 2014) where there is recognition of the vulnerable role of the researcher within the research context and of the value of generation by the researcher and the participants of a "rich and openly partial account" (Ellingson, 2009:4) to provide a deeper and richer understanding. Crystallisation also recognises the boundary spanning of methods and methodologies to fulfil qualitative research aims (Ellingson, 2009, 2014). The credibility of the qualitative researcher is developed through the integrity of their research methodology and their level of engagement with the proposed methodology (Richardson, 2000, Bryman, 2008;).

Ethics Approval from a Researcher Perspective

Obtaining ethical approval for this study from the WIT School of Business Research and Ethics Committee is the first ethical requirement of the study. Orb et al (2000) espouse the adherence to the ethical principles of autonomy (recognition of the rights of participants in the context of the study), beneficence (protecting participants confidentiality etc.) and justice (being fair and recognising the possible vulnerability of participants). Adopting these principles ensures the voluntary nature and the informed consent of the participants, that they each have given their informed consent and that identities are protected and confidentiality maintained. The protocol in relation to informed consent and the protection of confidentiality and anonymity of the participants is outlined earlier in this paper.

Insider/Outsider Considerations

As this study is being conducted in this researcher's own work environment (albeit including external stakeholder organisations due to the nature of the study and the research approach chosen) the concept of insider/outsider requires consideration. While many of the participants do not work in the same organisation as the researcher, they are all members of the same ecosystem of HEIs and industry representatives who are engaged in the design, development, accreditation, delivery and management of HE

apprenticeships. The traditional view of the researcher as insider was negative as it was thought that it may 'pollute their objectivity' (Hellawell, 2006: 485). Merton (1972) described the insider in the research context as sharing a particular characteristic with the subject being studied. While the literature on insider research in an educational context is not extensive it does offer the advantages and disadvantages of the insider concept (Hockey, 1993; Davis, 2005; Mercer, 2007). Hammersley (1993) and Davis (2005) put forward the proposition that the positions of insider and outsider can overlap.

The researcher as insider also needs to consider issues such as confidentiality, intimate knowledge and the filtering process (Brannick and Coughlan, 2007). While the confidentiality of the participants can be managed by not disclosing their names in the interviews, the final report it is still a valid concern for participants especially when they are being interviewed and observed by a researcher they know. The issue of intimate knowledge is a concern for the researcher as she will be interviewing colleagues in her own organisation and colleagues in her broader ecosystem who she is collegial, and in some cases, friendly with. Both the internal and external colleagues have been very much part of the apprenticeship journey with the researcher and all are aware of the researcher's area of research and there is the possibility that this collegiality may lead to the assumption of a shared knowledge (Mercer, 2007). These are challenges to insider research that need to be considered in the design of the case studies to mitigate any negative impacts of the challenges as much as possible (Mercer 2007; Chavez, 2008; Costley et al, 2010). There are also obvious benefits to the researcher being an insider such as access to research sites, knowing the social setting within the organisation and access to key stakeholders including policymakers.

The ethics of conducting insider research has many implications as highlighted above. As an insider the researcher must comply with not only the code of practice of Waterford Institute of Technology but also within her own institution, National College of Ireland. Ethical clearance for this study was applied for from both institutions in February 2019.

Acknowledgement of Research Bias

The researcher understands the potential for research bias and is aware of the possibility of her own bias in this study Meyer (2001). The researcher has worked in an academic

environment for over 10 years in a combination of commercial and senior management roles and prior to that worked in industry as a senior Human Resource professional for many years. This background has resulted in the researcher having views about both the academic and industry elements of this study. The researcher has also been directly involved in the development of one of the proposed HE Apprenticeship case studies. To reduce bias the researcher will engage with peers independent of this study to seek alternative conclusions (Miles and Huberman, 1994; Meyer, 2001; Crossan and Berdrow, 2003; Kelliher, 2005; Gibbert and Ruigrok, 2010) in pursuit of a range of perspectives on the phenomenon. Securing timely ethical approval is central to the commencement of the data collection process within a timeframe to facilitate a six-month data collection period. The researcher is fortunate to have support for this study from her employer and the key stakeholders in HE Apprenticeships and this support will hopefully smooth the path to timely access to participants.

Researcher Reflections

As I pause at the junction between designing the research methodology for my study and actually embarking on the research, I am reflecting on the reality of what lies ahead. In particular I am thinking about my role as 'insider' as researcher. My concerns are less with the implications of being an insider in my own organisation in the context of this study and lie with being an insider within the wider apprenticeship ecosystem. I and my organisation were one of the frontrunners/early adopters in the design of the new higher education apprenticeships, and in being so, worked very closely with the policy colleagues from Department of Education and Skills, Solas and the Higher Education Authority. While these colleagues actively encourage and support this study, I have a concern that our close collegiality may result in a homogeneity of perspectives, which may produce the diversity of outcomes that I believe the study would benefit from. As referenced earlier in this paper, the main issues for consideration are intimate knowledge, the filtering process and assumptions of shared knowledge. The logistics of the research process will be challenging within the timeframe but will be achievable. I am looking forward to getting started on the interviews in particular. As a novice researcher the data management and analysis may present challenges which I hope the data management approach presented above will deal with. I hope to present a full and fair representation

of the outcomes which fulfil the requirements of the study by answering the research questions and to achieve research trustworthiness.

CONCLUSION

Aligned to the social constructivist theoretical underpinning of this study, this is an interpretivist philosophical position that recognises multiple forms of reality (Lee and Baskerville, 2003; Carcary, 2009) which are created by individuals in the context of their lives (Cunliffe, 2002). Having considered several relevant research approaches, the interpretivist multiple case study was identified as providing the optimum fit for the study. This approach would allow for the phenomenon to be studied in depth in its natural context (Crowe et al., 2011) without the need for the complete emersion of the researcher. How reliability, validity and generalisability will be achieved has been addressed. The primary data collection technique advanced is that of semi-structured interviews, supported by documentary review and the researcher's own reflective log. The qualitative data analysis proposed is thematic analysis as it fits with the interpretivist philosophy, the social constructionist theoretical perspective and the interpretive multiple case study research design. Ethical considerations have been explored and considered from a number of perspectives with a particular focus on the issue of researcher as insider.

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Appendix 1: Case Study/Research Protocol

Research Aim	This research aims to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration.
Research Questions	(a) What is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for HEI and industry collaboration?
Research Method	Interpretivist Multiple Case Study
Timeframe for Data Collection	Approximately 6 months from April to September 2019
Case Selection Process	The selection criteria for the case studies are as follows: • Higher Education Apprenticeships as opposed to Further Education Apprenticeships • Representative of different stages on the Plewa et al (2015) HEI-Industry Collaboration Model • Ease of access to willing and knowledgeable participants/interviewees • No issues or concerns in relation to confidentiality and GDPR
Case Access	Approach Academic and Industry Leads of three HE Apprenticeships at different stages of evolution plus policy stakeholders in organisations such as Department of Education, Solas, HEA and QQI
Ethical Access	• Researcher as insider • Informed consent • Confidentiality
Research Instrument	The primary research instrument will the research protocol/interview guide
Boundary Device	Boundary Organisation Theory; Preliminary Conceptual Framework
Techniques for Data Collection	• Semi-structured interviews as the primary research technique • Review of relevant documentation • Maintenance of researcher's reflective log
Data Management	• Data collection plan to be developed • Interview guide has been developed • Document protocol to be developed • Maintenance of a case study database
Data Analysis	Thematic analysis to include an audit trail of the process used and memoing to feed in to theory formulation

Appendix 2: Preliminary Interview Themes

(This will be further developed and cross referenced to specific elements of the Conceptual Paper and the number of questions will be subsequently reduced and refined)

Preliminary Interview Themes for Academic & Industry Apprenticeship Members

- Discuss purpose of research
- Outline confidentiality guarantees, issue letter explaining confidentiality and request consent to record interview

A. Background Details

- Could you give me a brief description of your organisation?
- Could you give me some details about your professional background?
- How long have you worked with your employer?
- Does your employer have previous experience in design and delivery of apprenticeships?
- How long have you worked on the apprenticeship project? Did you apply to work on apprenticeships or were you seconded to it?
- What is your role in relation to apprenticeship?

B. Theme 1 – Apprenticeship

- What does the term apprenticeship mean to you?
- Do you believe the term is broadly well understood in relation to higher education apprenticeships?
- If not, why do you think that is?
- Do you believe that there is a difference between the traditional apprenticeships and the newer higher education apprenticeships?
- What was your knowledge of apprenticeships before you became involved?
- What was your organisation's objective in getting involved with apprenticeships?

C. Theme 2 – Process of Engagement

- Prior to the development of your apprenticeship, what involvement did your organisation have with the relevant industry bodies?
- Had your organisation worked with them before and if so in what capacity and to what end?
- Where did the motivation and inspiration come from for embarking on this apprenticeship journey?
- How did your organisation engage with your industry partners on this apprenticeship?
- Can you talk me through that process of engagement?
- Was there an obvious senior level sponsor in your organisation?
- At what level in each organisation did the initial engagement happen at?
- Was the intention to work together followed up with a contract/MoU/SLA?
- If such a document was used where was it sourced from? How long did it take to go from signalling of intention to work together to production of document?
- Was a high-level steering group appointed? If so how did this happen, as in who nominated the members and their terms of reference?

D. Theme 2 – Clarity of Roles, Responsibilities and Accountabilities

- Did the document clearly set out accountabilities and roles for each party? Were the risks to each party identified?
- Was it clear at the outset as to what each party had to do?
- Was one party seen to be more accountable than the other? If so who? Why did you think that was? Is that what transpired?
- Was it clear what each party was bringing to the table?
- Was there appreciation for what expertise each party was bringing?
- How aware were each party of each other's internal systems, culture and way of working?
- Were there any tensions between the two organisations internal systems, culture and ways of working?

- Was a Project Lead assigned to the project? If so from what organisation? Or was there one assigned from each organisation?
- Was a project team established and if so what was the makeup of this?
- At the early stages of the apprenticeship journey there was a lot of interaction with the relevant policy leads such as Solas, HEA, QQI, DES – which party took the lead? Why do you think that was? Did it benefit the project deliverables?
- Did the expertise of each party come to the fore at different stages of the overall process?
- Do you think the roles of the HEI and industry partners are clearly understood? Can you give some examples to illustrate your answer?
- Is there clarity on where your organisation's role stops and your collaboration partner's role starts?
- If that clarity does exist for you then do you think it exists in both organisations?

E. Theme 3 – Organisational Support

- Did you feel supported in your own organisation in terms of resources allocated to support this?
- From an academic/industry career progression perspective how was/is your involvement with this project viewed?
- As academic/industry settings are busy places with competing priorities were you facilitated in focusing on this as a priority or how it ranked or rated as a priority in the overall scheme of things?
- Did this create competition for internal resources and how did you manage that?
- What were the internal incentives in your organisation for being involved with this?
- Through what lens was your involvement viewed through in your organisation? Collaboration? Programme design (Academic)? Fulfilment of a strategic KPI? Talent pipeline (industry)
- Through what organisational system is the performance of the apprenticeship reported?

F. Theme 4 – Co-design, Work Based Learning and Accreditation

- How would you and/or your organisation define work-based learning?
- Does your organisation have a track record in work- based learning? If so, tell me how?
- If not, is this your organisation's first foray in to work-based learning?
- Is apprenticeship seen as work- based learning or as something else?
- Did you experience any challenges in the design of the work-based curriculum? If so, what were they?
- Did both parties play an equal role in designing the overall curriculum including assessments?
- How do you feel the co-design of the apprenticeship went?
- As a HEI did you feel that you had more responsibility as this is known to be a core skill for HEIs?/As the industry partner did you feel that you had more responsibility in relation to the on-the-job content?
- What did you learn from your collaboration partners in this co-design process?
- How do you relate to issues that the literature in this area report in relation to this apprenticeship:
  - programme quality; the need for higher levels of employer engagement
  - requirement for HEIs to improve processes and levels of support when engaging with industry
  - the level and depth of rethinking of traditional boundaries required
  - a focus on workplace mentorship
- Did this process differ from other co-design experiences? If so, how? Did your organisation see your role as truly co-designer of an apprenticeship programme?
- As there was a very strong emphasis from the outset on the QQI accreditation process how did you feel about that from your perspective (academic/industry) in terms of accountability, expertise and deliverables?
- Were there any factors that hindered you and/or your organisation in relation to the co-design, WBL and/or accreditation?

G. Theme 5 – HEI and Industry Collaboration

- From a collaboration perspective what did your organisation hope to gain from this process?

- Was there a clear collaboration process to follow? If so, who designed it? Did both parties follow it?

- What challenges if any did you experience in relation to collaboration with your collaboration partner?

- Who experienced the challenges and how were they managed?

- What was learned from encountering these challenges?

- What benefits were gained from the collaboration?

- Who were the beneficiaries?

- Was there anything to be learned from other HEI and industry collaboration projects that could be applied to this?

- Is there anything that you think that was learned from this process that could be applied to other HEI and industry collaboration projects?

- Has the experience of this motivated you and/or your organisation to engaged in other HEI and industry collaboration projects?

- Key HE sector reports note that HEIs need to be more proactive and dynamic in their collaboration with industry – is this a good example of both? Tell me why?

- Were any tensions experienced in the HEI and industry collaboration? (Between cultures, systems, processes?)

- If so, what do you think could have been done to have prevented those tensions from happening?

- In your view was the collaboration mutually beneficial? How?

- How did the learner benefit from the collaboration?

- Has, or would your organisation consider collaborating with the same partner again on a different type of project or even another apprenticeship?

- What barriers did you identify if any?

- What incentives were there?

- What qualities do you think each party needs to have to make this collaboration a success?

- On reflection were both your and your partner's expectations met?

- Were both organisations clear as to what success in this context looks like?

H. Concluding Questions

- What do you think are the necessary elements for a successful apprenticeship education programme?
- What advice would you give to another HEI starting out on the apprenticeship journey?
- What has been the biggest learning for you?
- Is there anything else you would like to tell me?

Appendix 3: Preliminary Interview Themes for Policy Stakeholders

- Discuss purpose of research
- Outline confidentiality guarantees, issue letter explaining confidentiality and request consent to record interview

A. Background Details

- Could you give me a brief description of your organisation?
- Could you give me some details about your professional background?
- How long have you worked with your employer?
- What is your organisation's role in relation to higher education apprenticeships?

B. Theme 1 – Apprenticeship

- What does the term apprenticeship mean to you?
- Do you believe the term is broadly well understood in relation to higher education apprenticeships?
- If not, why do you think that is?
- Do you believe that there is a difference between the traditional apprenticeships and the newer higher education apprenticeships?
- What was your knowledge of apprenticeships before you became involved?
- What was your organisation's objective in relation to higher education apprenticeships?

C. Theme 2 – Process of Engagement

- What is your awareness of the process of engagement between HEI's and industry partners?

- In the overview you have of the various HEI apprenticeships are there ones that stand out for you in terms of how they have engaged with industry?
- In relation to the ones you have identified, what factors do you think have positively impacted this engagement?
- In your experience to date how has senior level sponsorship in the collaborating organisations impact on the engagement?

D. Clarity of Roles, Responsibilities and Accountabilities

- As you have interacted with a number of HE apprenticeships how important do you think clarity around accountabilities and roles for each party are?
- How did this clarity manifest itself?
- Do you think it was clear at the outset as to what each party had to do based on your interactions with them?
- Did you feel that one party appeared to be more accountable than the other? If so who - as in HEI or industry? Why did you think that was?
- Looking from the outside in was it clear what each party was bringing to the table?
- Do you think there was an appreciation for what expertise each party was bringing?
- How aware were each party of each other's internal systems, culture and way of working?
- Were there any tensions between the two organisations internal systems, culture and ways of working?
- At the early stages of the apprenticeship journey there was a lot of interaction for the consortias with the relevant policy leads such as Solas, HEA, QQI, DES –it benefit the project deliverables?
- Did the expertise of each party come to the fore at different stages of the overall process?
- Do you think the roles of the HEI and industry partners are clearly understood? Can you give some examples to illustrate your answer?
- How would clarity of roles, responsibilities and accountabilities in the consortia assist in the delivery of your organisations needs in the apprenticeship context?

E. Theme 3 – Organisational Support

- From your perspective did you observe that the HEIs and industry partners were supported in their own organisations in terms of resources allocated to support this?
- From an academic/industry career progression perspective could you see if there was career progression for the HEI and industry partner personnel involved?
- Did you get the feeling that the apprenticeships were priorities of the relevant organisations?
- Did you see any of the HEI and industry partner personnel being rewarded by their organisations for their involvement?

F. Theme 4 – Co-design, Work Based Learning and Accreditation

- How would you and/or organisation define work-based learning?
- What has your experience of work-based learning been? Can you give me some examples?
- Do you see apprenticeship as work-based learning or as something else?
- What challenges have you observed in the design of the work-based curriculum?
- Have you also observed those challenges being overcome? If so, how?
- From what you have observed do both parties play an equal role in designing the overall curriculum including assessments?
- How do you feel the co-design of the apprenticeships is going across the range of new apprenticeships so far?
- Do you think that the HEIs have more responsibility in specific areas and the industry partners in others? If so what areas?
- What have you as a stakeholder learned from your observation of the collaboration partners in the co-design process?
- How do you relate to issues that the literature in this area report in relation to the new HE apprenticeships:
-
  - programme quality; the need for higher levels of employer engagement

   o requirement for HEIs to improve processes and levels of support when engaging with industry

   o the level and depth of rethinking of traditional boundaries required

   o a focus on workplace mentorship

- As there was a very strong emphasis from the outset on the QQI accreditation process what did you observe in the consortia partners in terms of accountability, expertise and deliverables?

- What factors have you observed that have hindered the consortia's in relation to the co-design, WBL and/or accreditation?

G. Theme 5 – HEI and Industry Collaboration

- What do you and your organisation hope the collaborative process in the apprenticeship context would achieve?

- What challenges did you observe in the formation and management of the consortia?

- How were these challenges and how were they managed?

- What did you and your organisation learn from observing these challenges?

- What benefits do you think the partners gained from the collaboration?

- Who were the beneficiaries?

- Is there anything that you think that was learned from the apprenticeship process that could be applied to other HEI and industry collaboration projects?

- Key HE sector reports note that HEIs need to be more proactive and dynamic in their collaboration with industry – have you seen any examples of this in the range of new apprenticeships? Is there any specific example you could talk about?

- Were any tensions observed in the HEI and industry collaboration? (Between cultures, systems, processes?)

- If so, what do you think could have been done to have prevented those tensions from happening?

- In your view was the collaboration mutually beneficial? How?

- How did the learner benefit from the collaboration?

- What barriers to collaboration did you identify if any?

- What incentives were there?

- What qualities do you think each party needs to have to make collaboration in this context a success?

- Have your organisation's expectations in the overall apprenticeship context been met?

- Is your organisation clear as to what success in this context looks like?

H. Concluding Questions

- What do you think are the necessary elements for a successful apprenticeship education programme?

- What advice would you give to HEIs and industry partners starting out on the apprenticeship journey?

- What has been the biggest learning for you and your organisation?

- Is there anything else you would like to tell me?

Appendix 4: Consent Form

CONSENT FORM

Researcher's Name(s): Deirdre Giblin

Project Title: 'A process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration'

INTRODUCTION

This consent may contain words that you do not fully understand. Please ask the researcher to explain any words or information that you do not clearly understand.

You are being asked to participate in a research study as a stakeholder in the new apprenticeship landscape in Ireland. When you are invited to participate in research, you have the right to be informed about the study procedures so that you can decide whether you are willing to participate.

Your participation is entirely voluntary. You may stop participation at any time up to data merge without penalty or loss of benefits to which you are otherwise entitled.

WHY IS THIS STUDY BEING DONE?

The purpose of this research is to study the process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration. This study is in partial fulfilment of a Doctorate in Business Administration, which the researcher is undertaking in Waterford Institute of Technology.

The Researcher works in the National College of Ireland as Director of Development and External Engagement. National College of Ireland are supporting this study given that it has the potential to develop understanding of the process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry

collaboration. It aims to increase understanding as to how the process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration can be effectively designed and implemented. This understanding could then be used to improve the effectiveness of apprenticeship education collaborations between education providers and industry in the Irish apprenticeship landscape.

HOW MANY PEOPLE WILL BE IN THE STUDY?

Up to 30 apprenticeship stakeholders will take part in this study; each will have had a role to play in the apprenticeship education landscape in Ireland.

WHAT AM I BEING ASKED TO DO?

You are being asked to participate in one interview. You will be asked a little about your professional background, about your organisation and about your role in the 'new' higher education apprenticeships. You will then be asked questions under the following headings: the general concept of apprenticeship; the process of engagement between Higher Education Institutes and industry partners; clarity of roles, responsibilities and accountabilities; organisational support; co-design, work-based learning and accreditation; Higher Education and Industry collaboration.

HOW LONG WILL I BE IN THE STUDY?

This study will take 6 months to complete. Each interview will take between 45 and 60 minutes to complete. With your permission the interviews will be recorded. The interviews will take place at a location of your choosing (e.g. your workplace, a coffee shop, etc.). I realise that you are busy and understand that the interview may be interrupted – the questions have been designed to allow for this likelihood. As such, the time from start to finish of the interview, allowing for disruptions, may vary from interview to interview.

WHAT ARE THE BENEFITS TO ME OF BEING IN THE STUDY?

The benefit of the study to you is the creation of a body of knowledge which you and your organisation as apprenticeship stakeholders will hopefully be able to apply to enhance the effectiveness of future apprenticeships.

WHAT ARE THE RISKS OF BEING IN THE STUDY?

The questions relate to your experiences as an apprenticeship stakeholder and as such do not present a particular risk. However, should any criminal or harmful issues be disclosed to the researcher, it may be necessary for the researcher to report these, following consultation with her research supervisors, Dr. Patricia Bowe and Dr. Felicity Kelliher.

CONFIDENTIALITY

For your participation in this study to be anonymous it would mean that your identity would not be known to the researcher. Participants taking part in the study will not be anonymous as they will be known to the researcher and potentially the research supervisors (if required).

Your participation in the study will be treated confidentially. Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study. While confidentiality applies, please be aware that, should any criminal or harmful issues be disclosed to the researcher, it may be necessary for the researcher to report these, following consultation with her research supervisors, Dr. Patricia Bowe and Dr. Felicity Kelliher.

For confidentiality purposes you will be assigned an Identification Code and your name or other identifying factors will not appear in the final research documentation or related publications.

Information produced by this study will be stored in the researcher's file and identified by a code number only. The code key connecting your name to specific information about you will be kept in a separate, secure location. Information contained in your records may not be given to anyone unaffiliated with the study in a form that could identify you without your written consent, except as required by law. In addition, if used,

you will be given the opportunity to listen to or read the audio transcript before you give your permission for their use if you so request.

WHO DO I CONTACT IF I HAVE QUESTIONS, CONCERNS, OR COMPLAINTS?

You may ask questions, voice concerns or complaints to the researcher (principal investigator), Deirdre Giblin by email deirdregiblin@gmail.com or by telephone 086 8233981.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

If you have any questions regarding your rights as a participant in this research and/or concerns about the study, or if you feel under any pressure to enrol or to continue to participate in this study, you may contact my research tutor, Dr. Patricia Bowe at pbowe@wit.ie.

A copy of this Informed Consent form will be given to you before you participate in the research.

SIGNATURE

I have read this consent form and my questions have been answered. My signature below means that I do want to be in the study. I know that I can remove myself from the study at any time up to data merge without any problems.

Signature _____   Date _____

Print Name: _____

PAPER 3

Student Name	Deirdre Giblin
Student No	20074655
Paper No	Paper 3 Design Implementation and Initial Findings
Title of Paper	A PROCESS FOR ENACTING AN APPRENTICESHIP MODEL ASA MECHANISM FOR FACILITATING HIGHER EDUCATION AND INDUSTRY COLLABORATION
Date Submitted	September 16th 2019

ABSTRACT

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration. The resultant research questions are: (a) what is the process for developing, implementing and enacting a Higher Education (HE) apprenticeship education model? (b) How can this model serve as a mechanism for HEI and industry collaboration? An interpretivist paradigm is adopted which is in sympathy with the social constructionist theoretical underpinnings of the study. This exploratory study interviews HEI and Industry stakeholders within the Irish Financial Services Apprenticeship Scheme to explore this phenomenon in its natural context, as it allows for the subjective and contextual experiences of the participants to be incorporated. In this paper the researcher documents the implementation of her research design over a six-month period. The implementation involved a number of stages: obtaining ethical approval for the study; recruiting and conducting semi-structured interpretive interviews with twelve participants representing key HEI-Industry stakeholders and maintenance of the researcher's reflective log. Having transcribed twelve semi-structured interviews, in liaison with a review of reflective log entries, the researcher familiarised herself with the data, identified a number of emergent themes and presented initial findings. The next steps in the research study are outlined.

KEYWORDS

PAPER 3: RESEARCH DESIGN & PHASE ONE FINDINGS

INTRODUCTION

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC). The resultant research questions are: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for higher education institute (HEI) and industry collaboration? The research questions are supported by the following research objectives: (1) Develop a HE apprenticeship education model incorporating roles, responsibilities and accountabilities; (2) Identify the internal and external organisational supports required to implement the HE apprenticeship education model, and (3) Explore the key drivers for the successful enactment of the HE apprenticeship education model.

As the research aims to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration, the researcher is seeking to understand the social reality that is created by the subjective experience of the individuals under study (Berger and Luckman, 1966; Campbell, 2000; Gephart, 2004). Understanding more about the roles, processes, systems, culture and conditions that influence the realities of individuals seeking to collaborate from the worlds of higher education and industry in the context of apprenticeship education design and development, will facilitate the answering of the research questions. The most common form of interaction involves conversations in informal and formal settings and as proposed by Berger and Luckman (1966), individual's social realities are maintained and reconstructed by conversations. In this paper the researcher is seeking to understand these conversations and the impact they have on the collaboration of the actors identified.

RESEARCH METHODOLOGY

Aligned to the social constructivist theoretical underpinning of this study, this research takes an interpretivist philosophical position that recognises multiple forms of reality (Lee and Baskerville, 2003; Carcary, 2009), which are created by individuals in the context of their lives (Cunliffe, 2008). The applied interpretive interview approach in this research

allows for the apprenticeship phenomenon to be studied in depth in its natural context (Crowe et al., 2011), without the need for the complete immersion of the researcher. Interviewing multiple HEI and Industry stakeholders from within the studied apprenticeship scheme allows for multiple perspectives to emerge in pursuit of deep description (Crowe et al., 2011). Ethical considerations have been explored and considered in a previous paper from a number of perspectives, with a particular focus on the issue of researcher as an insider performing the dual role of practitioner-researcher in this research context.

The researcher is the Director of Development and External Engagement in the National College of Ireland and relevant to this study, is a member of the International Financial Services Apprenticeship Consortium[9] and a member of the Dublin Regional Skills Forum[10]. In this paper the researcher presents the implementation of the research design over a 6- month period. This process involved a number of stages: obtaining ethical approval for the study from the relevant bodies; mapping of the interview questions to the literature review and the conceptual framework; development of a data collection project plan; recruiting the research participants; conducting 12 semi-structured interviews; initial thematic analysis of emergent themes arising from the interviews (Braun and Clark, 2006) and maintenance of researcher's reflective log. It concludes with the next steps required to complete the data collection and data analysis.

STUDY CONTEXT

The research context is the International Financial Services Apprenticeship Scheme. Five members of the International Financial Services (IFS) Apprenticeships Consortium and seven national policy stakeholders were interviewed as part of this research (fig. 1).

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[9] The International Financial Services Apprenticeship Consortium is the steering group for the International Financial Services Apprenticeships

[10] A Network of Regional Skills Fora was created as part of the Government's National Skills Strategy and provides an opportunity for employers and the education and training system to work together to meet the emerging skills needs of their regions.

Figure 1: IFS Apprenticeship Study Participant Organisations

Two of the IFS Consortium members represent industry (Financial Services Ireland) and two represent the studied HEI (National College of Ireland, of which the researcher is a staff member). The fifth member is the largest employer of IFS apprentices and Vice Chair of the IFS Consortium. The seven national policy stakeholders each represent one of the seven bodies that in total comprise the apprenticeship national policy landscape as it pertains to higher education in Ireland.

ACCESSING AND RECRUITING PARTICIPANTS

Each of the participants was contacted via email and all responded within the maximum of three working days with the exception of those who were on annual leave. All of the participants are in positions of relative autonomy in their organisations and none needed to achieve organisational approval for the interviews. Attached to the emailed interview

request was the letter of consent to be signed if there was a willingness to participate in the study and a reminder of the purpose of the study (appendix 1). As soon as the interview date, time and place was confirmed each participant was sent a Microsoft Outlook diary request and a reminder email was sent 2 days before the interview.

Primary Data Collection: Interview Schedule

Of the 12 participants invited to take part in the study all 12 agreed. The only logistical accommodations that were required were as a result of participants being on annual leave which resulted in two interviews being rearranged and one taking place over the telephone. The researcher acknowledges that telephone interviews are often depicted in the literature as a less attractive alternative to face to face interviews due to the absence of visual cues and the risk of data distortion. Novick (2008) states that the evidence is lacking that they produce lower quality data and that telephone interviewees can actually feel more relaxed and provide more revealing insights. In this instance the telephone interview was with the Chair of the Apprenticeship Council whom the researcher knows through the course of her work. She is satisfied that the quality and the integrity of the data was not impacted negatively by the data collection method.

Table 1 below provides details of the study participants.

Category	Role	Date of Interview	Length of Interview	Reviewed Transcript	Gender
IFS Consortium	FSI Apprenticeship Lead	14/06/19	66.19	Will approve quotes to be used	Female
IFS Consortium	NCI Apprenticeship Lead	19/06/19	98.28	Will approve quotes to be used	Male
National Policy Stakeholder	Executive Director Solas	20/06/19	56.45	Will approve quotes to be used	Female
IFS Consortium	FSI Director	28/06/19	61.63	Will approve quotes to be used	Male
IFS Consortium	Global Head of Talent IFS Participating Employer	03/07/19	50.44	Will approve quotes to be used	Female
National Policy Stakeholder	Education Policy Director Employer Body and Apprenticeship Council Member	10/07/19	88.48	Will approve quotes to be used	Male
National Policy Stakeholder	Regional Skills Manager and Apprenticeship Council Member	10/07/19	71.05	Will approve quotes to be used	Female
IFS Consortium	NCI Vice President	16/07/19	62.30	Will approve quotes to be used	Male
National Policy Stakeholder	Dept. of Education & Skills Apprenticeship Lead and Apprenticeship Council Member	17/07/19	66.26	Will approve quotes to be used	Male
National Policy Stakeholder	Higher Education Authority Apprenticeship Lead and Apprenticeship Council Member	08/08/19	72.14	Will approve quotes to be used	Female
National Policy Stakeholder	Chair of Apprenticeship Council	09/08/19	56.36	Will approve quotes to be used	Male
National Policy Stakeholder	Quality Qualifications Ireland Apprenticeship Lead and Apprenticeship Council Member	20/08/19	69.57	Will approve quotes to be used	Male

Table 1: List of Study Participants

The majority of the interviews took place at the participants' place of work, with two happening at the researcher's place of work and one taking place over the telephone. At the start of each interview the participants were talked through the consent form (appendix 1) and given the opportunity to ask questions before signing. Permission was asked for the interviews to be recorded and this had already been signposted in the email request. Each interview followed the interview guide (appendix 2. The length of each interview is documented in table 1.

Within 48 hours of each interview the researcher logged her reflections on the interview and the cumulative picture building at each stage (Koch, 1994; Carcary, 2009; Brinkmann and Kvale, 2015). All participants were offered the opportunity to review the transcript. None of the participants took up that option but the researcher offered the participants the opportunity to approve the quotes selected by the researcher for inclusion in this paper. All participants accepted this offer. A point of reflection by the researcher was that this approval process relaxed the participants and facilitated them to open up in their responses to the questions.

THEMATIC ANALYSIS PROCESS

The researcher used Otter.AI transcription and audio software to record each interview. She found that the transcription in most cases was approximately 60% correct and that each interview required correcting which took up to 5 hours per interview. In the process of this she familiarised herself with the initial emergent themes and reflected on these further in her log which she completed within 48 hours of each interview. This facilitated the noting of emergent themes and sub-themes, which became clearer on further familiarisation with the data. Clusters of themes then started to emerge (appendix 3).

The researcher went through each of the scripts several times, identifying the most frequently occurring themes by using different coloured highlighter pens and noting them in the margins (appendix 3). The researcher then listed the emerging themes under the headings 'Consortium' and 'Stakeholders' and looked at where they converged and where they differentiated and in the main they converged (appendix 3). Sub themes were also noted using this iterative process of data analysis (Dey, 1993). These were organised into the following themes and sub-themes as can be seen at Table 2.

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Theme	Sub-theme
Ambiguity about the Use of Terminology	Expansion into Non-traditional Apprenticeship Domains
	Work-based Learning Perspectives
	Occupational profile
Differing Stakeholder Motivations for Involvement	Response to Economic Climate
	European Apprenticeship Renaissance
	Statutory Obligation
	To Influence Public Policy
	Advocacy for HEI Apprenticeship Providers
	Guarantors of Quality
	Apprenticeship Culture
	Competitiveness of IFS Sector
	Belief in Mode of Learning
Importance of the Apprenticeship Stakeholder Relationships	Role of the Consortium
	Powers of the Consortium
	Leadership of the Consortium
	Role of the HEI on the Consortium
	Relationship between Education Partner and Employer Body
	Collaboration of all Stakeholders
Confusion around Roles and Responsibilities	Roles and Responsibilities of Stakeholders
	Overlap in Consortium and Stakeholder Roles
	Differentiation between Employers and Employer Body Roles
The Requirement for Robust Processes	Statutory Basis for Processes
	Processes as Barriers
	Streamlining of Processes
	Re-visiting 1967 Legislation vis a vis Processes

Table 2: Emergent themes and sub-themes

FINDINGS

Having established the themes and sub-themes (Table 2), the researcher studied the interaction between the themes and sub-themes using thematic map (Miles and

Huberman, 1994). This process consolidated the findings into five main themes: ambiguity about the use of apprenticeship terminology; differing stakeholder motivations for involvement; importance of the apprenticeship stakeholder relationships; confusion around roles and responsibilities and the requirement for robust processes (figure 2).
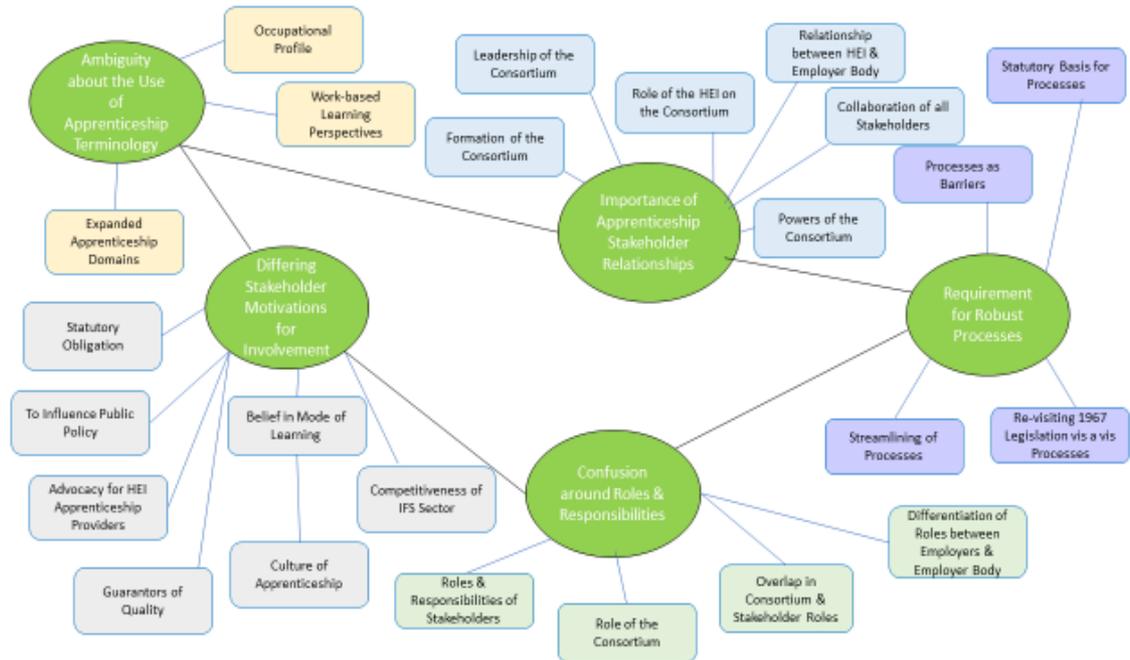
Figure 2: Thematic Analysis Map: Enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC)

Each of the exhibited themes (figure 2) are discussed below.

Theme 1 – Ambiguity about the Use of Apprenticeship Terminology

One of the outputs of the Apprenticeship Review Process in 2013 and the subsequent establishment of the Apprenticeship Council was the decision to continue to use the term "Apprenticeship". This would be governed by the Industrial Training Act of 1967, and would include the new expanded apprenticeship occupations. This had been a much discussed issue in the apprenticeship context especially with the new higher education apprenticeship providers at the time.

The continued use of the term apprenticeship seems to have been driven by the pragmatic use of the existing legislation based on insights from some of the national policy stakeholders;

> "……it's a pragmatic acceptance that we have to work within a statutory framework because it is already there and to dismantle it would have a required bigger changes. The statutory framework provides the backing of the Industrial Training Order and that is a defining characteristic of Apprenticeships both pre and post review". (Department of Education Apprenticeship Lead)

Legislative protection of all parties is viewed as important and the decision made by the key national policy stakeholders was that the existing legislation provided those necessary protections;

> "Apprenticeship is a mode of learning and it's underpinned by legislation. There are protections for apprentices, there is a structure by which employers have to sign up, and it is a form of learning that happens both on and off the job." (Executive Director Solas)

However, there are quite different views expressed from the various participants as to how useful retaining the term "Apprenticeship" has been,

> "…there's something about the term apprenticeship and some days I think it should be changed and some days I think it shouldn't because apprenticeship is an important term with a long history but it is so closely associated with the craft apprenticeships". (HEA Apprenticeship Lead)

This view is echoed in day to day conversations by those operating in the apprenticeship sphere. It is an understandable view and as the sectors involved in apprenticeship are extended, it is an ongoing debate with those sectors more closely linked with the traditional apprenticeships having a greater understanding and appreciation of the value of the use of the term. Interviewees highlight growing ambiguity about the use of apprenticeship terminology with the extension of apprenticeships into non-traditional

apprenticeship domains and work-based learning initiatives, extracted as sub-themes in the data analysis.

Expanded apprenticeship domains

The extension of apprenticeships into new sectors was not an expected outcome of the Apprenticeship Review (2013) and the concept of extending apprenticeships in to new non-traditional occupations has been difficult for some employers to grasp.

"I don't think there is an understanding of what the new apprenticeships involve. The International Financial Services Industry for instance has experience of graduate programmes, but they're very different to apprenticeships. I don't think there is an awful lot of knowledge about what an apprenticeship is and the commitments involved" (NCI Apprenticeship Lead)

It appears that the 'hard sell' of the term apprenticeships to the employer is impacting employer engagement with the scheme;

> "I think the fact that it is called an apprenticeship is a negative term for the companies we're dealing with, if we'd been allowed to call it something else that might make a difference. And it might make it more attractive …maybe we might be able to sell it better to employers". (FSI Apprenticeship Lead)

There is acknowledgement that the term apprenticeship is a source of difficulty particularly as there is an apparent disparity between the craft apprenticeships and the new apprenticeships.

> "The use of the UK term 'Degree Apprenticeship' could possibly work". (HEA Apprenticeship Lead)

Work-based learning perspectives

The input of the QQI Apprenticeship Lead recognising the importance of the 'extraction' of skills and learning 'from the enterprise setting' promotes the importance of the

workplace being a locus of learning for the apprentice. There is also recognition by the policy participants that apprenticeship is a unique mode of learning;

"…it is not like any other education or training provision in that somebody actually gets a job with an employer to become an apprentice. And the employer has to be formally involved in providing the job, the guidance and the salary" (Executive Director Solas)

"Students in typical third level courses apply the learning almost at the end yet the apprentice is applying the learning while they learn – it is part of their mode of learning." (Regional Skills Manager).

While there was consensus that apprenticeship equates to work-based learning, more detailed descriptions came from the HEI participants;

"To me the term means earn and learn – work on the job and get the education at the same time." (FSI Apprenticeship Lead)

"Somebody who is learning as they go and get direction and support from somebody within the organisation who is a mentor, perceived as somebody who knows the ropes, and some sort of perceived wisdom about the industry, and will guide them. In addition to that they receive training and education and receive a recognisable reward in the industry that will set them on a path to be fully qualified, and a member I suppose, of that community of practice" (NCI Apprenticeship Lead)

"Apprenticeship means to me serving your time so as to become competent at actually doing something to a high level of practice and doing it as well as having an educational input… [it] can create a beautiful marriage between the practical and the theoretical" (NCI Vice President) "Apprenticeship is an occupation specific form that mixes work based learning and college learning, on and off the job where there is a locus of learning which is outside and inside the enterprise. Skills and learning are extracted from the enterprise setting." (QQI Apprenticeship Lead)

It is not surprising that the HEI participants present detailed descriptions as they look at apprenticeships through a learning lens, built on a long history of delivering work based education which clearly overlaps with the apprenticeship education model (figure 3.2). In contrast, the employer participants look at the utilisation of learning in the work context:

"… for me it's around learning your trade and that can be about analytics or whatever, in an environment that supports you to be able to do that. So it's on the job with the support of the theory from the college to make it come alive for people. It's the collaboration between the college, the individual and the company to be able to make sure that the learning is utilised in real time. It's adding value to all three – it's like a tripartite relationship in the creation of value." (IFS Employer)

"….. it's a model of learning that accelerates the capabilities in the individual for them to become highly valuable to their sector" (FSI Director)

Occupational profile

The employers and employer representatives bring a valuable appreciation of the role of the occupation at the very heart of apprenticeship. They have a strong focus and appreciation of the development of expertise being at the core of the apprenticeship proposition:

"It is about deep learning for a specific occupation and I would say that you can't do an apprenticeship in anything less than two years." (Ibec Education Policy Director)

Without the employer's detailed understanding of the occupations then the Occupational Profile on which each apprenticeship is built could not be produced. The specific needs of the occupation need to be addressed and delivered on, for the apprenticeship to have currency and validity in their own sector and beyond.

This unique aspect of apprenticeship appears to be well understood by the policy makers, as discussed later in the findings.

Theme 2 – Differing Stakeholder Motivations for Involvement

The motivation for involvement in apprenticeships varied greatly between the policy and consortia participants and also within those two categories.

All of the policy participants are members of the Apprenticeship Council and a number of them were involved from the Review of Apprenticeships in 2013[11] through to now (2019). The researcher felt an almost overwhelming amount of good will from those who have been involved from the early days and a strong motivation to "crack the code and make this work" and a very strong sense of "doing the right thing for the country" with an undertone of "even if the country doesn't realise it yet".

Response to Economic Climate

The Chair of the Apprenticeship Council and the Ibec Director of Education Policy were part of the original review (2013) and they provided invaluable insights into those early days of the apprenticeship programme. The Chair talks of "building the bridge while we were walking over it" and the Ibec Director paints a picture of the landscape at the time:

> "We were in the depths of the crisis. Construction apprenticeships had fallen away…There were apprentices but there were no apprenticeships…the army had to help some of them to finish them. So the then Minister for Education Ruairí Quinn decided to set up the Apprenticeship Review Group under Kevin Duffy."

European Apprenticeship Renaissance

The current Department of Education representative adds the insight (as is borne out by the literature review) that:

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[11] Review of Apprenticeship Training in Ireland, Department of Education and Skills, 2013

"…at European level apprenticeship started to kind of become a bit of a flavour of the month, in effect a European apprenticeship renaissance and there was a sense that countries with high performing apprenticeships were countries that had low levels of youth unemployment. So in that time of crisis it was talked about in the context of addressing unemployment challenges."

It appears, and this is corroborated by those involved in the original review of apprenticeships (2013) that one of the main outputs of the review group, which was to expand the occupations for apprenticeships, was totally unexpected. There was a sense that the review took a "life of its own".

All of the policy stakeholders are on the Apprenticeship Council because they are representing their employers (with the exception of the Chair), and all were asked as part of this study to speak about the motivation of their employers for being involved in this programme (see figure 3.1 above).

Statutory Obligation

As the Department of Education "set the policy and legislative framework for apprenticeship" and "bring to Government the various apprenticeship related proposals such as the recommendations of the Review Group", their motivation is statutory obligation.

Solas, (formerly the agency known as FÁS) has had a very long association with apprenticeship. Ireland has an excellent reputation for the high quality of its apprentices across the craft apprenticeships, evidenced by the international employability of apprentices and achievements at international events such as the World Skills competition. Solas was selected by the Department of Education to be the Secretariat for the Apprenticeship Council. Many things changed for Solas with the advent of the new apprenticeships. The craft apprenticeships are still centrally co-ordinated by Solas and the new apprenticeships are decentralised and managed by Industry led Consortia with supports from Solas and some of the other agencies such as the HEA and QQI. Solas have the "oversight of apprenticeship as a whole because of the legislation underpinning apprenticeship being the 1967 Act".

To Influence Public Policy

The motivation for Ibec as the largest employer representative body is to influence public policy in relation to education and labour market policy to the benefit of their membership. While it was obvious for Ibec to be invited on to the Review Group and the Apprenticeship Council their Education Policy Director had a particular interest in this area:

"Typically we, Ibec, have to be very strategic in what we get involved with and how we get involved. So I thought about it and said actually I will be the one to represent Ibec"

Advocacy for Higher Education Institute Apprenticeship Providers

Apprenticeship is a relatively new landscape for the Higher Education Authority as a number of the new apprenticeships lead to higher education awards as opposed to further education awards. The HEA's motivation for being involved are as funders and also advocates for the HEIs developing and providing apprenticeships. These HEIs vary from Technological University Dublin to Institutes of Technology who are experienced in delivering craft apprenticeships, to Universities, Colleges and private HEIs who have no experience at all. The HEA participant pointed out as did many Apprenticeship Council members that the Apprenticeship Council "don't have any legal basis over apprenticeship".

Guarantors of Quality

At the time of the apprenticeship review Quality Qualifications Ireland (QQI) was:

"…the new kid on the block…and as we (QQI) have a mandate that spans further and higher education and training a submission was made to the Review Group"

and then;

"…as the external quality agency for post-secondary education we were invited by the Minister to join the Apprenticeship Council".

QQI appear to have a very clear remit and motivation for involvement;

> "as the guarantors of the National Framework (of Qualifications) we wanted to ensure the quality of the emerging apprenticeships…. Our remit would be that if a particular apprenticeship programme purports to do something that it can be done and that the institution can demonstrate their ability to deliver in a way that ensures the quality of the programme and the experience for the learner. So we are objective neutral and process intensive." (QQI Apprenticeship Lead)

Culture of Apprenticeship

The Chair of the Apprenticeship Council is also CEO of the ESB which is known as a company with a long and proud history of apprenticeship. His personal interest in the area of apprenticeship and his organisational experience made him an obvious choice for inclusion in the original review group and for Chair of the Apprenticeship Council.

> "…ESB takes on between 40 and 60 apprentices every year…there is a cost to the company in the supporting infrastructure but we have a comprehensive structure in place including supervisors who were apprentices in their time."

He talks very passionately about smaller contractors who take on apprentices;

> "where the owners themselves came up the apprenticeship route and they have strengthened their infrastructure to be able to grow their own apprentices"

> "We are all motivated by the same desire, by maintaining a system that works for all that is actually preserved by us all poaching apprentices from each other"

and observes that in organisations that were not historically involved in apprenticeships that it is much harder to inculcate the apprenticeship culture and the desire to build the necessary support structure.

Competitiveness of International Financial Services Sector

From the Consortium perspective the motivations for being involved are very mixed. From the employer body perspective as represented on the Consortium by Financial Services Ireland (FSI) by the FSI Director who says;

> "As a sector director I am responsible for the competitiveness of the sector…a tangible item for the apprenticeship is that talent and skills is incredibly important for the sector notwithstanding whether we're in a growth phase or a decline phase its incredibly important that the right talent is coming through at all times into the sector. So the apprenticeship route is one of the clear things that we need to put an effort in to create that pathway, it is creating more skills for the sector and finding talent that might otherwise not get in."

Belief in the Apprenticeship Concept as a Model of Learning

From the HEI perspective the heart rather than the head of the organisation appeared to win, in that as the NCI Vice-President says;

> "…there was a lot of internal resistance, I wouldn't have been overly excited by the commercials to be honest. A lot of investment was required and we had to redirect scarce resources to something that is a very long and slow cook. If we get the employers taking on lots of apprenticeships that would be fantastic really cool. I passionately believe in the apprenticeship concept, it is in mine and the college's DNA but it needs to make financial sense and without a scaling up from employers that is difficult."

The researcher found that there were very mixed reasons for involvement in the apprenticeships which was to be expected based on the variety of participants interviewed. Every policy stakeholder was clear about their organisation's reason for involvement but the words that struck the researcher most were those of the Chair of the Apprenticeship Council when describing his own sector's approach to apprenticeship, 'we are all motivated by the same desire, by maintaining a system that works for all'. There is still a sense that while all policy stakeholders are clear of their motivation for

involvement it still seems to be siloed across the board and a long way off the maturity and cohesiveness of the electrical sector approach, which radiates a strong sense of 'one for all and all for one', which has been developed over a long period of time.

Theme 3 – Importance of the Apprenticeship Stakeholder Relationships

The stakeholders on the apprenticeship landscape specific to the HEI apprenticeships have been mapped at Figure 3.1. In the early days of the establishment of the IFS Consortium, the relationships with Solas, the HEA and QQI were key. Solas provided the processes and the set up & development funding. The HEA provided guidance, advocacy and annual funding for the apprentices and the relationship with QQI was focused on the accreditation approval for both IFS apprenticeships.

Role of the Consortium

The role of the Consortium is key to the success of the stakeholder relationships. The participants were asked for their observations on the consortium;

> "You know and I know that many parts of the apprenticeship journey have been tough but one of the key areas is that of the consortium. Some consortia have been hugely successful and some not so much. And the learnings as to why they haven't been successful is as important as the success piece." (Regional Skills Manager)

> "Looking back on the early days I think we could have been more involved in the formation of the consortia. I think this was a resource issue. Instead of big groups meeting I think there could have been smaller groups meeting and us having more one to one meetings with the consortia would have been of benefit" (HEA Apprenticeship Lead)

The early adopter Consortia were established in an information vacuum without a full understanding of the overlap with the various statutory agencies. yet with the requirement to deliver on ambitious outcomes from design, development & accreditation of apprenticeships programmes through to the recruitment of employers and apprentices.

Powers of the Consortium

There is an element of dissatisfaction with the powers of the Consortium as expressed by the FSI Apprenticeship Lead;

"there wasn't really any guidance because since there was a whole new concept of having this consortium. At the beginning we thought the consortium would have more power but there is a blurring of the lines in relation to the role of the Authorised Officer in Solas. In reality I am a kind of a buffer between Solas and industry…The consortium should be in a position to make some of the decisions that Solas make to make everything more efficient and more seamless for the apprentices and the employers"

The researcher is a member of the IFS Consortium and has been since its establishment. She has reflected, throughout her involvement with the apprenticeship process to date, on the role of the Consortium. The IFS Consortium is managed by the Financial Services Ireland Apprenticeship Lead with two key employers, State Street and Fidelity, holding the Chair and Vice-Chair positions. It has evolved from being a requirement of the approval and funding process to it being a forum that addresses key strategic issues. In common with other members of the Consortium the researcher is of the view that it needs to evolve further as it is quite reliant on the management and co-ordination skills of the FSI Apprenticeship Lead. The next phase of development should see the employers proactively collaborate more with the Chair and Vice-Chair.

Leadership of the Consortium

Leadership of the consortium emerged as a sub-theme:

"A consortium where there is clear leadership and ownership from industry obviously works best. I have seen quite a few where they seem to be driven in the main by the education partner." (HEA Apprenticeship Lead)

"It is important that there is one industry body leading. Where a sector has a number of representative bodies who all want to take the lead – that is a difficult place to be." (Regional Skills Manager)

"I think it is important that the Consortium is seen as a guiding group with strong employer leadership advising the rest of us what needs to be done. I think this group should be used for game changer decisions" (FSI Director)

Role of the HEI on the Consortium

The role of the HEI on Consortia differs. On the IFS Consortium the partnership between NCI and FSI is strong and there is a very clear sense of joint accountability and 'being in this together'. The belief of both parties in the value of the apprenticeship concept for the sector has been tested many times since establishment. The IFS sector has proven to be one of the more difficult sectors in which to 'sell' the concept. There are a variety of reasons for this put forward by those interviewed: 'It is a sector dominated by in the main North American employers who are sceptical of the apprenticeship concept'; 'The tried and tested entry route into the International Financial Services sector is graduate entry. This is what we know and this is what our recruitment and retention systems are built around'; 'Hiring of apprentices causes us difficulty in reporting of headcount to our US HQs. We don't know how to define them in headcount terms in a way they will understand'. It is these types of issues that are brought to the IFS Consortium meetings for discussion and resolution. As articulated by the FSI Director 'I think it is important that the Consortium is seen as a guiding group with strong employer leadership advising the rest of us what needs to be done. I think this group should be used for game changer decisions'.

The Regional Skills Manager, who has an overview of a number of apprenticeships across a variety of industries, cites a best practice consortium example;

"There is an excellent example of a consortium that I have witnessed…all parties were in clear agreement that apprenticeship as opposed to any other development intervention was the answer for their skills issue …all the roles were clarified up front with guest appearances from the relevant stakeholders such as Solas. The education provider role was also well explained. There was an existing relationship with the education provider and a trust in them that definitely helped."

Relationship between Education Partner and Employer Body

The relationship between the education partner and the employer body was highlighted by the FSI Apprenticeship Lead: 'in our education partners I see a 'can do' attitude – NCI will do whatever is needed and lead on innovations such as use of e-portfolios and designing the mentor training programme'. She remarks that 'there is transparency in the way the college works. This all helps to build the trust.' The importance of the relationship is commented on further by the NCI Apprenticeship Manager: 'The relationship with FSI is very strong. So much depends on the support being given by the lead enterprise body and also the alignment of values. Both organisations need to acknowledge that apprenticeship is different and that they value it.' The alignment of values and ambition of both education and employer partners combined with the trust, transparency and a belief in the value of the apprenticeship concept has served the IFS Consortium well to date.

Collaboration of all Stakeholders

There is a keen awareness by all of the participants that there are a multitude of stakeholders and that this can bring its own pressures: 'With apprenticeship there are a lot of stakeholders and that changes the game completely'; 'So it's actually building the blocks of the external relationships that takes time'; 'It is the collaboration of all of the stakeholders that can make this all work well'. Also noted by many of those interviewed was the prevalence of good will 'The majority of stakeholders are really good and there is a huge amount of good will." (Ibec Director of Education Policy).

Theme 4 – Confusion around Roles and Responsibilities

Clarity of roles and responsibilities is key to the success of any initiative of this nature (Carter, 2010). Roles and responsibilities across the range of apprenticeship stakeholders is a strong theme based on the study's findings.

Roles and Responsibilities of Policy Stakeholders

While the Consortium is at the centre of the operation of the apprenticeship process in the new apprenticeships, the roles and responsibilities of the policy stakeholders are also very important. The majority of participants agree that there was some confusion at the outset and some of that confusion appears to still exist. The number of stakeholders involved has resulted in the view that 'at times it can appear confusing as to who is responsible for what' and as stated by the Ibec Director of Education Policy, 'we made a significant challenge even more difficult by the lack of clarity'.

Overlap in Consortium and Stakeholder Roles

The overlap between the role of the Consortium and the role of the Solas Authorised Officers lead to confusion especially in the early days. Even the most collaborative of the stakeholders found that it could 'be a difficult space - we work well with Solas who look after all of the process parts and we come in and do the funding side for the HEIs and even with the best will in the world from all concerned it is blurry' as conveyed by the HEA Apprenticeship Lead.

In the instance of the role of the HEI in the IFS Apprenticeships there seems to be more clarity about the different roles with 'FSI largely focused on recruitment' with the 'academic nature of the programme, managing the quality of delivery is the prime focus of the college' (NCI Apprenticeship Lead). As observed by the Regional Skills Manager this is not always the case with her stating that 'there is a significant element of clarity needed for both education providers and industry in relations to roles and responsibilities and the level of commitment needed'.

Differentiation of Roles between Employers and Employer Body

Understanding the roles of the various stakeholders is advocated as important by the Ibec Director of Education Policy and he talks of the differentiation between 'the role of employers and the people who are paid to represent employers. There is a different dynamic going on there. Now we like to think that we represent employers authentically but we are in the middle of a system and we get to know people very well in the system,

and some would argue that you need to be part of what you do to actually achieve anything', He puts forward that this is 'public choice theory.'

Theme 5 – The Requirement for Robust Processes

Throughout the interviews the theme of processes kept recurring from the overall system processes through to more localised operational processes.

Statutory Basis for Processes

Many process related questions were raised by those interviewed. One of the fundamental questions raised about the process was;

> "…whether the statutory apprenticeship basis is the right one. In retrospect I can see why they went that route. And that relates to process" (Ibec Director of Education Policy)

This relates to the previous point made about the unintentional outcome of the Apprenticeship Review being the expansion of apprenticeships into new occupations. The comment explains the fact that the statutory basis for apprenticeship while not ideal in the eyes of many interviewees, was understandable.

Processes as Barriers

Nevertheless, as the Regional Skills Manager commented 'On the process, it can be difficult to get a grasp of an understanding and to get over each of the hurdles required…the process can create barriers as well'. There is a divergence of opinion as to whether the processes can be streamlined further with comments such as: 'I'm not sure given all of the stakeholders how much streamlining you can do'; 'Maybe you can take bits out of the system and make them work better but a lot of the elements are fundamental'; 'If you look at all of the stakeholders and their needs it is very difficult to know what can be changed'; 'Just look at the 12 step process and then figure out why this thing isn't working as efficiently or effectively as it should'; 'So you have got a nice neat circle but in real terms it's a game of snakes and ladders'.

Revisiting 1967 Legislation vis a vis Processes

The situation is very well summarised by the Chair of the Apprenticeship Council;

> "We have delivered an infrastructure and a set of processes that can develop new apprenticeships. It might be clunky and it could do with some refinement and the alignment with the 1967 legislation could possibly be revisited."

Summary of Initial Findings

Initial findings indicate a strong sense of there being a challenge in both the use and understanding of the term apprenticeship and its implication for the commitment required from the various parties. The original objective of the 2013 Review of Apprenticeships was motivated by the apparent need to review the existing system, as the country emerged from recession and the expansion of apprenticeships into new occupations appears to have been an unexpected outcome. This could account in part for the retention of the term apprenticeship which is viewed as a double edged sword by the participants. The integrity of the term is acknowledged in its use in the traditional sense but its appropriateness to its extension in to the new occupations is questioned, in particular by those participants interacting with employers.

All participants clearly articulated their and their organisations motivations for being involved with apprenticeship and also for 'sticking' with apprenticeships on what has been acknowledged across the board as 'a journey not without challenges'. The motivation for all participants was in fulfilment of their organisational objectives with a heavier emphasis on this with the policy stakeholders. The IFS Consortium participant involvement in apprenticeship was discretionary for all – FSI, NCI and the employers.

The importance of the role of the Consortium is highlighted by all participants. All conclude that there was a lack of guidelines for the early adopters such as the IFS Consortium. This ambiguity was balanced by the recognition that all were in the same place "building the bridge and walking over it at the same time" and by the goodwill generated in part by all being at the start of this together. Leadership of the consortium was identified as a sub-theme and in particular the need for leadership from employers.

The majority of participants agree that there was some confusion at the outset and some of that confusion appears to still exist around roles and responsibilities. This lack of clarity appears to exist to different degrees in the national policy stakeholder landscape and within the context of the consortium members. The role of the HEI appeared to be the one with the most clarity. Some participants felt that lack of clarity about roles and responsibilities had a knock on impact on the HEI and industry actors having a full understanding of the level of commitment required.

The theme of the need for robust processes came through very strongly in all of the interviews, from the overarching national apprenticeship system through to the processes specific to the consortia members and the apprentices. Even the decision to retain the apprenticeship term can be traced back to process. There is a divergence of opinion as to whether processes can be streamlined further with the Consortium members, and employer representatives most strongly stating the need for process changes to be made.

CONCLUSION

This paper documents a number of stages in implementing the research design including: obtaining ethical approval for the study from the relevant bodies; mapping of the interview questions to the literature review and the conceptual framework; development of a data collection project plan; recruiting the research participants; conducting 12 semi-structured interviews; thematic analysis of emergent themes and sub themes arising from the interviews; maintenance of researcher's reflective log. It concludes with the next steps required to complete the data collection and data analysis.

The initial findings from the familiarisation and review of the data resulted in the identification of key emergent themes: ambiguity about the Use of Apprenticeship Terminology, differing Stakeholder Motivations for Involvement, importance of the Apprenticeship Stakeholder Relationships, confusion around Roles and Responsibilities, the Requirement for Robust Processes. A number of initial sub themes were also identified.

The researcher has kept both research questions at the forefront of her mind while gathering and analysing the findings for this paper and is satisfied that the initial findings give a strong indication that she will fulfil the objective of being able to answer these

questions in the final analysis. The crystallisation of data through the combination of interview findings, documentary review and reflective diary entries indicates that the research questions will be answered and the research objectives being met.

NEXT STEPS

Having completed, transcribed and reviewed the interview results and utilised the reflective log to work through the emerging the researcher's thoughts, she will import the transcripts into NVivo to code and further develop the thematic analysis. The Documentary Review will be carried out. The data gathered will be mined further for further analysis. In addition, the researcher will continue with the maintenance of the reflective log.

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Appendix 1: Consent Form and Overview

<div align="center">

CONSENT FORM

</div>

Researcher's Name(s):   Deirdre Giblin

Project Title: **'A process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration'**

INTRODUCTION

This consent may contain words that you do not fully understand. Please ask the researcher to explain any words or information that you do not clearly understand.

You are being asked to participate in a research study as a stakeholder in the new apprenticeship landscape in Ireland. When you are invited to participate in research, you have the right to be informed about the study procedures so that you can decide whether you are willing to participate.

Your participation is entirely voluntary. You may stop participation at any time up to data merge without penalty or loss of benefits to which you are otherwise entitled.

WHY IS THIS STUDY BEING DONE?

The purpose of this research is to study the process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration. This study is in partial fulfilment of a Doctorate in Business Administration, which the researcher is undertaking in Waterford Institute of Technology.

The Researcher works in the National College of Ireland as Director of Development and External Engagement. National College of Ireland are supporting this study given that it

has the potential to develop understanding of the process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration. It aims to increase understanding as to how the process for enacting an apprenticeship education model as a mechanism for facilitating education provider and industry collaboration can be effectively designed and implemented. This understanding could then be used to improve the effectiveness of apprenticeship education collaborations between education providers and industry in the Irish apprenticeship landscape.

HOW MANY PEOPLE WILL BE IN THE STUDY?

Up to 30 apprenticeship stakeholders will take part in this study; each will have had a role to play in the apprenticeship education landscape in Ireland.

WHAT AM I BEING ASKED TO DO?

You are being asked to participate in 1 interview. You will be asked a little about your professional background, about your organisation and about your role in the 'new' higher education apprenticeships. You will then be asked questions under the following headings: the general concept of apprenticeship; the process of engagement between Higher Education Institutes and industry partners; clarity of roles, responsibilities and accountabilities; organisational support; co-design, work-based learning and accreditation; Higher Education and Industry collaboration.

HOW LONG WILL I BE IN THE STUDY?

This study will take 6 months to complete. Each interview will take between 45 and 60 minutes to complete. With your permission the interviews will be recorded. The interviews will take place at a location of your choosing (e.g.: your workplace, a coffee shop, etc.). I realise that you are busy and understand that the interview may be interrupted – the questions have been designed to allow for this likelihood. As such, the time from start to finish of the interview, allowing for disruptions, may vary from interview to interview.

WHAT ARE THE BENEFITS TO ME OF BEING IN THE STUDY?

The benefit of the study to you is the creation of a body of knowledge which you and your organisation as apprenticeship stakeholders will hopefully be able to apply to enhance the effectiveness of future apprenticeships.

WHAT ARE THE RISKS OF BEING IN THE STUDY?

The questions relate to your experiences as an apprenticeship stakeholder and as such do not present a particular risk. However, should any criminal or harmful issues be disclosed to the researcher, it may be necessary for the researcher to report these, following consultation with her research supervisors, Dr. Patricia Bowe and Dr. Felicity Kelliher.

CONFIDENTIALITY

For your participation in this study to be anonymous it would mean that your identity would not be known to the researcher. Participants taking part in the study will not be anonymous as they will be known to the researcher and potentially the research supervisors (if required).

Your participation in the study will be treated confidentially. Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study. While confidentiality applies, please be aware that, should any criminal or harmful issues be disclosed to the researcher, it may be necessary for the researcher to report these, following consultation with her research supervisors, Dr. Patricia Bowe and Dr. Felicity Kelliher.

For confidentiality purposes you will be assigned an Identification Code and your name or other identifying factors will not appear in the final research documentation or related publications.

Information produced by this study will be stored in the researcher's file and identified by a code number only. The code key connecting your name to specific information about you will be kept in a separate, secure location. Information contained in your records may not be given to anyone unaffiliated with the study in a form that could identify you

without your written consent, except as required by law. In addition, if used, you will be given the opportunity to listen to or read the audio transcript before you give your permission for their use if you so request.

WHO DO I CONTACT IF I HAVE QUESTIONS, CONCERNS, OR COMPLAINTS?

You may ask questions, voice concerns or complaints to the researcher (principal investigator), Deirdre Giblin by email deirdregiblin@gmail.com or by telephone 086 8233981.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

If you have any questions regarding your rights as a participant in this research and/or concerns about the study, or if you feel under any pressure to enrol or to continue to participate in this study, you may contact my research tutor, Dr. Patricia Bowe at pbowe@wit.ie.

A copy of this Informed Consent form will be given to you before you participate in the research.

SIGNATURE

I have read this consent form and my questions have been answered. My signature below means that I do want to be in the study. I know that I can remove myself from the study at any time up to data merge without any problems.

Signature   Date

Print Name: _____

Appendix 2: Interview Guide

Research Purpose

The aim of this study is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration.

- RQ (a) what is the process for developing, implementing and enacting a HE apprenticeship education model?

- RQ (b) How can this model serve as a mechanism for HEI and industry collaboration?

Preamble

Thank Participant. Discuss purpose of research. Collect signed consent form, confirm confidentiality criteria and request consent to record the interview.

Initial Questions

1. Tell me a bit about yourself and your professional background

2. How long have you been at this organisation?

3. What is your current role in relation to apprenticeship?

4. How long have you been in this role?

Apprenticeship Overview

5. What does the term apprenticeship mean to you?

6. What does the term work based learning mean to you?

7. How do you view the relationship between work-based learning and apprenticeship?

8. Do you believe these terms are well understood in HEIs and Industry?

 8.1. If not, why do you think that is?

Organisational Influence on HEI – Industry engagement

9. What is your organisation's role in relation to apprenticeships?

10. What was your organisation's objective in getting involved with apprenticeships?

11. Does your organisation encourage HEIs and industry to work together on apprenticeships?

12. How did this occur?

Prompts

    12.1.   At what level in each organisation did the initial engagement happen at?

    12.2.   Is there any contractual documentation supporting the partnerships?

    12.3.   Was your organisation involved in drafting or recommending such documentation?

    12.4.   Was a steering group appointed?

    12.5.   Did this process influence engagement between the HEIs and industry?

13. What impact, if any, did your organisation's involvement have on the effectiveness of these collaborations?

14. Where there any barriers to collaboration?

15. What were the benefits, if any of this collaboration?

Prompts

    15.1.   Do you think the partners can see the benefits?

    15.2.   Who were the beneficiaries?

    15.3.   Are there incentives for either party?

16. Is there anything that you think that was learned from the apprenticeship process that could be applied to other HEI and industry collaboration projects?

HEI- Industry: Relationship Management

Key HE sector reports note that HEIs need to be more proactive and dynamic in their collaboration with industry …

17. Have you seen any examples of HEI-Industry collaboration in the range of new apprenticeships?

18. How would you describe the relationship between the two parties (HEI and Industry)?

19. What, if any tensions, exist? (e.g. internal systems, culture, ways of working)

    19.1.   Could these tensions have been prevented? How?

    19.2.   What have you learned from this experience?

20. What challenges, if any, did you observe in the formation and management of the consortia?

    20.1.   How were these challenges managed?

    20.2.   What did you and your organisation learn from observing these challenges?

Roles, responsibilities and accountabilities

In cases where HEIs and Industry worked on apprenticeships together, in your experience…

21. Was it clear what each party was bringing to the table?

    21.1.   If so how was that evidenced?

22. Did one party take the lead?

Prompts

    22.1.   If so, who?

    22.2.   Why do you think that is the case?

23. How were roles, responsibilities and accountabilities allocated and managed?

Prompts

    23.1.   Were they evenly allocated?

    23.2.   Were there clear boundaries around the roles?

    23.3.   Was one party seen to be more accountable, responsibility than the other?

        23.3.1.   Why do you think this was the case?

    23.4.   Was a project lead assigned?

    23.5.   How was the project lead(s) assigned? (one or both organisations)

    23.6.   Were they (the project lead) supported by their own organisation?

    23.7.   Was a project team established?

    23.8.   What roles are within the team?

        Can you give some examples to illustrate your answer?

24. How well do you think the roles of the HEI and industry partners were understood?

25. Could you see the expertise of each party come to the fore at different stages of the process?

26. Where apprenticeships seen as a priority in terms of allocation of resources and support?

Apprenticeship Programme Design

27. What role does each party play in designing the overall curriculum, including assessments?

28. What challenges, if any, have you seen in the design of the work-based curriculum?

   28.1.   If so, what were they?

29. Were you aware of any factors that hindered the parties in relation to the co-design, WBL and/or accreditation?

30. How do you feel the co-design of apprenticeship curricula should occur?

31. What learning can be gained from the co-design process?

Apprenticeship Programme Delivery

32. How was the programme delivered?

33. Were success criteria set?

   33.1.   Were they achieved?

   33.2.   How were they measured?

   33.3.   Were the success criteria achieved?

Can you give some examples to illustrate your answer?

34. What do you think are the necessary elements for a successful apprenticeship education programme?

35. Was the programme a success from your perspective?

Closing Questions

36. What qualities do you think each party needs to have to make collaboration a success?

37. Have your organisation's expectations in the apprenticeship context been met?

   37.1.   If not, why do you think that is?

38. What has been the biggest learning for you and your organisation?

39. What advice would you give to HEIs and industry partners starting out on the apprenticeship journey?

40. Is there anything else you feel I should have asked or that you would like to tell me?

Thank you for your time

Appendix 3: Initial Analysis of Interview Transcripts & Clustering of Themes

Well, I would have only had the knowledge of the craft friendships through one of my brothers who's sadly passed away, he was an apprentice mechanic in the day and you know, back in the day, which was 40 years ago, whatever, lots of lots of people went into apprenticeship. So when this was put forward to the sector, we said we are going to look at these as professional apprenticeships and so non craft we couldn't use the word professional as you know, yourself we were told by the powers that be that we couldnt.

08:56

And I think the fact that it is called an apprenticeship is is a negative tone for the companies that we're dealing with, if we'd been allowed call it something else that might make a difference. And it might make it more attractive maybe we might be able to sell it better to to employers.

09:11

...) Interview 1

Motivation for Involvement

Well, it was a new initiative. And Ibec are always big into the education on the policies around different areas of education across all the levels. So it looked like it would be a really good prospect for Ibec to get involved in, and particularly for the different sectors, and like the likes of the retail sector, and that which I have difficulty retaining staff. So at the beginning, we didn't know whether it would work like that. The medtech sector took it on board, because they 're involved in companies that would take on apprentices for different areas, traditional anyway, and the bargy apprenticeships and stuff like that, for the non craft and their kind of craft apprenticeships.

Constraint

Energy Sector
- Strength of link with education provider
- Use of terminology - Apprenticeship
- Motivation for getting involved

Process
- → level of engagement with industry
- → governance docs
- → [illegible] of support with HEI
- → [illegible] of engagement [illegible]

Stakeholder

Energy Sector

Use of terminology - Apprent[iceship]

- Design of work based courses
- Benefit of collaboration

149

Appendix 4: IFS Apprenticeship Context Graphics
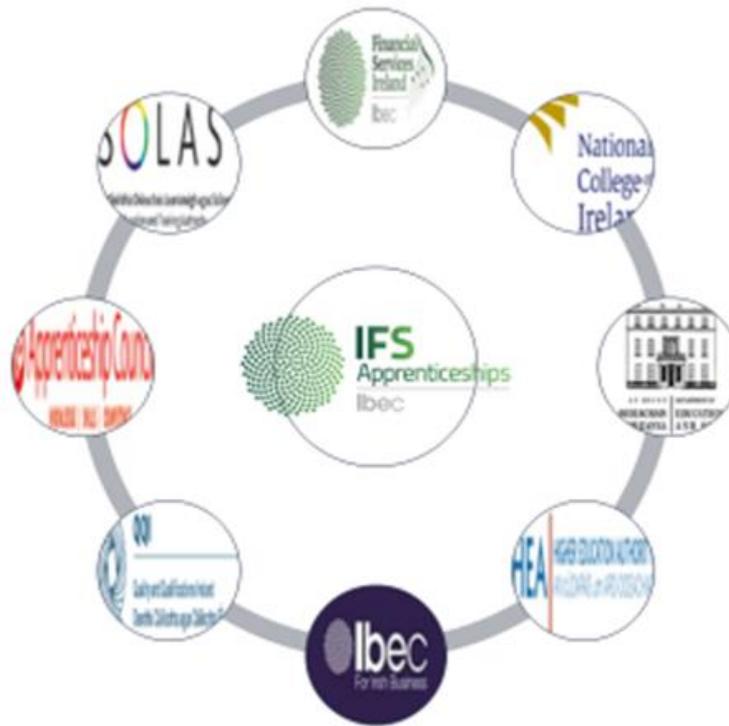
Stakeholder Map with the IFS Apprenticeship Consortium at the centre

Employer Map with the IFS Apprentices at the centre

PAPER 4

PREFACE

As this is a cumulative paper series, which has been examined by different external examiners, it is important to note the changes that were advised by the Paper 3 examiners have been acted on. The intent articulated in Paper 2 was to carry out three case studies of higher education apprenticeships in different sectors. The International Financial Services Case Study was presented in Paper 3, based on initial findings from twelve semi-structured qualitative interviews with national policy stakeholders and members of that specific apprenticeship consortium (see table 1).

The intention was to extend the research to include two further case studies and an extensive documentary review in Paper 4. However, the examiners noted that the data gathered from the IFS consortium (table 1) when combined with documentary analysis (appendix 1) would be sufficient for a doctoral study.

Two key pieces of feedback which guided Paper 4 were received from the examiners: 1) To frame the study as a 'sectoral study' instead of a case study and to confine the study to the International Financial Services sector, and 2) To 'mine' the data already gathered from the twelve interviews without additional interviews and incorporate the aforementioned documentary analysis and documentary review.

Student Name	Deirdre Giblin
Student No	20074655
Paper No	Paper 4 – Findings and Analysis
Title of Paper	A PROCESS FOR ENACTING AN APPRENTICESHIP MODEL AS A MECHANISM FOR FACILITATING HIGHER EDUCATION AND INDUSTRY COLLABORATION
Supervisors	Dr. Patricia Bowe Dr. Felicity Kelliher
Date Submitted	June 3rd 2020

ABSTRACT

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration. The resultant research questions are: (a) what is the process for developing, implementing and enacting a Higher Education (HE) apprenticeship education model? (b) How can this model serve as a mechanism for HEI and industry collaboration? An interpretivist paradigm is adopted which is in sympathy with the social constructionist theoretical underpinnings of the study. A sectoral study is put forward as a suitable method to investigate a contemporary phenomenon in its natural context, as it allows for the subjective and contextual experiences of the participants to be incorporated. In this paper the researcher documents the findings resulting from semi-structured interviews with twelve participants from across the higher education apprenticeship landscape including members of the International Financial Services Apprenticeship Consortium. In liaison with a review of twenty-two relevant professional documents and researcher reflective log entries, the researcher familiarised herself with the data and identified a number of themes, each of which is discussed within this paper. The next steps in the research study are outlined.

KEYWORDS

PAPER 4: FINDINGS & ANALYSIS

INTRODUCTIONS

The aim of this research is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC). The resultant research questions are: (a) what is the process for developing, implementing and enacting a HE apprenticeship education model? (b) How can this model serve as a mechanism for higher education institute (HEI) and industry collaboration? The research questions are supported by the following research objectives: (1) develop a HE apprenticeship education model incorporating roles, responsibilities and accountabilities; (2) Identify the internal and external organisational supports required to implement the HE apprenticeship education model, and (3) Explore the key drivers for the successful enactment of the HE apprenticeship education model.

In this paper, the researcher documents the findings resulting from semi-structured interviews from across the higher education apprenticeship landscape including members of the International Financial Services Apprenticeship Consortium. The researcher works as a Director of National College of Ireland and is a member of the International Financial Services Apprenticeship Consortium. International Financial Services in Ireland is the observed sectoral environment for this study. A higher education sectoral study is put forward as a suitable method to investigate a contemporary phenomenon in its natural context as it allows for the subjective and contextual experiences of the participants to be incorporated. Given the research aim and the resultant questions, an interpretivist paradigm is adopted for the study, which is in sympathy with the social constructionist theoretical underpinnings.

The research design for this sectoral study involves semi-structured interviews with twelve participants, five who are directly involved in the International Financial Services

Apprenticeship, and seven who are external stakeholders. These findings are supported by the identification and review of twenty-two relevant professional documents (appendix 1) and the subsequent coding of these documents and entries in the researcher's reflective log. In liaison with a review of relevant professional documentation and

researcher reflective log entries, the researcher familiarised herself with the data and identified a number of themes, each of which is discussed within this paper. This paper briefly describes the design implementation of the study, followed by a presentation of the findings arising from the data analysis.

DESIGN IMPLEMENTATION

The design implementation of this study took place between May 2019 and October 2019, and involved obtaining ethical approval, developing the data collection plan, conducting twelve semi-structured interviews (June-Aug 2019), review of the relevant professional documentation and the researcher's own reflective log. For the purpose of this paper the design implementation process is summarised as follows.

As part of the data collection process, the researcher sourced 22 documents that had been referenced by the interview participants. The documents are a combination of government generated reports, IFS Apprenticeship Consortium documentation and contracts and employer body consultation submissions. These documents were reviewed and manually coded and are presented in tabular form at appendix 1 and appendix 3, in chronological order. Analysis of these documents provided support for themes extracted from the primary interview data and are referred to in the findings section using the numbering sequence D1 to D22.

A deep understanding of the process for developing, implementing and enacting a HE apprenticeship education model was achieved from analysis of the interviews, therefore the documentary analysis is a complimentary data collection procedure in support of comprehending the roles, responsibilities, accountabilities and internal and external organisational supports required to implement the HE apprenticeship education model in the case context. The documentary review included a review of national policy documents (e.g. Review of Apprenticeship Training in Ireland D7; Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020 D13) and selected stakeholder documents (e.g. 'Ibec [12] Submission to Consultation on Government Review of Apprenticeships' D3 and International Financial Services specific documentation D9 as

[12] Ibec are Ireland's largest business membership organisation (www.ibec.ie)

identified by participants. Once reviewed, they were placed in context and coded for analysis (appendix 1 and 3). The documentary data was analysed together with data from the interviews and the reflective log and themes emerged across all three sets of data.

The logistics of the documentary analysis process was guided by combining the planning and analysis advice of Bowen (2009) and O'Leary (2014) (appendix 2a). A review of the documentation identified by participants provided background information that aided the understanding of the political, sociocultural and economic context in which the new apprenticeships were conceived and implemented. The questions asked by the researcher of the documents are provided at appendix 2b. The documentary data served to ground the research in the context of the higher education apprenticeship landscape and the phenomena of the International Financial Services Apprenticeships being investigated. Apart from providing contextual richness in the research, the documents were particularly useful in understanding the motivations of the involvement of the interview participants in the apprenticeship arena. The researcher used data gained from the documentary analysis to check interview data and vice versa. The analysis of the documents was instrumental in refining ideas and identifying conceptual boundaries. Its inclusion contributed to creating a fuller picture of the apprenticeship landscape in Ireland. The emergent themes and subthemes were partially supported by the documentary analysis (Ryan & Bernard, 2003; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). The documents are therefore mapped to the themes in Figure 1.

The documents analysed in this study did not have the potentially distorting effects of the qualitative researcher's presence in the field (Bowen, 2009). The diverse sources of data utilised, drawn from both government and stakeholder perspectives, gave a more complete picture of the sectoral study than would have been provided by a single source of data (e.g. interview transcripts). The triangulation of data sources to include documentary review and researcher reflections countered threats to trustworthiness, such as researcher and respondent bias within the interview data (Carter et al., 2014).

Following recruitment of the research participants, the researcher carried out semi-structured interviews (Table 1) using an interview guide informed by the literature (appendix 4).

The researcher then familiarised herself with the data in the typed transcripts and this led to the extraction of emergent themes. The researcher had planned to use NVivo[13] at this stage in the process but as a result of reflection on her intuitive style of working and the research needs of the study, she decided to continue the coding manually. She felt that her discomfort with Assisted Qualitative Data Analysis Software packages would restrict the way she carried out her analysis. Clarity from the outset about the steps of the analysis and organisation with regard to organising and developing themes gave the researcher confidence to continue with coding manually.

The first round of analysis (presented in Paper 3) identified five themes and twenty-four sub themes as presented in the thematic map (figure 1).

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[13] *NVivo* is a qualitative data analysis (QDA) computer software package designed for researchers working with text-based data and/or multimedia information, where deep levels of analysis on small or large volumes of data are required.

PARTICIPANT DETAILS

Code	Category	Role	Date of Interview	Length of Interview	Reviewed Transcript	Gender
C1	IFS Consortium	FSI Apprenticeship Lead	14/06/19	66.19	Will approve quotes to be used	Female
C2	IFS Consortium	NCI Apprenticeship Lead	19/06/19	98.28	Will approve quotes to be used	Male
P1	National Policy Stakeholder	Executive Director Solas	20/06/19	56.45	Will approve quotes to be used	Female
C3	IFS Consortium	FSI Director	28/06/19	61.63	Will approve quotes to be used	Male
C4	IFS Consortium	Global Head of Talent IFS Participating Employer	03/07/19	50.44	Will approve quotes to be used	Female
P2	National Policy Stakeholder	Education Policy Director Employer Body and Apprenticeship Council Member	10/07/19	88.48	Will approve quotes to be used	Male
P3	National Policy Stakeholder	Regional Skills Manager and Apprenticeship Council Member	10/07/19	71.05	Will approve quotes to be used	Female
C5	IFS Consortium	NCI Vice President	16/07/19	62.30	Will approve quotes to be used	Male
P4	National Policy Stakeholder	Dept. of Education & Skills Apprenticeship Lead and Apprenticeship Council Member	17/07/19	66.26	Will approve quotes to be used	Male

P5	National Policy Stakeholder	Higher Education Authority Apprenticeship Lead and Apprenticeship Council Member	08/08/19	72.14	Will approve quotes to be used	Female
P6	National Policy Stakeholder	Chair of Apprenticeship Council	09/08/19	56.36	Will approve quotes to be used	Male
P7	National Policy Stakeholder	Quality Qualifications Ireland Apprenticeship Lead and Apprenticeship Council Member	20/08/19	69.57	Will approve quotes to be used	Male

Code: C = Consortium Participant, P = Policy Stakeholder

Table 1: Participant Details
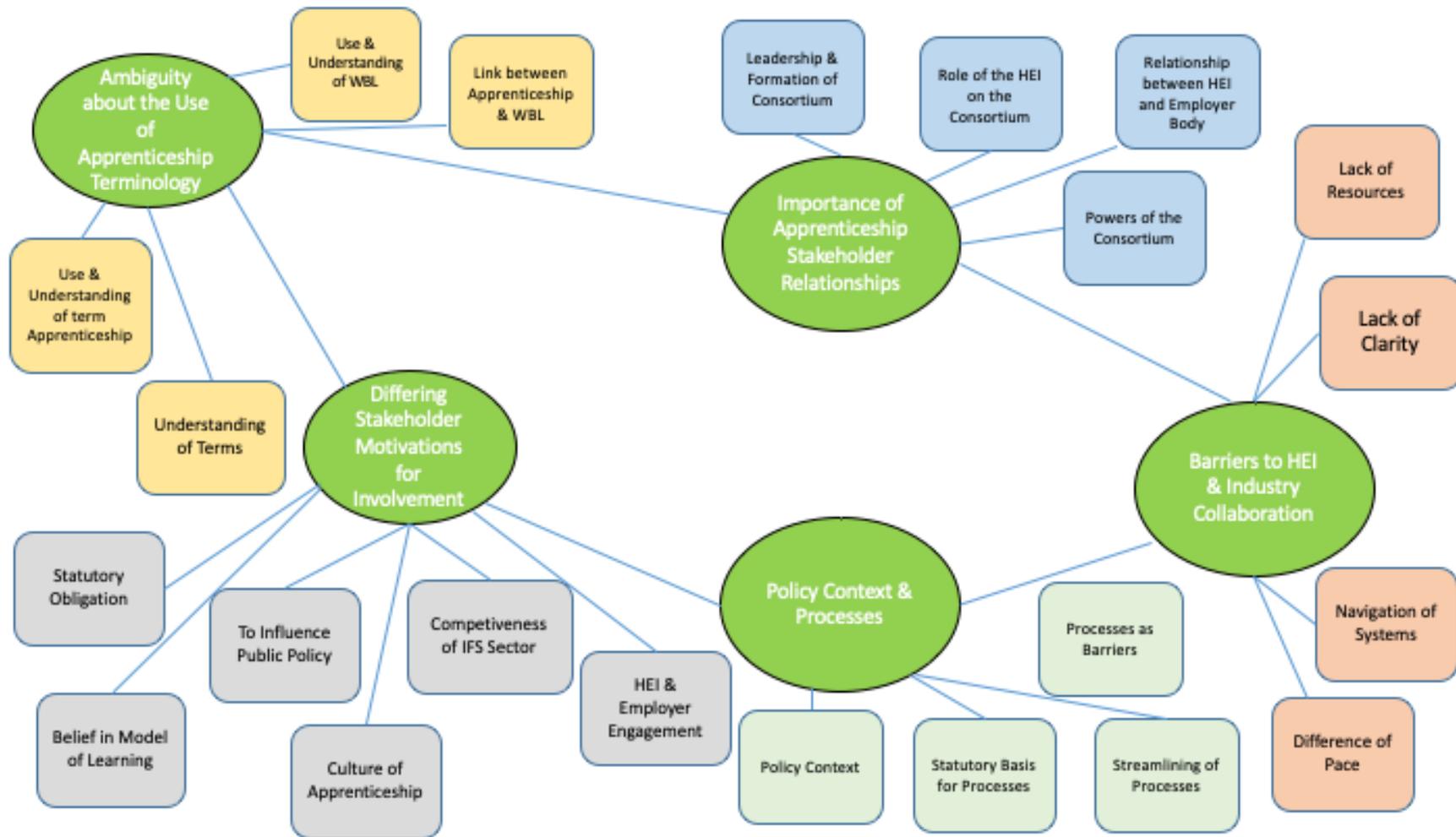
Figure 1 – Revised Thematic Analysis Map: Enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC)

FINDINGS

In pursuit of the research questions the researcher considered the interaction between the themes and the sub-themes using thematic maps (Basit, 2003; Miles and Huberman, 1994; Weng, 2012). This process consolidated the findings in to five main themes; Ambiguity about the Use of Apprenticeship Terminology, Differing Stakeholder Motivations for Involvement, Importance of the Apprenticeship Stakeholder Relationships, Confusion around Roles and Responsibilities, the Requirement for Robust Processes. Each of the five main themes illustrated in the thematic map (figure 1) is elaborated upon below. Additional and alternative sub themes also emerged which are elaborated on also.

Theme 1 - Ambiguity about the Use of Apprenticeship Terminology
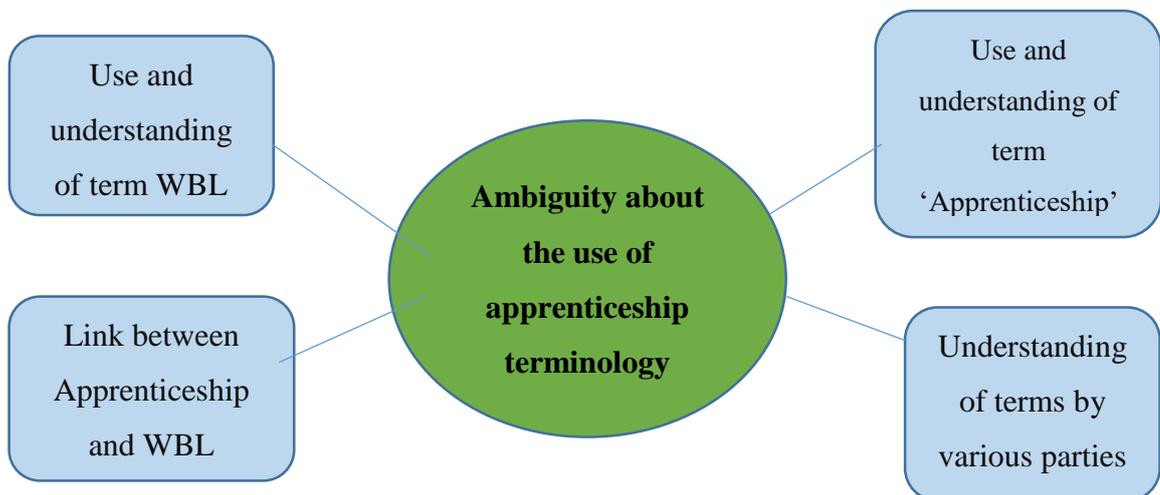
Figure 2: Theme 1 Ambiguity about the Use of Apprenticeship Terminology with revised Sub themes

Ambiguity about the use of terminology in relation to apprenticeship is evident in the findings. The interviewees were all asked questions about their understanding of various forms of apprenticeship related terminology. These questions were derived from the extant literature reviewed in Paper 1 of this paper series.

Use and Understanding of Term 'Apprenticeship'

The views on the term 'apprenticeship', gleaned from those who were involved from the outset in the original Apprenticeship Review Group (2013), provided insight into the origins of the use of the term in the current context: "*There needs to be some protocol for titling apprenticeships so that the title conveys something as well as the qualification level*" (P6). This highlights the importance of using consistent terms:

> "Changing the term – instinctively I'd say I wouldn't go there …I would be inclined to educate the population as to what the term apprenticeship is about rather than change it ...don't throw out the baby with the bath water." (P6).

Conversely, others believed that the term should change as expressed by P2:

> "In the review group I actually said that you should get rid of the word apprenticeship as it brings us back. So there was a lot of pushback on that from those who saw traditional apprenticeships as something valuable. And something very specific legislatively based."

Interestingly it is P2 who raised the issues with using the term apprenticeship. This is borne out by C1 stating that "*use of the term apprenticeship has made this an even harder sell to employers than it should have been*".

A more fulsome and holistic understanding of the term is provided by P1:

> "So to me apprenticeship is a mode of learning. And it's underpinned by legislation. So there are protections for apprentices…Apprenticeship has a level of specificity and detail that other forms of work based learning doesn't have as it is bounded by legislation" (P1)

This definition is underpinned by P7 "*Apprenticeship is an occupation specific form*" and also by the use of the term in D1, D7 and D13. The importance of the protection of the legislation (D1) appears to be appreciated more by the policy stakeholders than the employer and HEI representatives. The various elements of apprenticeship are amplified by the different participants based on their interests: "*a fantastic example of industry and academia working together*" (P3); "*…a great concept but a very slow burn commercially*" (C5). This is in part consistent with C1's view, "*a win-win for apprentice and employer but a very hard sell to the employer*". This echoes different priorities for different stakeholders. Operating within the legislative framework (D1) takes priority for the state stakeholders; the ability to 'sell' the concept of apprenticeship to the employer

representative body is important to the employer body and the consortium; while the mode of learning and the structure, quality and consistency of it, is a priority of the HEI.

A discussion evolved about how the UK went about differentiating between the craft/traditional and higher education apprenticeships and in particular the term 'degree apprenticeships': *"I do think a degree apprenticeship would help in getting education providers and the employers on board, even the universities might get on board if they do degree apprenticeship"* (P5). Yet within the policy stakeholders P7 disagrees *"I don't see any advantage in the use of the terminology in the UK of 'degree apprenticeships"*.

The concept of the place of employment being the 'locus of learning' is introduced by P7. His understanding of the term apprenticeships is that it:

> "mixes work-based learning, learning within employment, with learning in a more traditional off the job setting...there is a locus of learning which is outside the classroom and within the enterprise…the on the job phase is where the knowledge or skills or learning is already embedded in the employment setting."

This leads on to the employer understanding of the term viewed through the lens of the employer and the employer body representatives:

> "… for me, it's around learning your craft or trade, whatever it may be. And when I talk about craft, a trader can talk about analytics or whatever… And I think it's that collaboration between the institution, the individual and the company, to be able to make sure that the learning is real time, is utilized. It's adding value to all three of the parties and it's like a tripartite relationship." (C4)

C4 builds on P7's viewpoint with her comment on learning in '*real time'*. She also captures the value of the '*tripartite relationship*' which while not unique to apprenticeship, is at its best when copper-fastened by the protections and structure of an apprenticeship. This is expanded on by C3:

> "So it's a model of learning that, on one side might seem longer for students, but actually, I think accelerates the capabilities, and for what companies are looking for, and also accelerates capabilities in the individual, to be highly valuable to the sectors that they're going into, and actually in a much quicker time."

This acceleration of acquisition of skills and knowledge and the value add to the employer is one of the main selling points to employers and has been evidenced by the graduates of the IFS Apprenticeship programmes to date in a number of ways including promotion and overseas postings, "*I think the way this programme and other new apprenticeships*

have been developed is fantastic for the candidates. I mean, it's a total win/win" (C1). As possibly could be expected, the education provider's representatives' views, while not in conflict with the other participants, focus more on the learning, skills and competence:

> "Somebody who is learning as they go and gets direction and support from somebody within the organization who is a mentor, perceived as somebody who knows the ropes, and some sort of perceived wisdom about the industry, and will guide them. In addition to that, they receive class based education. They receive a recognizable award in the industry that will set them on a path to be fully qualified, and a member I suppose, of that community of practice." (C2)

C2 is the first to introduce the idea of a community of practice[14], which is something that is encouraged by the HEI in their management of the apprentices in the academic setting and in the supervision and guidance of them in the workplace. A number of social events, specific to the apprentices, have been had to create and sustain the development of a community of practice. A key point is made by P3 about the application of the learning happening from the beginning, which is another unique feature of apprenticeships:

> "…traditionally, I suppose students coming out would do their academic learning. And it's applying the learning almost at the end. Yeah. And so for me, the apprenticeship basis is that flexibility of applying the learning while you learn from the beginning." (P3)

This is a significant point that is not widely understood by employers, the fact that the apprentices apply their learning to the organisation to the benefit of the employer from the beginning.

While the review of literature offers many definitions of apprenticeship, as documented in Paper 1, it is important to understand the definition utilised by the Department of Education and Skills (Ireland):

> "A programme of structured education and training which formally combines and alternates learning in the workplace with learning in an education or training centre. It is a dual system, a blended combination of on-the-job employer-based training and off-the-job training"
>
> Department of Education and Skills 2013: p7

This is the terminology that governs apprenticeship in the modern Irish context.

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[14] A community of practice is a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly (Wenger, 1999)

In reviewing and analysing the documentation (appendix 1), the evolution of the term 'apprenticeship' can be seen from its origins in the Industrial Training Act 1967 (D1), and along its trajectory via the various published strategies and action plans of the Department of Education & Skills in the interim period (D2, D10, D12, D17). A definitive definition was provided by the 'Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020' (D13). As the purpose of the aforementioned Apprenticeship Review Group (2013) was 'to determine whether the apprenticeship model should be "retained, adapted or replaced by an alternative model of vocational education and training", the meaning of the term achieved significant attention in the output of this group (D4, D7). The submission from Ibec to the Review Group (D3), strongly advocated that the enterprise led approach be understood in the use of the term apprenticeship, reinforcing the centrality of a dual system apprenticeship in the DES (2013) definition.

Use and Understanding of Term 'Work Based Learning'

All participants were asked about their understanding of the term 'Work Based Learning'. The extant literature's WBL perspective can be summarised by Boud & Solomon's statement "Work is the curriculum" (2001). This ethos is what sets WBL apart from other learning formats, in that the content of the curriculum originates in the workplace and the detail of the content is 'negotiated' around the learning in and of the workplace. This WBL perspective directly influenced the questions asked of the participants about the term. Not all were familiar with the detail of it but all acknowledged the relevance of the term to the apprenticeship context. Those who were aware, have quite an informed understanding of the term. The reality of what Work Based Learning means in an employer setting is expressed, with emphasis, on the need for timely relevance, which is consistent with the expressed need for *'just-in-time learning'* (C4) and the *'relevance of the learning'* (P7); *"So for me, work based learning is continuous...we have to be able to deliver for people's needs, when they need it, and how they need it... It has to be real time, it has to be where it meets their needs"* (C4). This is corroborated by the employer body participant; *"...for me work based learning is the learning by osmosis, the learning by doing, you know, you come in, you sit in an environment to interact with colleagues"* (C3). P7 provides insight into the role work based learning plays, *"At its simplest level it is just a location but that is not really capitalising on the process of extracting learning*

from the work context". He goes on to highlight another unique differentiator of apprenticeship, which is the learning that can only be imparted in situ in the workplace:

> "More often implicitly rather than explicitly makes this so much about how an enterprise or an industry or an occupation goes about its activity that simply cannot be imparted or not efficiently imparted by any abstract of the symbolic process - it has to be learned either one to one or in a peer group in situ".

As anticipated, the more in-depth understanding of the term came from the HEI participants, "*it's applied…people are getting recognition for what they do at work…actually being assessed for learning that's actually done on the job*" (C2). The HEI orientated use of language such as 'learning outcomes' is evident here as are the concerns about assessment quality and consistency in the workplace; "*Work based learning is where you are learning on the job, and adult learning on the job, a way of experiencing a large part of learning on the job for very specific learning outcomes*" (C5). These comments allude to the complexity of the academic treatment of the work based learning outcomes and assessments from a quality perspective. This tension was identified in the early days of accreditation of the higher education apprenticeships and it was a challenge specifically experienced by the IFS Apprenticeships. The IFS Apprenticeships were the first to be subjected to the Quality Qualifications Ireland (QQI) [15] accreditation process for HEI apprenticeships and the challenges were insurmountable on the first outing. This resulted in a significant amount of learning for all stakeholders, which was shared with other HEIs and consortia. As advised by P7:

> "Work based learning is not a term that we at QQI have any formal definition of at the moment although we have discussed the possibility of developing quality assurance deadlines along with apprenticeship".

In the review and analysis of the documentation (appendix 1), the understanding and use of the term 'work based learning' featured in a number of the Department of Education & Skills strategies and action plans (D2, D10, D12, D17, D18) and not always exclusively in relation to apprenticeship.

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[15] **QQI** (Quality and Qualifications Ireland) is an independent State agency responsible for promoting quality and accountability in education and training services in Ireland.

Link between Apprenticeship and Work Based Learning

There was recognition among all of the participants of the link between Apprenticeship and Work Based Learning, with the observation by one participant that *"work based learning to me is the umbrella term"* (P1). C4 views the links as:

> "Hand in hand, apprenticeship is workplace learning, as far as I can see, so it's the college is giving them the theory, it's giving them the background, it's giving them the network, it's giving them the experiences around what's happening elsewhere? And then it's coming into the workplace to apply that learning".

C3 suggests that the relationship is one of facilitation;

> "Yeah, so the apprenticeship allows that work based learning to happen… and so to me, the link between the apprenticeship and work based learning is that it allows the real work based learning to happen, because over time, it doesn't happen in a couple of days, it happens over a period of time, because it's experiential learning".

While the participants appear to arrive at their understanding of the linkage based on their position in the apprenticeship ecosystem, they all appreciate the strong linkage and the value of it. As expressed by P7, *"Apprenticeship is Work Based Learning at its best"*.

As referenced in the literature review, neither WBL nor apprenticeship are new phenomena. Dewey (1938), Lewin (1947) and Knowles (1950) all acknowledged the value of learning through doing, a concept further developed by Bandura and McClelland (1977) under the auspices of social learning theory. Others too have contributed to the debate (cf. , Eraut, 2004; Grangeat & Gray, 2007; Hughes, 2004; Kyndt, Dochy & Nijs, 2009), with Raelin (2008) acknowledging that the apprenticeship education system is one of the oldest forms of WBL.

The range of documents specific to apprenticeship provided by the Apprenticeship Council, Department of Education & Skills, Solas and Quality Qualifications Ireland (D4, D5, D10, D11, D14, D15) make the link between Apprenticeship and work based learning explicit. The Quality Qualifications Ireland document (D11) - considering its purpose is 'to provide substantial and tailored guidance for the development, delivery and evaluation of apprenticeship programmes by the relevant parties with quality assurance accountability to QQI' (p.1), reinforces very specific links between both terms.

Understanding of Terms by the Various Parties

When the HEI representatives were asked to assess the industry view of these terms, they were very clear in their thoughts and their ability to articulate them:

> "In relation to industry you can't expect them to understand all of the complexities of the education piece. They want people to be qualified, they're understandably expecting the education provider to solve that piece for them." (C2)

C2 expands further by saying:

> "So in terms of work based learning and key to the success of apprenticeship, the involvement of the employer in assessment is a necessity. However, there are lots of barriers to employers wanting to get involved in assessment or being involved in assessment. And I don't necessarily think they understand that space".

This concern with assessment within the workplace has been a common thread throughout the interviews to varying degrees, and appears to be based on the role they play in such assessments. This has been a significant issue in the initial 'sell' of the apprenticeship concept to the employers and employer body representatives, but work-based assessment is crucial to fulfil one of the most important defining aspects of the criteria of apprenticeship. It is seen as a barrier to participation for employers, especially those who have scarce resources or those who compare resource commitment to graduate programmes versus apprenticeship.

The HEI participants also express concerns about employers' commitment to work based assessment and the need for mentors in the workplace, who are employees. They acknowledge that "*Strong reliance on mentors in the workplace, really, truly, are key*" (C2). The selection, development, support and management of mentors is a non-negotiable requirement of the IFS apprenticeships. All of the supports are provided by the HEI but a strong commitment on behalf of the employers is required to release the resources. Typically, mentors are at supervisor or management level and the progressive far sighted employers see the mentor role as a significant development opportunity for their employees; "*So in terms of work based learning, then the involvement of the employer in assessment is a necessity*" (C2). In the context of this study, mentors have been promoted within their organisations, which provides its own logistical challenges in back-filling, but is also a positive result in that it is seen as a potential route to promotion

by employees. The employers who are truly committed are those who nominate, select and reward the most proactive mentors, "*a number of factors are crucial and the one of utmost importance is the commitment of the employer*" (C2). A more fundamental view is offered by P1, who states:

> "All the time we are coming across people who you might expect to be very informed and up to date, and who are not, you know, people who say describe an apprenticeship as an alternative to third level… employers, educators, civil servants, journalists…and so to me that's a very good illustration of the fact that a universal understanding, I suppose, of what apprenticeship is in Ireland, is needed".

This contribution strongly points to the need for a system wide understanding of apprenticeship terminology in order for all stakeholders to move from awareness to a deeper understanding.

The employer and employer representative participants are also clear on the lack of consistent industry understanding; "*I think the challenge with a lot of industries is that they, in some ways, actually don't get the benefits of what the apprenticeship model can deliver for them*" (C3). This comment creates a link between an appreciation of the benefits of apprenticeship with an understanding of the terminology:

> "…and so I think the apprenticeship piece is not understood anywhere near to the level that it needs to be understood. Work based learning, I think, is partially understood. But I think what isn't understood is the value of this, and what it brings to the individual into the organization." (C4)

Both C3 and C4 have very valid concerns about the lack of appreciation of the value of apprenticeship and it appears that a universal understanding of terminology could assist with this concern. Those who understand the value and the terminology believe that "a*pprenticeships can create a beautiful marriage between the doing and the practical, hands on applied and the theoretical*" (C5).

The documentary analysis provides evidence that the education policy stakeholders and the education provider (D2, D4, D7, D10) are more aligned in the understanding the terms 'apprenticeship' and 'work based learning', than the industry and representative bodies (D3). This is not surprising as the majority of the terms originated from the Department of Education & Skills and its agencies. This higher education institute then, has an

apparent upper hand in the understanding of such terms which could impact in the HEI and industry collaboration.

**Theme 2 - Differing Stakeholder Motivations for Involvement**
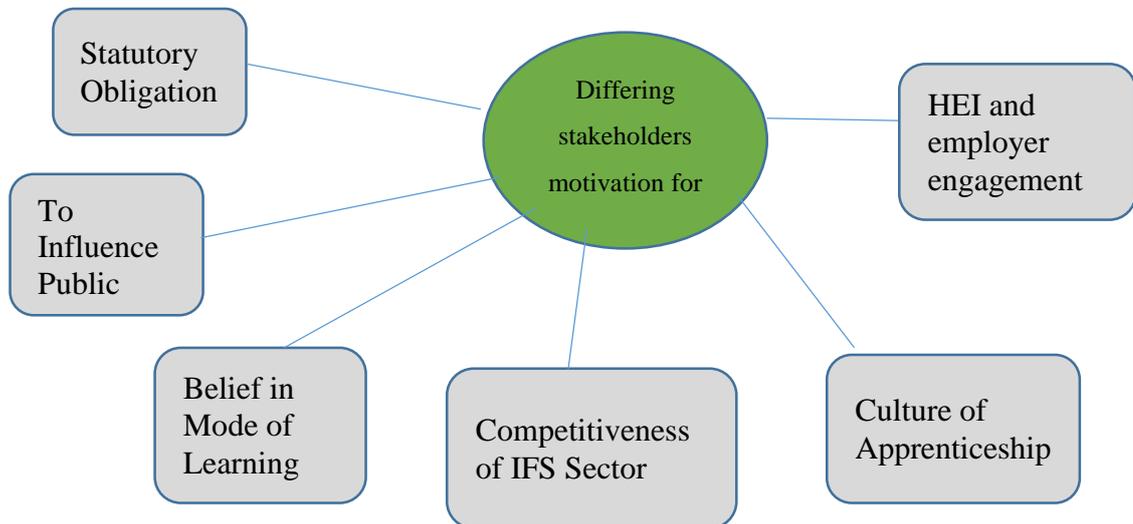
Figure 3: Theme 2 Differing Stakeholders Motivation for Involvement with revised Sub-themes

There are a number of different motivations for the involvement of the stakeholders, varying from statutory obligation through to developing a culture of apprenticeship at national level. Each of the participants were interviewed as to the reasoning and motivation of the involvement of their organisations in the IFS apprenticeship consortium. Some of the participants were operating very much on the fulfilment of their organisational objectives and others were thought leaders spearheading the initiative.

Statutory Obligation

Organisations such as the Department of Education and Skills (DES)[16], Solas[17], the Higher Education Authority (HEA)[18] and QQI all had statutory reasons for being involved. As explained; "*So the Department* [DES] *would have been responsible for*

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[16] DES is an Irish government department with responsibility for education and training, whose mission is to facilitate individuals through learning, to achieve their full potential and contribute to Ireland's social, cultural and economic development.
[17] SOLAS was established in 2013 under the Further Education and Training Act as an agency of DES.
[18] The HEA leads the strategic development of the Irish higher education and research system with the objective of creating a coherent system of diverse institutions with distinct missions.

commissioning the original review (D4) of the apprenticeship system, and in bringing it to government, including the establishment of the Apprenticeship Council" (P4). DES are the originators of the consortium idea and were motivated by both a need to review the then apprenticeship system and by an apprenticeship renaissance in Europe, as "*there was this sort of sense that countries with high performing apprenticeship systems, were countries that have low levels of youth unemployment*" (P4). Reflecting on the time of the Apprenticeship Review (D4) (2011-12), when unemployment was high in Ireland, P4 felt that the economic drivers for a new apprenticeship model were very strong (OECD, 2012). He also felt that "*the review itself kind of took on a life of its own to a certain extent*" and that there were "*influential voices around the review table*" (P4), criteria which are explored through the sub-themes below. It was not a stated intention of the Review Group (D4, 2013) to expand the apprenticeship occupations into new sectors and to set up new collaborative structures - these were "*unexpected*" by-products of the process.

Once the DES had taken the statutory lead, other relevant agencies such as Solas, HEA and QQI all played their various roles. Solas, the state agency with the deepest experience in the area of apprenticeships, were appointed by the DES as Secretariat for the Apprenticeship Council in 2013. This remit required them to use their existing knowledge in the area of craft apprenticeships to extend into the new apprenticeships, a role empowered under the 1967 legislation (D1). One of the initial tasks of the Apprenticeship Council was to decide whether to work within this piece of legislation, and after much debate it was agreed that it was the most pragmatic course of action. As described by P5, the HEA were "*already involved on the craft sides because [of] the Institute of Technologies[19] and it made sense from that involvement to extend the higher education apprenticeships also*". As a number of HEIs were new to the apprenticeship space, the HEA took on the role of advocacy for the HEI apprenticeship providers in practical areas, such as advice on funding for set up costs and making introductions across the HE system to those with more experience. QQI, as the guarantors of quality of the National Framework of Qualifications, had a clear statutory role in the accreditation process for all of the new apprenticeships, in both further and higher education (D11).

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[19] An Institute of Technology or IT is a type of HEI found in the Republic of Ireland, originally established in the 1960s to educate for trade and industry over a broad spectrum of occupations.

Statutory obligation is a clear and valid motivation for the organisations referenced above, but a number of participants expressed the view that '*being part of the same apprenticeship eco-system did not automatically guarantee commitment and that had to be worked on*' (P3). It was also acknowledged that '…*particularly the benefits of the new apprenticeships and their new processes needed to be promoted across that eco-system*' (P3), to garner a holistic system-wide level of support.

To Influence Public Policy

As stated by P4 one of the "*influential voices around the review table*" was that of P2. He explained the role of his organisation, Ibec, as an employer representative body as opposed to an employer, and discussed how that difference impacted on Ibec's motivation for involvement (D3):

> "It's called public choice theory, where you've got to differentiate between employers and the people who are paid to represent employers and their perspectives. There's a different dynamic going on there. Now we like to think that we represent employers authentically but we are in the middle of the system and employers…and some would argue you need to be part of the system to actually achieve something and we made that choice with apprenticeship." (P2)

Ibec members have had mixed experiences to date with the apprenticeships; those that had experience of the craft apprenticeships performing better than others for a number of reasons, including having a history and culture of apprenticeships in closely related sectors and employer appreciation of the applied apprenticeship model (P2). Therefore as an employer representative body that needs to deliver value for its members, Ibec have to:

> "understand members' needs, read the system and try to align the two of them" … "so for now we need to keep a watching brief" (P2).

This need to act on behalf of Ibec members is also balanced with a need to influence public policy:

> "I think for all sorts of society, for broader education policy reasons, it needs to work, you know, it's supposed to be a fair system" (P2).

Belief in Mode of Learning

In the context of this sectoral study the main motivator for National College of Ireland (NCI) as the education partner for the IFS Apprenticeships, is the alignment with its ethos as articulated by C2;

> "So we're all about trying to provide opportunity, progression and, you know, changing people's lives through education. So apprenticeship fits with that very well. There's a perfect match with our roots as a workers' college, you know, apprentices are workers. So there is perfect alignment there with our history".

The strong organisational commitment to this specific mode of learning was an important factor in maintaining the original motivation for involvement in times when the apprenticeship journey became arduous. The clear alignment with NCI's origins created an attraction to a consortium that:

> "was going to shape the future of the higher education sector …this was an entrepreneurial move which was also aligned with our historical roots and our philosophy" (C2).

This belief was matched by that of one of the anchor employers:

> "For me it is really important to recognise the learning on the job that happens, and then working in conjunction with the college, you know, I just think this is so fundamental, to who and what we are as an organization." (C4)

This alignment of belief systems and ambition to excel in apprenticeships in Ireland became a powerful shared motivation for both NCI and the lead employer, and became a driving force for the IFS Apprenticeships consortium.

This is consistent with the review of Ireland's approach to prior Higher Education policy, which had a strong emphasis on the vocational nature of higher education, with outcomes linked to labour market needs (Clancy, 1989). The Investment in Education Report (1965) represented a paradigm shift in education policy in Ireland. By the late 1960s policy formulation was influenced by human capital theory (O'Sullivan, 2005), advocating the investment in the development of people and its positive impact on the economy (Walsh and Loxley, 2015).

Competitiveness of IFS Sector

The overriding motivator for the involvement of Financial Services Ireland[20] (FSI) as the representative body for the financial services sector, was to contribute to the sector's competitiveness (D8, D21). As articulated by C3:

> "So, as the sector director, I have a role to play in the competitiveness of the sector"…"Talent and skills are incredibly important for the sector. Notwithstanding, whether we're in a growth phase or decline phase, it's incredibly important that the right talent is coming through at all times into the sector".

This articulation of FSI's motivation is at odds with the experience of C1, as she struggles at the coalface of encouraging IFS employers to recruit apprentices:

> "…this is such a 'hard sell' to the employers". C1

There appears to be a disconnect within the sectoral representative body and the experience of C1 as she continually makes significant efforts to 'sell' and 're-sell' the concept and benefits of apprenticeship on an annual basis:

> *"creating a pathway that assists in finding talent that may not otherwise get in"* (C3).

The goal of:

> "a bigger pipeline of talent and that will have greater outcomes for the overall sector in terms of diversity and retention" (C4),

is not getting through to the wider sector however, even when supported by highly motivated and committed IFS employers. The message that this:

> '*national talent play'* (C4)

is not being understood by the majority of IFS employers, despite the best efforts and intentions of the employer body (Ibec) and sectoral representatives. This 'disconnect' relates somewhat to P2's comments relating to '*public choice theory'* earlier in the paper.

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[20] FSI is the only cross-sector financial services industry association in Ireland and is part of Ibec

The 'Strategy for the Development of Ireland's International Financial Services sector to 2025' (D22), has specific action points on the IFS apprenticeships that link directly to C3's points about apprenticeship aiding the competitiveness of the sector. The literature supports the recognition on an educated workforce as a key national asset and a source of competitive advantage (Porter, 1990), however if the Department of Education and Skills is to realise its intention 'to make Ireland the best education and training system in Europe within a decade' (Action Plan for Education, 2018), the HE system must produce graduates who are life-long learners that will fulfil the skills and knowledge needs of a rapidly changing labour market (OECD 2017; World Bank 2017).

Culture of Apprenticeship

The IFS sector has a culture of graduate recruitment and not apprenticeship, as observed by a number of participants (cf. C1, C2, C3, C4, P2, P3, P6). As articulated by P6:

> "we are all motivated by maintaining a system that works for all, which is actually preserved by us poaching apprentices from each other".

This statement describes a totally different sector and culture from the IFS sector that has reached a level of maturity in relation to apprenticeships, where it is the acknowledged and aspirational entry route. Apprenticeship clearly has strong currency with other employers in the sector described by P6. He provides insights into a sector where the eco-system, including small and large employers, embrace apprenticeship, and:

> "where the business benefits are clearly understood as they have been demonstrated over time, actually over generations" (P6).

This is in direct contrast to the IFS sector where only small pockets of employers are engaging with apprenticeship and the majority of those are engaging in a relatively small way. C3 advances the argument that more time is needed for the approach to '*become embedded in the sector*' and affirms that '*patience is needed from all concerned*'. P6 acknowledges that his sector is a mature one, and that with the new apprenticeship landscape "*we were very much kind of using the term 'building the bridge while you're walking over it'*". Ultimately, P6's ambition is to establish apprenticeship as '*a route of choice*' for larger numbers across different sectors. The longer term aspiration for the IFS sector, is for employers to incorporate C4's suggestion of "*apprenticeship is part of who*

we are and what we do" into their future strategic plans, reinforcing the ambition to embed a culture of apprenticeship in Ireland.

The 'Strategy for the Development of Ireland's International Financial Services sector to 2025' (D22) and its predecessor (D8) sets out a vision for talent in the sector that has apprenticeship at its core, but this is not translating into the numbers that are required to make this apprenticeship model sustainable in the longer term, without a significant shift in culture.

HEI and Employer Engagement

The funding landscape in Higher Education is encouraging HEIs to get closer to industry, with many funding initiatives requiring evidence of close collaboration with industry as a key criteria for funding (D10, D12, D17). As observed by P2:

> "It's not surprising as closer collaboration between HEIs and business is in every policy rhetoric" … "that's a policy imperative as funding is driving the performance compact agreements in the Higher Education system".

This was a significant matter for consideration by the DES in the implementation of the findings of the Apprenticeship Review Group (2013):

> "There was a huge emphasis on employer engagement and at all levels of education and training. So it was ticking a number of boxes and actually proposing a model as opposed to just a kind of a generic statement around well, you know, education institutions should talk more to employers, you know, hey, here's the mechanism." (P4)

Yet in the context of NCI's involvement in the IFS apprenticeship, C5 raised concerns about receiving a return on the investment that the college has made in apprenticeship from a resource perspective:

> "We had to redirect scarce resources to something, which is a very long and slow cook. I remain unconvinced that employers are excited about this. I want them to be as I personally believe in this, but it has to make financial sense".

This is corroborated and elaborated upon by P2 as he references Foreign Direct Investment (FDI) employers:

> "They probably haven't embraced this to the extent that one would have hoped because it's new... it's not the way they would traditionally have recruited. FDI companies are particularly paranoid about headcount."

Expanding this point further, P2 continues, *"It's a new model for them, which they don't really understand…this isn't something that US multinationals would have been accustomed to at all, so it's a big cultural shift for them"*. C3 concurs, *"it's a sector where the traditional models are still very much rooted in how they operate"*. Yet reflecting on his previous experience with the tech sector, C3 pinpointed an interesting difference:

> "There's already a theme running through the tech sector that maybe third level is not what they're looking for. As you know a lot of US founders of tech companies dropped out of college or never even started college. Peter Thiel (co-founder of Paypal) has this fellowship where he gives $100k to students to pursue their projects. And he insists that they don't go to college, you know, like, so this is already out there".

The high level policy and strategy documents published by the Department of Education & Skills (D2,D10, D12, D17, D18) and the Department of Enterprise Business & Innovation (D6, D8, D22), promote engagement between HEIs and industry, with a number of streams of funding promoting such collaboration (cf. Springboard+[21], Skillnet Ireland[22]). Specific published strategies for the IFS sector (D8, D22) support these policies in practice. Documents produced jointly by the HEI and industry (including industry representative groups) such as the suite of Consortium documents (D9) evidence strong HEI-Industry engagement at the process and operations level of the apprenticeship system.

Research consistently presents a need for HEIs to establish mutually beneficial partnerships with industry so as to remain at the cutting edge of the very fast pace of change happening in the macro environment (Perkmann et al., 2011; Ankrah and Al-Tabaa, 2015). These collaborative relationships have been found to positively impact management and organisation of both parties (Siegel Waldman & Link, 2003), contributing mutual economic (Lehmann & Menter, 2015), institutional and social (Ankrah & Al-Tabaa, 2015) gains resulting from the HEI-industry engagement. However, these benefits can only be gleaned when both parties negotiate a balanced socio-economic approach to collaboration, where the learner remains at the heart of the collaborative activity (Liew et al, 2013).

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[21] The Springboard+ upskilling initiative in higher education offers free courses at certificate, degree and masters level leading to qualifications in areas where there are employment opportunities in the economy.
[22] Skillnet Ireland is a business support agency of the Government of Ireland. Our mandate is to advance the competitiveness, productivity and innovation of Irish businesses through enterprise-led workforce development.

**Theme 3 - Importance of the Apprenticeship Stakeholder Relationships**
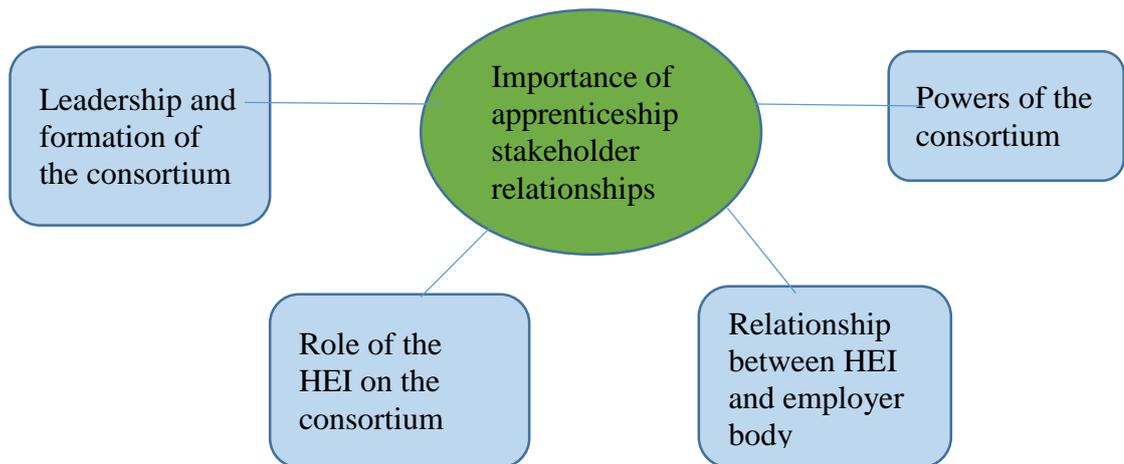
Figure 4: Theme 3 Importance of Apprenticeship Stakeholder Relationships

All participants commented on the importance of stakeholder relationships. This 'new' and 'revised' model of apprenticeship involves the stakeholders in a way that is different from the traditional model. The concept of the 'Consortium' is new and involved all of the stakeholders at some stage in its development and/or ongoing operation to varying degrees.

Leadership and Formation of the Consortium

The formation of the Consortium was one of the first tasks for the groups approved to design, develop, accredit and deliver new apprenticeship programmes (D9). Not only was this process new but as reflected on by P1, "*it is a disruptor…. there's a disruptive element to all of this*". The consortium approach was a disruptor in a number of ways as it was a requirement of funding that it had to be industry led (this requirement is referenced in each of the documents D7, D11, D13, D14, D15). As observed by P3, '*with the exception of the Skillnet Ireland initiative whose funding stream is also channelled into industry led Learning Networks*', this was a significant move away from the structures supporting the 'traditional' apprenticeships for whom Solas was and still is the co-ordinating body. Thus, the concept of *'building the bridge while you're walking over it'* (P6) was very evident in the establishment of the early consortia, and specific to this study, the IFS Consortium.

The composition of the IFS consortium and particularly the steering group was mainly, "*made up of mostly senior HR professionals who represent organizations involved in apprenticeship representing Ireland for their organization or even European base*" (C2).

While the seniority of a number of the members was both effective and efficient in the making of many of the early HR based decisions, C4 suggested:

> "That while it's important to have HR involved, having a few CEOs as part of the consortium could be really helpful as they could bring a different perspective plus use their network to get the message out".

Reflecting on the consortia formation stage, P5 expressed the view that she thought that the HEA should have been more involved but acknowledged that the knowledge and resources were not available. She believes that "*more value would have been gained for all*" if the HEA had engaged in more one-to-one meetings with each consortium rather than the larger group meetings that were held intermittently. When the policy stakeholder participants who had knowledge of the apprenticeship system were asked to comment more broadly on whether the newly established consortia across the system were actually industry led, the majority felt that they were led by the HEIs rather than industry. In the case of the IFS Consortium, the collective view of the participants was that it was industry led by FSI but with a very strong input from NCI (D9). C4 reflected that "*the nature of the financial services industry is so driven by tight regulation and robust internal processes, so it was always going to have to be industry led*", and this is reflected in the International Financial services sectoral strategy documents (D8, D22). The closeness of the FSI relationship with NCI was commented on by C1 (who provided anecdotal advice from IFS employers in the early days of the consortium), "*they saw FSI and NCI as a very strong partnership especially in the employer information sessions and company visits*". C4 concurred when stating, "*there appeared to be a very positive relationship between FSI and NCI*". The International Financial Services Occupational Profile document (D5) is a good example of where the HEI and Industry both showed evidence of leadership in the production of these core documents for the Consortium.

Role of the HEI in the Consortium

Initially it appeared that the role of the HEI in the consortium was the clearest element of what was an otherwise unclear landscape. Programme design and development are core activities of HEIs and usually a known quantity. Looking more broadly at other consortia, a number of participants commented that the industry consortia members depended on the HEI members "*to exercise their expertise in the space of programme development and in particular accreditation*" (C2). The role of NCI as the HEI on the IFS consortium

was very different to any previous industry partnership role. Industry partnerships are core to how NCI operates yet as articulated by C2, *"We needed to set and manage expectations of everyone involved to develop an apprenticeship properly, even when we were not entirely sure of the parameters"*. When asked to elaborate on the difference he responded:

> "With this, there are a lot of external stakeholders, and that changes the game completely. So it's actually building the blocks for those external relationships and that takes time, their involvement takes time. And this is a pressure because from a college perspective there is an urgency on programme development yet there are a number of dependencies on so many stakeholders." (C2)

This was a very different experience to that of other education partnership arrangements. P3 suggests:

> "The system brings into play everything, funding challenges, issues about roles, responsibilities, rules of engagement, the curriculum versus the work experience piece, you could ultimately say this system brings all that into play".

This insight highlights how the role of the HEI on the IFS consortium is much more than its typical role on programme development and quality management committees. The role of the HEIs on the consortia in the wider system, is of concern to a number of participants (P3, P4, P5, P7), perhaps best expressed by P4:

> "You've heard me say this on numerous occasions, about apprenticeships that are driven primarily from education and training situations, [they] just don't work. They're conceived by the education partner because the industry partner did not spare the time to get involved, because they are time poor. Yeah. And they can be a bit passive in the development phase and things like that. And there are definitely scenarios where problems are being solved by education and training institutions that should be solved by industry".

Bravenboer (2016) offers insight to this sub-theme. Bravenboer, a researcher at the forefront of HE apprenticeship development, has been consistent in his view that HEIs have a pivotal role to play in the co-design of apprenticeship programmes (Anderson, Bravenboer & Hemsworth, 2012; Bravenboer, 2016). Along with colleagues, he argues that 'universities can bring uniquely valuable strengths to the development of higher apprenticeship programmes'. This study extends Anderson et al.'s (2012) argument for HEI involvement in higher apprenticeship programme design and delivery, reinforcing the value of HEI: IC collaboration in the development of higher apprenticeship programmes.

The participant-led documentation identification process revealed a number of new documents that had not been published at the time of the design and development of the IFS apprenticeships programme (D14, D15). These documents are useful guides for HEIs on Consortia's developing apprenticeships. Commenting on these documents C2 specifically commented on the value of the QQI document 'Statutory Quality Assurance Guidelines developed by QQI for Providers of Statutory Apprenticeship Programmes' (D11), with regard to his involvement of the development of a new apprenticeship for the recruitment industry. NCI was the first HEI to seek approval for a higher education apprenticeship from QQI under these guidelines, and it was one of the first two HEIs approved by the Apprenticeship Council to do so.

Relationship between HEI and Employer Body

The relationship between the HEI and the Employer Body (Ibec) (and FSI as the sectoral representative body for the IFS sector), is by the very nature of apprenticeship, a key factor to its success. The NCI and FSI relationship is viewed by both as a very strong and robust one:

> "It's an excellent partnership. I see a 'can do' attitude – NCI will do whatever is needed and will adapt things to make it work, like the development from an education perspective - setting up the e-portfolios, designing the mentor training programme." (C1)

> "The relationship with FSI is very strong. I think that it's grown over time as we have worked our way through this whole process. There is a very strong sense of us being in this together." (C2)

A number of the participants commented that not all HEI and Employer Body or industry partnerships in the apprenticeship context had been as positive. Factors underpinning this discord include mismanagement of expectations, misalignment of objectives and misunderstanding of each other's roles and responsibilities. Restating P2's advice, "*you've got to differentiate between employers and the people who are paid to represent employers and their perspective. There's a different dynamic going on there*". P2 alludes to the role of the Employer Body as '*intermediary*' and recommends that they need "*to be part of what you do to actually achieve*". A further tension highlighted in participant interviews, was the commercial nature of the sector putting pressure on the Employer

Body to demand delivery on timelines that the HEI and the organisations in their supply chain, could not deliver on:

> "This could create a pressure because from a college perspective, there is an urgency on programme development. But to do it right takes time. But when you've got an external party involved, you need to be very clear about what can be delivered and when." (C2)

In this consortium, the strength of the relationship between NCI and FSI was perceived to preclude these tensions (C4, C1), reinforcing the value of consortium relationship building in the optimum delivery of apprenticeship programmes.

These findings reinforce Liew et al.'s (2013) perspective, that a strong advocate and working group are necessary for a successful HE-IC outcome. The need for a strong co-relation (Lehman and Menter, 2015) between how regional wealth can be created by HE-ICs is also exhibited, as are the need for close links between HEIs and regional wealth. These can be more closely interlinked by following a 'co-evolutionary path' with a strong focus on the role of local government and how they work with HEI managers, as highlighted by P2, P3 and P4 to varying degrees.

The wider HE-IC literature focuses on the importance of trust in HE-ICs (Schilke & Cook, 2013; Vanneste, Puranam & Kretschmer, 2014). This is seen as a key variable in determining successful collaboration outcomes. This research is especially focused on how trust is based on repeated patterns of reciprocal behaviours and interactions over time (Poppo, 2013), leading to an enhanced mutual understanding by all partners (Plewa et al., 2015). Both P1 and P2, as the operational leads for FSI and NCI, focused on the role of trust as being a key enabler of the HEI-Industry collaboration at the heart of the IFS Apprenticeship Consortium:

> "At FSI we were lucky to be working with very professional individuals within an organisation (NCI) with a strong reputation. Trust and transparency have been crucial to the success of our partnership. When you are embarking on something new it is important to know that you have each other's back." (C1)

Powers of the Consortium

As the consortium is a new concept, there were initially teething problems with the Solas Authorised Officers (AOs)[23] and their acceptance of the new system. C1 stated:

> "It was originally thought that the consortia would take on some of the responsibilities of the AOs, in particular the approval of the employers as employers of apprentices".

C1 expressed concerns about the apprentice registration and approval process under this arrangement:

> "From the Solas perspective, the registration process has to be simpler. I think the interaction with the Authorized officers in that process is totally irrelevant. And it can hinder and has hindered the processes, they should have no input into it at all. And I really mean that. It's a big barrier to making the process work".

Her view is that:

> "The consortium could do it all - take on the students, the companies hire them and do all the background checks. Everything is signed and sealed, then upload the names of the apprentices on a portal controlled by Solas".

While these comments are process orientated, they do expose an issue about the balance between accountability and responsibility in relation to the consortium and their interaction with the AOs employed by Solas. The consortium have decision making powers in relation to many aspects of the IFS Apprenticeship: setting salary and benefits; designing recruitment and selection processes; designing and delivering programme content; recruiting employers and monitoring performance of apprentices and mentors. Yet some of the duties assigned to AOs, such as approval of employers, do appear to be ones that could be carried out by the consortium under the guidance of Solas - "*It's like we are trusted to make the big decisions but not the ones that would make the whole process easier for everyone*" (C1).

Guidance documents have been developed by the Apprenticeship Council and Solas since the IFS Apprenticeships have been developed, which provide more clarity on the powers of the Consortium and the stakeholders (cf. D13, D14, D15), based partly on initial feedback from stakeholders in 2016.

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[23] SOLAS has statutory responsibility for ensuring that the apprentices' conditions conform to the law. Every registered apprentice has an Authorised Officer (AO) allocated to them to provide support and guidance on any difficulties that the apprentice may encounter during the apprenticeship.

Theme 4 – Policy Context & Processes
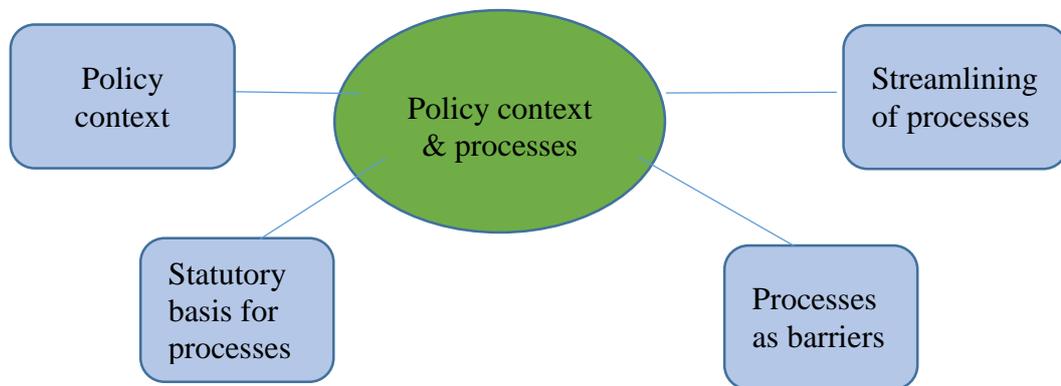
Figure 5: Theme 4 Policy Context and Processes with Sub-Themes

Policy Context

Processes is a theme consistently mentioned by most participants. Yet, to understand the landscape for the processes, it is important to understand the underpinning policy context.

The policy context as explored in Paper 1 describes how the government of Ireland and its policy makers have put HE at the heart of its economic development plans (Loxley & Seery, 2012; Walsh, 2014a, 2014b; HEA, 2017; DES, 2018), in consideration of the emerging 'performance economy' underpinned by the aforementioned current and future skill requirements. Clancy (2015) is critical of the actions of policy makers to transform HEIs into organisations that deliver more directly on national development objectives, believing that they are overly focussed on current labour market needs, to the detriment of apprentice's personal development and HE cultural objectives. Despite Clancy's concerns, he acknowledges that this utilitarian model is a 'globally favoured model', one that appears to be applied in the Irish context. Specifically, the combination of policy developments in higher education and in apprenticeships are brought to bear in the development and evolution of higher education apprenticeships in Ireland. As expressed by P4, the DES:

> "Essentially set the policy, legislative framework for apprenticeship from commissioning the original review of the apprenticeship system, bringing it to government and proposing the establishment of the Apprenticeship Council".

There is a strong recognition of the DES' high level of accountability, *"ultimately, responsibility has to rest with us in the Department because it's a major piece of public policy"* (P4). As the existing apprenticeships came under the remit of the previous iteration of Solas, the DES made a pragmatic decision for the new Higher Education apprenticeships to also come under Solas' remit, albeit with a funding relationship linked to the HEA,

> "So essentially, all of the process side of it is dealt with by Solas. And we [HEA] come in and we do the funding side…we are funders of the higher education ones [Apprenticeship], with a role on the Apprenticeship Council. But the process, it really is with Solas." (P5)

> "We [Solas] oversee the creation of industrial training orders that create apprenticeships. We're responsible for providing consent to employers to employ apprentices. We maintain a register of apprentices and we have a network of authorized officers who support all of that, those that, you know, looking after apprentices, registering apprentices, engaging with employers out there around the country." (P1)

As the 'new' apprenticeship model emerged from various stakeholders' engagement with the planning process in Ireland, it became a key element in a number of policy documents (D10, 12, 13, 14, 15) from the Department of Education & Skills. It is also highlighted in sectoral strategy documents and, specific to this study, the IFS sector strategy documents (D8, D22).

Statutory Basis for Processes

As stated by P1, it is the Industrial Training Act of 1967 (D1) that provides the statutory basis for both the existing and new apprenticeship models. The Apprenticeship Review (2013; D7) decided to establish the new apprenticeships under the 1967 legislation and '*to live with some of its limitations*' (P4), rather than wait for a considerable period of time for new legislation to be drafted, passed and enacted. There are a number of processes that were established as a result of the 1967 legislation which applied to the existing apprenticeships. These now also extend to the new apprenticeships.

Specifically, Chapters III and IV of the 1967 Act address Apprenticeship and reference topics such as industrial training orders, terms of employment and the role of the authorised officers (D1). There has been ongoing dissatisfaction with some of the legacy elements of the 1967 Act, expressed in particular by the employer body participants (C1, C3, P2). They have a collective view that the overall process should be more responsive

and dynamic and in tune with industry's need for agility rather than, '*tethered to legislation that is over 50 years old*' (P2).

Early in the process, the IFS consortium encountered a requirement for the ultimate apprentice occupation to be recognised under the 1967 Act. There was an additional requirement for an Industrial Training Order[24] (D1) to be issued for the IFS occupations. As highlighted by both C1 and C2, these were challenging pieces of work. Occupational profiles[25] (D5) had to be written, that satisfactorily differentiated the occupations for approval by the Apprenticeship Council. Following a long consultation period, occupational profiles were produced and approved for the occupations of 'IFS Associate' and 'IFS Specialist', much to the delight of consortium members:

> "This was the second biggest milestone after being approved to develop the apprenticeships…to think that the International Financial Services sector now had specific occupations with statutory recognition was fantastic." (C1)

In a similar timeframe, the role of the 'authorised officers' employed by Solas became known to the Consortium. The AO role is set out in the legislation and among their duties are the powers to ensure that the employer:

> "has adequate facilities for the training of persons by way of apprenticeship in an employment in the activity or trade, arrange with the employer for the taking by him of a person into an employment in the activity or trade by way of apprenticeship" and can "examine the methods used in the training and instruction of any person whom he finds employed in a designated industrial activity in any premises mentioned in paragraph (b) of this subsection and give advice in such training and instruction." (D1)

When companies first agreed to take on apprentices, the Consortium had no knowledge of the existence of the AOs. To have to subsequently advise the companies that there was now another layer of processes was less than ideal. This has left a bitter after taste with the employer body participants and elements of distrust in, and frustration with, the system have emerged:

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[24] An Industrial Training Order (ITO), which is a statutory instrument, designates an industrial activity as an apprenticeship. SOLAS is the body responsible for creating industrial training orders, via the 1967 Industrial Training Act and the 2013 Further Education and Training Act.
[25] The occupational profile which underpins each apprenticeship is used to determine whether an industrial training order is required to designate a new industrial activity or whether an existing order is sufficient to cover that activity.

"The authorised officer process is very time consuming and not very efficient. Trying to source who the authorized officer is, wherever, in whatever office, getting them to contact the companies, chasing them up to make sure they get registered, takes a long time." (C1)

Processes as Barriers

There was an overwhelming response from the consortium participants that some of the processes were actually barriers rather than enablers, comprehensively articulated by P3:

"I think some parts of the process created unintended barriers. It can be difficult to get a grasp of an understanding of the process in its totality and to get over each of those hurdles".

C2 reflects on the specifics of the programme development process:

"So yeah, in terms of getting our programmes developed, there wasn't an existing model that you could look at but that does exist now. So there was a lot of learning happening as we developed, and we've had a lot of learning since that. We have learned through going through that process." (C2)

As noted by P3 - *"I suppose the system doesn't help, because there are two types of HEI providers, who the process is very different for".* This refers to the fact that the validation process for Institutes of Technologies and Universities was quite different from the process that NCI had to go through, as the rest of the HEIs are licenced to manage their own apprenticeship validation processes (D11). There was a strong sense from a number of stakeholders, including some of the policy stakeholders, that there was an element of inequity in the process albeit that it was also a new process. The remit of QQI in the validation process is described by P7:

"Our remit is to ascertain if a specific programme purports to do something, that it can be done and that it can be done in that institution. If its mandate is to meet regional skills, that the institution can do so and can demonstrate their ability to deliver in a way that ensures the quality of the programme and of the experience for the learner. So we are objective neutral, but process intensive." (P7)

One of the challenges encountered in the validation of HE apprenticeships was that of ensuring the consistency of quality of the learning that happens in the workplace. While it was recognised that this is just another learning environment, recognition was also afforded to the need for a specific workplace learning process, "*at its simplest level it's just a location…yet what needs to be capitalised on is the process of abstracting learning from the work context"* (P7). This required a major shift in the validation processes with a new focus on the occupation and industry specific requirements and on the IFS Occupational Profiles in particular (D5):

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"There is so much about how an enterprise or an industry or an occupation goes about its activity that simply cannot be imparted by any type of abstraction of the symbolic process. It has to be learned either one on one or within a peer group in situ" (P7).

It is acknowledged by P1 that while processes were not ideal at the beginning of the establishment of the new apprenticeships, they have improved over the interim four years (2013-2017) and a lot has been achieved in that time period (D14, D15):

"We have created 15 new industrial training orders in four years, whereas the previous 20 years, there had been none. So while things were not ideal at the start of the new apprenticeships we've managed the whole process. We have it running pretty smoothly now. We have kept the system moving and have made what was quite a clunky, old fashioned kind of way of doing things as agile as we can make it." (P1)

Streamlining of Processes

While all participants recognise that a lot has been achieved since the introduction of the new apprenticeships, there is still a strong sense that the current processes could be streamlined further. The general consensus is that the steps in some of the processes in the wider system need to be removed to make it leaner. Other aspects of the process work well. For example, the screening of the apprentices on a number of levels appears to be unique to the IFS apprenticeships:

"So when employers are looking to get apprentices, they're really picking from the best pool. Whereas, as far as I'm aware, in the other apprenticeships, the employer recruits the apprentice directly. This is something that feeds in to the high retention rate and overall success of the IFS apprenticeships." (C2)

This process is one that was designed by the consortium and C4 believes that this process "*is meeting the needs of the industry and adds tangible value. The screening process of the apprentice is really, really important and the consortium is so well placed to do this.*" The perceived value of this process to the consortium members justifies its addition against an otherwise generally held view by the participants of the need to streamline the overall process.

The focus in the first few years (2013-2017), was on extending apprenticeships in to new sectors (P1, P4, P6) and providing guidance for the development of new apprenticeships (D13, D14, D15). The main emphasis in the last few years (2018-2020) has been on engagement with employers and while this is still ongoing, a number of policy stakeholders suggest that it would be timely now to review and streamline the processes:

"Just look at the 12 step process (D14) and then you figure out why this thing isn't working as efficiently as, or effectively as it should? I mean, why do you need 12 steps? You can pull steps out of that as long as there is no impact on the quality. In relation to quality, I would make no concession. I mean it was a good piece of work, and it's ticked all the legislative boxes. So visually you've got this nice, neat circle, it's actually not a circle, it's actually more akin to a game of snakes and ladders." (P2)

P2 advances the argument that the whole process is meant to be enterprise led but in reality, as advocated by Ibec in its original submission in response to the Apprenticeship Review in 2013 (D3), it is led by the need to satisfy the statutory needs of the policy stakeholders. As a member of the Apprenticeship Council, P2 understands the need for the statutory and legislative footing, but as an employer body representative, he advocates for a review: "*You've got to debug the process, you've got to look at the wheel, and just really kick the tyres on that and review it to make it more enterprise led*". The 'wheel' referred to, is the graphic used by Solas to visually represent all of the steps in the process, is found in the guidance documents (D13, D14) and is proposed as a tool to bring the new apprenticeship programme to market. The most significant and radical process streamline that was suggested is that of one government agency being accountable for everything to do with apprenticeship:

"This one is probably the most difficult one in that you've got to bring them under a unified agency. Yeah. You know, there's got to be one body that's doing this. Does it have to be statutory based? Yes, I think it does. So okay, there's a solution. Have a root and branch review and allocate resources accordingly, if there is a true and strong commitment to the future of sustainable apprenticeships." (P2)

This idea has been expressed in other fora before but as no mid-term review of the new apprenticeships has yet taken place, it has not had much traction to date. The idea is somewhat aligned with the comment that the overall process needs to be more enterprise led. It is also aligned with current dialogue about the possible future integration of the broader further and higher education systems (D17, D18).

The recent body of research in this area centres on the collaboration between HEIs and industry, with a particular focus on the co-design of apprenticeship education models (Bravenboer, 2016; Carter, 2010; Rowe, Perrin & Wall, 2016). The advent of these models brought with them a new approach to multi-stakeholder collaboration to produce

apprenticeship education models that fulfil all stakeholder needs (Chankseliani & Relly, 2015; Saraswat, 2016). This new approach seeks to more deeply engage the employer in the programme design process, which challenges the historically preserved role of HEIs as primary masters of programme design (Clancy, 2015).

**Theme 5 – Barriers and Challenges to HEI and Industry Collaboration**
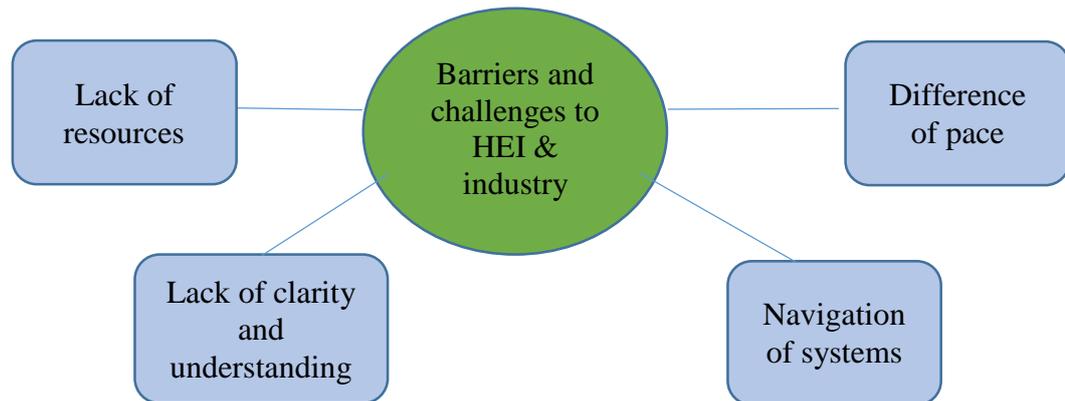
Figure 6: Theme 5 Barriers and Challenges to HEI and Industry Collaboration with Sub-Themes

A number of barriers and challenges to HEI and industry collaboration were discussed by the participants in the course of their interviews. Some of the participants viewed these barriers and challenges purely from the perspective of their organisational remit, while others took a whole system perspective. Irrespective of the lens through which these views were taken, there was consistency in the sub-themes as discussed below.

Lack of Resources

As with many other skilling and upskilling initiatives: time, cost and availability of human resources create challenges to HEI and industry collaboration partners. Financial support, or lack thereof, was considered by a number of participants:

> "There is an awareness that with the craft apprenticeships there is payment to employers. A significant number of employers see it as an incentive and have issues that financial support is not available for the new ones. While it's not an issue for the IFS apprenticeships, it's a huge issue for the engineering and chef apprenticeships." (P1)

> "There is significant pressure for additional investment in apprenticeship, the payment of allowances, and all of that sort of thing and it does raise actually the point as to what's appropriate to be funded and what's not appropriate to be funded." (P4)

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P6 acknowledges that "*there may be something needed in the financial space such as support from the State with maybe tax breaks or something in that space*" to encourage the uptake of apprentices by employers. Apart from the requirement from some sectors for direct financial support, there is also the point raised by P7 that "*the reality of the kinds of ancillary costs of the apprentice to the enterprise needs to be considered*". Within this context, P1 introduces the term 'hassle factor' for employers:

> "So, you know, mentoring, organizing quality, workplace learning, you know, an employer especially an SME26 is questioning, 'do I have the time and resources for this - can I do this?' And then, you know, that's a barrier".

Of concern to C5 is the "*management and measurement of the work based element and the impact that has on achieving consistency of learning outcomes based on the resources and commitment of the employers*". This aligns with the previous point about the commercial viability from a HEI perspective of apprenticeship and the organisational supports that the HEI has had to divert to the IFS apprenticeships. These views are all intertwined with the commitment of resources required by both the HEI and the employer to achieve success.

Lack of Clarity and Understanding

P3 offered an overview of a number of new apprenticeships and she observed that with some "*the barriers were lack of clarity about the roles, and who was responsible for costs. And that clarity piece challenged the process*". The views of C1 is also consistent with this perspective, specifically in relation to clarity or lack thereof, about the role of the consortium and its overlap with the role of the AOs as referenced earlier in this paper. Lack of clarity can also undermine the trust between the HEI and industry. This can hinder the understanding of each other's perspectives and systems, which are essential to the success of the apprenticeship education model, "*so you need time to build up trust, and allow time for people to understand their perspectives and the systems that other people are working in*" (C3). C3 gives the following example:

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26 SMEs are small to medium sized enterprises, defined as those with less than 250 employees and assumed to have greater resource constraints than larger enterprises.

> "So you know, when you go to one of the big international banks. We don't realize until we get into the process that they may have six or seven layers of approvals required before they can sign an apprenticeship contract. And then on the other side, that industry might go, 'Well, we want this to start on October 31'. And we're telling you in July, and they may not understand that there are timetables and structures and processes that must be followed [in HEIs], in order for that to start".

Lack of understanding of each other's drivers, commitments, pressures and timelines can therefore be a barrier to creating the necessary levels of trust between both parties. This reinforces Mulkeen et al.'s (2017) research, which found a consistent lack of clarity in relation to ownership of all aspects of apprenticeship programme including - programme quality; the need for higher levels of employer engagement; requirement for HEIs to improve processes and levels of support when engaging with industry; the level and depth of rethinking of traditional boundaries required and a focus on workplace mentorship.

Navigation of Systems

A further challenge to industry collaboration with HEIs is the lack of a cohesive system, which employers can find hard to navigate. A number of the participants spoke about a "*siloed*" (P1) system, and a "*disconnect*" (P2) between further and higher education, describing it as "*two systems that served two different sets of constituents*" (P5). The criticisms were on two levels of systems - that of the apprenticeship system and the streamlining of processes that is needed within that system, and of the overall education system that appears '*unfathomable as to what enterprise supports are available*' (P2). P3 has a unique perspective on this and states that:

> "The abundance of supports available to enterprise is often a surprise to them but even when they are aware that there are benefits to be had, the system still presents itself as too cumbersome to navigate".

Without exception all participants were in favour of streamlining the overall apprenticeship process in order to remove barriers to HEI and industry collaboration, referenced earlier in this paper. This aligns with the current global and national debate about the need for integration of the further and higher education systems in the move away from a binary system to a more seamless single tertiary education framework (D2, D10, D12, D17, D18).

Difference of Pace

There is an acknowledged difference of pace between how HEIs and industry operate and in most cases for very valid reasons. Industry is, in the main, driven by commercial forces with the objective of achieving profits, whereas most HEIs operate on a not-for-profit basis. As articulated by C5 - *"in the main they have different drivers and these drivers set the pace. Think also about the different audiences, customers and shareholders versus students as they also set the pace"*. These differences need to be understood by both parties and appreciated by each, as otherwise the differences can become a barrier to collaboration. *"The pace of most HEIs kills the employer as they feel it takes too long to do anything - they don't understand why everything takes so long. This piece is really a big challenge"* (P5). In the instance of the IFS Apprenticeships, NCI as education partner is conscious of the need to act quickly and in a flexible manner, as they are aware of industry's general perception of HEIs - *"a lot of the conversations I hear about from the representative body groups and employee groups are often complaints about their education providers because they're not flexible"* (C1). Based on the research findings, the industry view of HEIs is that they can be bureaucratic, but the participants also expressed concerns that there is bureaucracy in the overall system which also creates barriers to collaboration.

The reviewed documentation (appendix 1 and 3) have less to contribute to this theme and sub themes. Some of the gaps in the process and supports which had not been provided have now been at least partially fulfilled by documents published since 2017, such as 'Apprenticeship Code of Practice for Employers and Apprentices' and 'Developing a National Apprenticeship Handbook', among others (D13, D14, D15, D17, D18). Many of the challenges identified in the literature relate to a misalignment of partner expectations and requirements, aggravated by the absence of mutually agreed Key Performance Indicators (KPIs):

> "There are, and have been, partners getting involved in forming apprenticeship consortia who do not understand what is expected of each party. Because of the remit of my role I have an overview of the region and have seen what misalignment of mutually agreed objectives can lead to. Some partners have very different agendas." (P3)

Rajala & Vadi's (2017) study highlighted the use of the concept of boundary crossing from organisational theory as a mechanism that assists in providing insights into HE-ICs of varying success, a view supported by Santos & Eisenhardt (2005) and Mulkeen et al. (2017) in terms of multiple stakeholder expectations. To look more specifically at HE-ICs through an apprenticeship education lens, there is relevancy in Plewa et al.'s (2013) representation of HE-IC Phases at Figure 4.2 that are directly relevant to the researcher's objective to propose a HE-IC apprenticeship education model.

CONCLUSION AND NEXT STEPS

In this paper the researcher has documented the findings from twelve semi-structured interviews from across the higher education landscape (table 1), including members of the International Financial Services Apprenticeship Consortium of which she is a member. These findings are supported by the participant identification of professional documentation (appendix 1) and the subsequent review and manual coding of these documents and entries in the researcher's reflective log. In liaison with a review of relevant professional documentation and researcher reflective log entries, the researcher familiarised herself with the data and identified a number of themes as exhibited in a thematic analysis map (figure 1).

Five themes emerged from the findings, as exhibited in figure 1:
1.   Theme 1 - Ambiguity about the Use of Apprenticeship Terminology (Subject)
2.   Theme 2 - Differing Stakeholder Motivations for Involvement (Division of Labour)
3.   Theme 3 - Importance of the Apprenticeship Stakeholder Relationships (Community)
4.   Theme 4 – Policy Context & Processes (Rules)
5.   Theme 5 – Barriers and Challenges to HEI and Industry Collaboration (Instrument)

Theme 1 and 2 yielded more in-depth responses and stronger views than originally anticipated. This may be explained by the fact that these two themes are of significant relevance to all of the participants irrespective of whether they are policy stakeholders or consortium members. While these set firm foundations in pursuit of the research questions and objectives, Theme 3 through to Theme 5 provide more specific information from which to develop, implement and enact a HE apprenticeship education model as a mechanism for facilitating higher education and industry collaboration. Figure 1(a) exhibits the evolution of these themes and how they interact with each other, as exhibited in the data presented in this paper. Relational arrows have been added to demonstrate the relationship between the themes with the addition of elements that will be expanded upon in the next stage of the study to respond to the research questions and objectives.
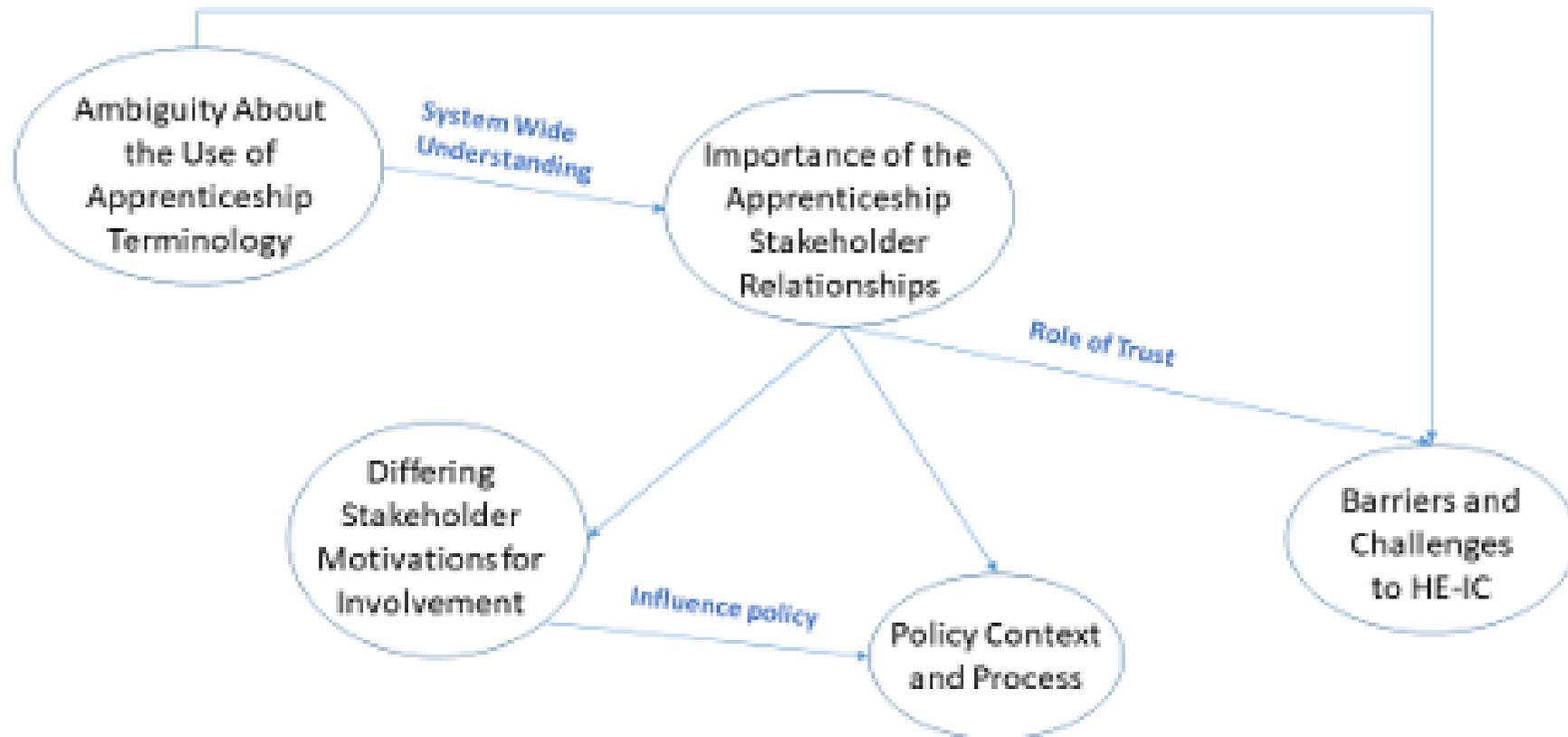
Figure 1(a): Refined Thematic Analysis Map: Enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC)

Having completed the data analysis to extract the research findings and ultimately the key themes relating to this study, the next steps include a discussion of the findings, contemplated through consideration of extant literature and in pursuit of a refined framework to assist in answering the research questions and addressing the research objectives for this study. The research conclusions, recommendations, contributions and reflective insights will also be considered.

RESEARCHER REFLECTIONS

I had mixed feelings as I brought this paper to a conclusion. I was happy to see the themes and sub themes emerge and was very grateful to the participants for their honesty, their generosity and in some cases their bravery in sharing their insights, thoughts and experience. My deep level of interest and passion for my subject area has in many cases been matched by that of the participants. The goodwill that has been so important in facilitating the evolution of the higher education apprenticeships to date has been extended to me in my study. There is a palpable element of sadness that my immersion in this study is approaching an end. This is matched by my concern for the future of the 'new' apprenticeships and an added sense of personal, professional and academic responsibility in this study making a contribution to the next phase of their evolution.

I have gained immense satisfaction from my study to date on a personal level (yes even on reflection from the not so enjoyable moments!). On a professional level satisfaction has been gained from presenting elements of this study to the Apprenticeship Council, Solas, QQI as the study progresses. From my own organisation's perspective a lot of the learning gained from this sectoral study to date has been applied to a forthcoming Recruitment Practitioners Apprenticeship degree developed in partnership with the National Recruitment Federation, which will be the first of its kind globally and is due to be launched at the World Employment Conference in Madrid in October 2020.

As I changed roles within my own organisation during the course of this study I reflected on the relevance of my area of study to my new role. I was delighted to find that this study has achieved another level of relevance with regard to this role as I engage with a number of the same national policy stakeholders in dialogue about tertiary education and alignment of further and higher education with industry needs.

As I submit this paper in a time of understandable social restrictions because of the Covid-19 crisis I am quite sad that as a DBA class our final full cohort visit to Waterford has been cancelled. The group dynamic has been personally very important to me and has supported me through a few years in which I experienced family loss and ill-health. For us not to be together again is a blow but I will endeavour to do something to get the geographically far flung group together in some way. I also have concerns about not being in a position to present and defend my work in person as I feel that is where my strength lies and the absence of that opportunity puts more pressure on the written word of this paper standing on its own merit.

I am now looking forward to the next stage of this doctoral process and to bringing this study to fruition with the virtual support of my Supervisors and classmates and grateful for the focus this gives me at this very unsettling time in our history.

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Promise.

Appendix 1 Documentary Analysis

Code	Title of Document	Date	Author	Original Purpose	Intended Audience	Related Themes	Relevance
D1	Industrial Training Act 1967	1967	Government Publications	To make better provision for industrial and commercial training and to establish an overseeing structure and to define its powers and duties	Education Providers, Employers, Apprentices, Apprenticeship Stakeholders	Ambiguity about the Use of Apprenticeship Terminology (T1) Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4)	Highly Relevant
D2	National Strategy for Higher Education to 2030	2011	Department of Education & Skills	To present a vision of an Irish higher education sector that can successfully meet the many social, economic and cultural challenges that face us over the coming decades, and meet its key roles of teaching and learning, research, scholarship, and engagement with wider society	Higher Education Providers, Employers,	Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4)	Relevant
D3	Ibec Submission to Consultation on Government Review of Apprenticeships	2013	Ibec	To represent the views of Ibec business sector members with regard to the government review of apprenticeships	Apprenticeship Council members, Department of Education & Skills, Department of Enterprise Business & Innovation, Ibec sector bodies	Ambiguity about the Use of Apprenticeship Terminology (T1) Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant

D4	Apprenticeship Review – Background Issues Paper	2013	Department of Education & Skills	To determine whether the current model of apprenticeship should be retained, adapted or replaced by an alternative model of vocational education and training for apprentices - taking into account the needs of learners, the needs of employers, the needs of the economy and the need for cost effectiveness into the future	Department of Education & Skills, Department of Enterprise Business & Innovation, Solas, Higher Education Authority, Quality Qualifications Ireland, Education Providers in Further and Higher Education	Ambiguity about the Use of Apprenticeship Terminology (T1) Differing Stakeholder Motivations for Involvement (T2) Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Highly Relevant
D5	International Financial Services Occupational Profiles	2013	Solas	To underpin each apprenticeship and to determine whether an Industrial Training Order is required to designate a new industrial activity or whether an existing Order is sufficient to cover that activity.	IFS Apprenticeship Consortium, IFS Employers, National College of Ireland, Financial Services Ireland, Apprentices, Workplace Mentors, Authorised Officers	Importance of the Apprenticeship Stakeholder Relationships (T3)	Highly Relevant
D6	Action Plan for Jobs	2013	Department of Business Enterprise & Innovation	To provide the next step in the Government's plan to rebuild the economy and support the transition to a sustainable, jobs rich economy based on enterprise, innovation and exports.	Employers, Education Providers,	Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant
D7	Review of Apprenticeship Training in Ireland	2013	Department of Education & Skills	To determine whether the apprenticeship model should be "retained, adapted or replaced by an alternative model of	Employers, Education Providers, Solas, HEA, QQI, Ibec, Financial Services Ireland	Ambiguity about the Use of Apprenticeship Terminology (T1) Importance of the Apprenticeship Stakeholder Relationships (T3)	Highly Relevant

				vocational education and training"		Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	
D8	IFS2020: A Strategy for Ireland's International Financial Services sector 2015-2020	2015 & 2018	Department of Business Enterprise & Innovation	To set out a new vision and strategy for Ireland's International Financial Services sector	IFS Employers, Financial Services Ireland, Education Providers	Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant
D9	Consortium Terms of Reference Consortium Contract with National College of Ireland Consortium Contract with Apprenticeship Council Consortium Contracts with IFS Apprenticeship Employers National College of Ireland IFS Apprenticeship Contract with the HEA	2015	IFS Apprenticeship Consortium	For governance and guidance purposes	IFS Consortium, Financial Services Ireland, Ibec, National College of Ireland, IFS Employers, Solas, HEA, QQI, Apprenticeship Council,	Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Highly Relevant
D10	Action Plan for Education 2016-2019	2016	Department of Education & Skills	To set out the central vision and Statement of Strategy of the Department of Education & Skills and Action Plan for the Irish Education and Training	Education Providers, Employers	Ambiguity about the Use of Apprenticeship Terminology (T1) Differing Stakeholder Motivations for Involvement (T2)	Highly Relevant

				System to become best in Europe over the next decade	Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	
D11	Statutory Quality Assurance Guidelines developed by QQI for Providers of Statutory Apprenticeship Programmes	2016	Quality Qualifications Ireland	To provide substantial and tailored guidance for the development, delivery and evaluation of apprenticeship programmes by the relevant parties with quality assurance accountability to QQI	Education Providers, Employers, Apprenticeship Consortia, Apprenticeship Council, Solas, HEA, QQI Panel Members	Ambiguity about the Use of Apprenticeship Terminology (T1) Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Highly Relevant
D12	National Skills Strategy 2025	2016	Department of Education & Skills	To ensure a more dynamic, responsive and high quality education and training system that provides all learners with the knowledge and skills they need to participate fully in society and the economy.	Employers, Education Providers, Ibec,	Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant
D13	Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020	2017	Department of Education & Skills	To set out an action plan to significantly grow work-based learning over the coming five years using the apprenticeship and traineeship modes of learning and skills development.	Apprenticeship Council, Solas, HEA, QQI, Education Providers, Employers, Ibec sectoral bodies	Ambiguity about the Use of Apprenticeship Terminology (T1) Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Highly Relevant
D14	Developing a National	2017	Apprenticeship Council	To explain the steps involved in developing a	Apprenticeship Consortia,	Ambiguity about the Use of Apprenticeship Terminology (T1)	Highly Relevant

	Apprenticeship Handbook			national apprenticeship, with links to supplementary information and resources with the primary intention of assisting consortia involved in developing apprenticeships, as well as anyone interested in the apprenticeship development process.	Employers, Education Providers	Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	
D15	Apprenticeship Code of Practice for Employers and Apprentices	2017	Apprenticeship Council	To assist employers and apprentices to understand their duties and responsibilities relating to the Apprenticeship Programme.	Employers, Apprentices, Education Providers	Ambiguity about the Use of Apprenticeship Terminology (T1) Importance of the Apprenticeship Stakeholder Relationships (T3) Policy Context & Processes (T4)	Highly Relevant
D16	Dublin Regional Skills Strategy	2018 & 2019	Dublin Regional Skills Forum	To provide an opportunity for employers and the education and training system in the Dublin Region to work together to meet the emerging skills needs of their regions.	Dublin based Employers, Higher & Further Education Providers, Dublin Chamber, IDA, Enterprise Ireland, Ibec, SFA, Department of Employment and Social Protection,	Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant
D17	Action Plan for Education 2019	2019	Department of Education & Skills	To set out the priorities for the Department of Education and Skills and its agencies and aegis bodies for the year	Education Providers, Employers,	Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant

D18	Statement of Strategy 2019-2021	2019	Department of Education & Skills	To set out the strategic actions to be achieved in response to the needs of learners, employers and society, at every level in the education and training system, in the context of significant national and international change, evolving skill demands and changing demographics	Education Providers, Employers	Policy Context & Processes (T4) Barriers and Challenges to HEI and Industry Collaboration (T5)	Relevant
D19	Future Jobs Ireland	2019	Government of Ireland	To set out an agenda to respond to future risks and to ensure that Ireland seeks to ensure Ireland benefits from the changes that are already happening in the world of technology, artificial intelligence and robotics, and the move to a low-carbon economy.		Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4)	Somewhat Relevant
D20	National Development Project Ireland 2040	2019	Department of Public Expenditure & Reform	To build the Ireland of tomorrow, and prepare for a future society which will have an extra one million people, and 660,000 more people at work		Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4)	Relevant
D21	Technology Skills 2022	2019	Department of Education & Skills	To set out a plan to provide appropriate education and training pathways for people to train, learn and upskill in a variety of high-level ICT skills which are sought		Differing Stakeholder Motivations for Involvement (T2) Policy Context & Processes (T4)	Relevant

				after by a diverse range of industries			
D22	Ireland for Finance: The strategy for the development of Ireland's international financial services sector to 2025	2019	Government Publications	To set out a whole-of-Government strategy for the further development of the international financial services sector in Ireland to 2025 including the employment target for the Strategy is to reach 50,000 people in direct employment in the sector by 2025		Differing Stakeholder Motivations for Involvement (T2)

Policy Context & Processes (T4)

Barriers and Challenges to HEI and Industry Collaboration (T5) | Relevant |

Appendix 2a: Documentary Analysis Process

(influenced by Bowen (2009) and O'Leary (2014)

- Create a list of texts to explore (e.g., population, samples, respondents, participants)

- Consider how texts will be accessed with attention to linguistic or cultural barriers

- Acknowledge and address biases

- Develop appropriate skills for research

- Consider strategies for ensuring credibility

- Know the data one is searching for

- Consider ethical issues (e.g., confidential documents)

- Have a backup plan

- Gather relevant texts

- Develop an organization and management scheme

- Make copies of the originals for annotation

- Asses authenticity of documents

- Explore document's agenda, biases

- Explore background information (e.g., tone, style, purpose)

- Ask questions about document (e.g., Who produced it? Why? When? Type of data?)

- Explore content (using interview technique of treating the document like a respondent or informant that provides the researcher with relevant information)

- Organisation of content extracted from documents relative to the themes and the ability to answer the research questions

Appendix 2b: Questions asked of the Documents as part of the Documentary Analysis

- Content analysis of the documents is the process of organising information into categories related to the central questions of the research.
- What is the rationale for using document analysis?
- What is the specific function of the documents?
- Do the documents provide supplementary research data that is valuable to the study?
- Documents can provide a means of tracking of changes and development – do these?
- Do they verify the findings or corroborate the other evidence?
- Or are they contradictory? If they are it points towards the need for further investigation
- Is there a convergence of the information from the different sources?
- Have the documents been looked at with a critical eye?
- Can the authenticity, credibility, accuracy be verified and are they representative?
- Has the original purpose of each document been considered? Why was it produced and who was it produced for?
- Is there any data uncovered by the documents that was no provided by the interviews? If so what? & what contribution has that made to the study?

Appendix 3: Links to Documents

No	Author/ Publisher	Title	Year	Link
D1	Government Publications	Industrial Training Act 1967	1967	http://www.irishstatutebook.ie/eli/1967/act/5/enacted/en/html
D2	Department of Education & Skills	National Strategy for Higher Education to 2030	2011	https://hea.ie/assets/uploads/2017/06/National-Strategy-for-Higher-Education-2030.pdf
D3	Ibec	Ibec Submission to Consultation on Government Review of Apprenticeships	2013	file:///C:/Users/dgiblin/Documents/IBEC%20Apprenticeship%20Consultation%20doc.pdf
D4	Department of Education & Skills	Apprenticeship Review – Background Issues Paper	2013	https://www.education.ie/en/Publications/Policy-Reports/Apprenticeship-Review-–-Background-Issues-Paper.pdf
D5	Solas	International Financial Services Occupational Profiles	2013	http://www.apprenticeship.ie/en/apprentice/Shared%20Documents/IFS%20Specialist.pdf
D6	Department of Business Enterprise & Innovation	Action Plan for Jobs	2013	https://dbei.gov.ie/en/Publications/Publication-files/Action-Plan-for-Jobs-2013.pdf
D7	Department of Education & Skills	Review of Apprenticeship Training in Ireland	2013	https://www.education.ie/en/Publications/Policy-Reports/Review-of-Apprenticeship-Training-in-Ireland.pdf
D8	Department of Business Enterprise & Innovation	IFS2020: A Strategy for Ireland's International Financial Services sector 2015-2020	2015 & 2018	https://www.gov.ie/en/collection/d13662-ifs2020-strategic-plan-and-action-plans/
D9	IFS Apprenticesh	Consortium Terms of Reference	2015	All subject to GDPR

		ip Consortium	Consortium Contract with National College of Ireland Consortium Contract with Apprenticeship Council Consortium Contracts with IFS Apprenticeship Employers National College of Ireland IFS Apprenticeship Contract with the HEA		
D10	Department of Education & Skills	Action Plan for Education 2016-2019	2016	https://www.education.ie/en/The-Department/Action-Plan-for-Education-2016-2019/Action-Plan-for-Education.html	
D11	Quality Qualifications Ireland	Statutory Quality Assurance Guidelines developed by QQI for Providers of Statutory Apprenticeship Programmes	2016	https://www.qqi.ie/Publications/Publications/Apprenticeship%20Programmes%20QAG%20Topic-Specific.pdf	
D12	Department of Education & Skills	National Skills Strategy 2025	2016	https://www.education.ie/en/Publications/Policy-Reports/pub_national_skills_strategy_2025.pdf	
D13	Department of Education & Skills	Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020	2017	https://www.gov.ie/en/publication/71d017-action-plan-to-expand-apprenticeship-and-traineeship-in-ireland-2016/	
D14	Apprenticeship Council	Developing a National Apprenticeship Handbook	2017	https://hea.ie/assets/uploads/2017/06/Developing-a-National-Apprenticeship-Handbook.pdf	
D15	Apprenticeship Council	Apprenticeship Code of Practice for Employers and Apprentices	2017	www.apprenticeship.ie/Documents/ApprenticeshipCodeOfPractice.pdf	

D16	Dublin Regional Skills Forum	Dublin Regional Skills Strategy	2018 & 2019	https://www.regionalskills.ie/regions/dublin/our-region/
D17	Department of Education & Skills	Action Plan for Education 2019	2019	https://www.education.ie/en/Publications/Corporate-Reports/Strategy-Statement/action-plan-for-education-2019.pdf
D18	Department of Education & Skills	Statement of Strategy 2019-2021	2019	https://www.education.ie/en/Publications/Corporate-Reports/Strategy-Statement/statement-of-strategy-2019-2021.pdf
D19	Government of Ireland	Future Jobs Ireland	2019	https://dbei.gov.ie/en/Publications/Publication-files/Future-Jobs-Ireland-2019.pdf
D20	Department of Public Expenditure & Reform	National Development Project Ireland 2040	2019	https://www.gov.ie/en/campaigns/09022006-project-ireland-2040/
D21	Department of Education & Skills	Technology Skills 2022	2019	https://www.education.ie/en/Publications/Policy-Reports/technology-skills-2022.pdf
D22		Ireland for Finance: The strategy for the development of Ireland's international financial services sector to 2025	2019	https://www.ifsireland.com/BlankSite/media/IFSMedia/Documents/Ireland-for-Finance.pdf

Appendix 4: Interview Guide

Research Purpose

The aim of this study is to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration.

- RQ (a) what is the process for developing, implementing and enacting a HE apprenticeship education model?

- RQ (b) How can this model serve as a mechanism for HEI and industry collaboration?

Preamble

Thank Participant. Discuss purpose of research. Collect signed consent form, confirm confidentiality criteria and request consent to record the interview.

Initial Questions

41. Tell me a bit about yourself and your professional background

42. How long have you been at this organisation?

43. What is your current role in relation to apprenticeship?

44. How long have you been in this role?

Apprenticeship Overview

45. What does the term apprenticeship mean to you?

46. What does the term work based learning mean to you?

47. How do you view the relationship between work-based learning and apprenticeship?

48. Do you believe these terms are well understood in HEIs and Industry?

48.1.   If not, why do you think that is?

Organisational Influence on HEI – Industry engagement

49. What is your organisation's role in relation to apprenticeships?

50. What was your organisation's objective in getting involved with apprenticeships?

51. Does your organisation encourage HEIs and industry to work together on apprenticeships?

52. How did this occur?

52.1.   At what level in each organisation did the initial engagement happen at?

52.2.   Is there any contractual documentation supporting the partnerships?

52.3.   Was your organisation involved in drafting or recommending such documentation?

52.4.   Was a steering group appointed?

52.5.   Did this process influence engagement between the HEIs and industry?

53. What impact, if any, did your organisation's involvement have on the effectiveness of these collaborations?

54. Where there any barriers to collaboration?

55. What were the benefits, if any of this collaboration?

Prompts

55.1.   Do you think the partners can see the benefits?

55.2.   Who were the beneficiaries?

55.3.   Are there incentives for either party?

56. Is there anything that you think that was learned from the apprenticeship process that could be applied to other HEI and industry collaboration projects?

HEI- Industry: Relationship Management

Key HE sector reports note that HEIs need to be more proactive and dynamic in their

collaboration with industry ...

57. Have you seen any examples of HEI-Industry collaboration in the range of new apprenticeships?

58. How would you describe the relationship between the two parties (HEI and Industry)?

59. What, if any tensions, exist? (e.g. internal systems, culture, ways of working)

59.1.   Could these tensions have been prevented? How?

59.2.   What have you learned from this experience?

60. What challenges, if any, did you observe in the formation and management of the consortia?

60.1.   How were these challenges managed?

60.2.   What did you and your organisation learn from observing these challenges?

Roles, responsibilities and accountabilities

In cases where HEIs and Industry worked on apprenticeships together, in your experience…

61. Was it clear what each party was bringing to the table?

  61.1.   If so how was that evidenced?

62. Did one party take the lead?

Prompts

  62.1.   If so, who?

  62.2.   Why do you think that is the case?

63. How were roles, responsibilities and accountabilities allocated and managed?

Prompts

  63.1.   Were they evenly allocated?

  63.2.   Were there clear boundaries around the roles?

  63.3.   Was one party seen to be more accountable, responsibility than the other?

    63.3.1. Why do you think this was the case?

  63.4.   Was a project lead assigned?

  63.5.   How was the project lead(s) assigned? (one or both organisations)

  63.6.   Were they (the project lead) supported by their own organisation?

  63.7.   Was a project team established?

  63.8.   What roles are within the team?

Can you give some examples to illustrate your answer?

64. How well do you think the roles of the HEI and industry partners were understood?

65. Could you see the expertise of each party come to the fore at different stages of the process?

66. Where apprenticeships seen as a priority in terms of allocation of resources and support?

Apprenticeship Programme Design

67. What role does each party play in designing the overall curriculum, including assessments?

68. What challenges, if any, have you seen in the design of the work-based curriculum?

68.1.   If so, what were they?

69. Were you aware of any factors that hindered the parties in relation to the co-design, WBL and/or accreditation?

70. How do you feel the co-design of apprenticeship curricula should occur?

71. What learning can be gained from the co-design process?

Apprenticeship Programme Delivery

72. How was the programme delivered?

73. Were success criteria set?

73.1.   Were they achieved?

73.2.   How were they measured?

73.3.   Were the success criteria achieved?

Can you give some examples to illustrate your answer?

74. What do you think are the necessary elements for a successful apprenticeship education programme?

75. Was the programme a success from your perspective?

Closing Questions

76. What qualities do you think each party needs to have to make collaboration a success?

77. Have your organisation's expectations in the apprenticeship context been met?

77.1.   If not, why do you think that is?

78. What has been the biggest learning for you and your organisation?

79. What advice would you give to HEIs and industry partners starting out on the apprenticeship journey?

80. Is there anything else you feel I should have asked or that you would like to tell me?

Thank you for your time

SECTION 3

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

INTRODUCTION

To reiterate the rationale for this study outlined in Section one, the aim of this research is to explore a process for developing, implementing and enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC).

The socio-economic benefit of a high functioning apprenticeship education model is significant, driving the need for, and value of a HE-IC framework. It has the capacity to accommodate both male and female apprentices with varying levels of abilities in a broad range of occupations and sectors as evidenced in countries such as Germany, Austria, Switzerland, Norway, Finland and Australia (Chankseliani et al, 2017). There is very little difference between employment outcomes and lifetime earnings of apprentices and HEI graduates (Keese, 2016), reinforcing the socio-economic value of WBL on individual learners. At a European level, apprenticeships result in better employment outcomes for the under 24s (EC, 2013; G20-OECD-EC conference, 2014).

The 'new' apprenticeships framework in Ireland have been part of the post- secondary education landscape since the Apprenticeship Review in 2013. A number of stakeholders have vested significant effort to work towards the success of this apprenticeship renaissance however, more needs to be done to understand the nuances of HE-IC in this environment. Leveraging the experience and knowledge of the national policy stakeholders and the consortium members of one of the 'new' early adopter higher education apprenticeships – the International Financial Services (IFS) Apprenticeships – together with the extant literature and existing documentation, this study informs the HE-IC process in a way that will enhance new apprenticeships in a diverse range of sectors.

This study began in 2016 when the new apprenticeships, and specific to this study, the IFS Apprenticeships, had just commenced. The IFS Apprenticeships were one of the first of the new apprenticeships to come to market following the 2013 review and were the first HE apprenticeship to be accredited by Quality & Qualifications Ireland[27] (QQI)

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[27] QQI is the national agency responsible for qualifications and quality assurance in further education and training and higher education in Ireland.

under a new accreditation system (2016)[28]. A suite of IFS apprenticeships paved the way for a number of subsequent apprenticeships in both the further education and HE systems. Parties to the IFS Apprenticeships worked very closely with national policy stakeholders and a number subsequent apprenticeship consortia to disseminate the learning as it emerged. This HE-IC was the inspiration for this study.

At the time of writing (July 2020), a newly formed Irish Government established the Department of Further and Higher Education, Research, Innovation & Science. It is interesting to note that Simon Harris, the incoming Minister for this new Department, launched the IFS Apprenticeships at the inaugural European Financial Forum in 2016 in his then role as Minister of State at the Department of Finance. In his new role, Deputy Harris launched the new Recruitment Apprenticeship Degree in July 2020, completing the development cycle started in 2016.

This concluding chapter pursues a response to these research questions and objectives in light of the research findings. The forthcoming section offers a summary of the research outcomes and an extraction of the themes from the research study. A discussion of these outcomes ensues, including particular pursuit of a model for developing, implementing and enacting a HE apprenticeship education model. The chapter finishes by outlining the research contribution to both practice and theory, including a review of its limitations, before concluding with a proposal for further studies.

DISCUSSION OF FINDINGS AND CONSIDERATION OF EXTANT LITERATURE

This study explored a specific HEI-Industry collaborative learning opportunity, which was the design, development, implementation, delivery and management of the IFS Apprenticeship Education model. As set out in research Paper 3, the phase two interviews were guided by the literature-informed themes, outlined at Table 2 (p:117). In total 14

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[28] The 'New Apprenticeships and QQI' circular (ref. 2016/01 QQI CL) clarified matters relating to the awarding, quality assurance and recognition of New Apprenticeships for members of consortia proposing New Apprenticeships. See: https://www.qqi.ie for further details.

hours of recorded data was gathered from the research participants, who all gave generously of their time, knowledge and insights.

Carrying out the research and analysing the data led to the development of a thematic map depicting five emergent themes: 1) Ambiguity about the Use of Apprenticeship Terminology; 2) Importance of the Apprenticeship Stakeholder Relationships; 3) Differing Stakeholder Motivations for Involvement; 4) Policy Context & Process and 5) Barriers & Challenges to HE-IC. The thematic map is replicated at Figure 1.
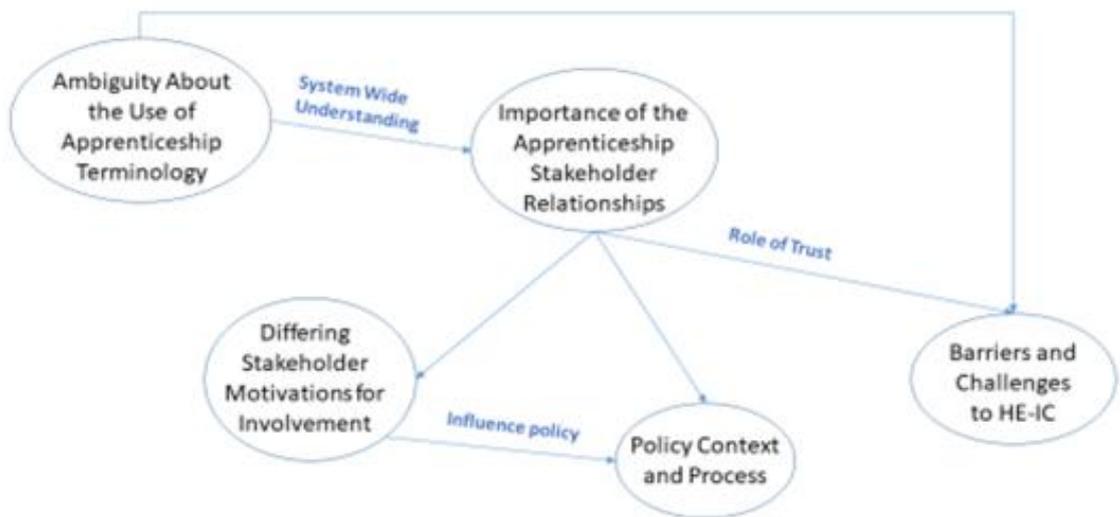

Figure 1 Revised Thematic Analysis

Extraction of the core themes was the result of the researcher's immersion in the findings as exemplified in Table 1

Themes	Sub themes	Findings from Participants	Findings from Documentary Review
Theme 1: Ambiguity about the Use of Apprenticeship Terminology	Use and understanding of the term 'Apprenticeship'	There is varied use and understanding of apprenticeship based on motivation for involvement. The participants are on a continuum from disagreement with the use of the term through to an appreciation of the history of the term and the protections afforded by the legislation.	The evolution of the term 'Apprenticeship' in the Irish context was traced from its origins in the 1967 Industrial Training Act and along its trajectory to the definitive definition as provided by the Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020.
	Use and understanding of term work based learning (WBL)	There were varying degrees of understanding of the term, depending on where the participant worked. There were a range of interesting insights shared that could add value to the use and understanding of the terms for all of the stakeholders.	The use of the term featured in a number of the Department of Education & Skills strategies and action plans and not always exclusively in relation to apprenticeship (cf. D2, D3, D4, D7, D10, D11, D14, D17, D18)
	Link between Apprenticeship and WBL	While the participants appear to arrive at their understanding of the link between apprenticeship and WBL based on their position in the apprenticeship ecosystem, they all appreciate the link exists.	A range of documents specific to apprenticeship made the link between Apprenticeship and WBL explicit (cf. D2, D3, D4, D7, D10, D11, D14, D17, D18).
	Understanding of terms by various parties	Varying levels of understanding of key terms such as 'work based assessment', 'work based mentors', 'authorised officers', 'electronic portfolios' were of concern to all participants. All acknowledged that lack of understanding impacted on appreciation of the scale of commitment needed to ensure a successful apprenticeship. Participants believe a system wide understanding of apprenticeship terminology is needed to enhance understanding.	The documentary analysis provides evidence that the education policy stakeholders and the education provider are more aligned in a common understanding the terms 'apprenticeship' and 'work based learning', than the industry and representative bodies.
Theme 2: Differing Stakeholder Motivations for Involvement	Statutory Obligation	Statutory obligation is a clear and valid motivation for a number of stakeholders (e.g. HEI, Industry). A number of participants expressed the view that being part of the same apprenticeship eco-system did not automatically guarantee commitment. It was acknowledged that the benefits of the new apprenticeships and the new processes needed to be promoted across that eco-system to garner a holistic system-wide level of support.	With the original statutory requirement for apprenticeship being contained in the Industrial Training Act 1967 (D1) and also being referred to in a range of documents (cf. D3, D4, D7, D9, D11), statutory obligation is clearly embedded in the documentation.
	To Influence Public Policy	The importance of the voice of the employer representative body (Financial Services Ireland, FSI) within the apprenticeship ecosystem is apparent due to the crucial differentiating point of apprenticeships being employer led. The need for FSI to act on behalf of their members is balanced with a need to also influence public policy.	The voice of the parent employer representative body Irish Business and Employers Confederation (Ibec) is heard clearly from the 'Ibec Submission to Consultation on Government Review of Apprenticeships' (D3) and in subsequent documents such as 'IFS2020: A Strategy for Ireland's International Financial

			Services sector 2015-2020' (D8) and in the suite of consortium specific documents (D9).
	Belief in Mode of Learning	The alignment of belief systems and ambition to excel in apprenticeships became a powerful, shared motivation for both the education provider and the lead employer. It became a driving force for the IFS Apprenticeships consortium.	While a belief in this mode of learning is evident in the operation of the IFS apprenticeship, the only evidence in the suite of consortium specific documents is in D9.
	Competitiveness of IFS Sector	The overriding motivator for the involvement of FSI as the representative body for the financial services sector is to contribute to the sector's competitiveness. This finding is inconsistent with FSI's ability to attract significant numbers of participating employers. The message that this 'national talent play' is not being understood by the majority of IFS employers, despite the best efforts and intentions of the employer body and sectoral representatives. There appears to be a disconnect between the employer body and the sector's employers in seeing the value of apprenticeship as a solution to a talent and skills problem.	The 'Strategy for the Development of Ireland's International Financial Services sector to 2025' (D22) has specific action points on the IFS apprenticeships that link directly to participants' points about apprenticeship aiding the competitiveness of the sector.
	Culture of Apprenticeship	The IFS sector has a culture of graduate recruitment and not apprenticeship, as observed by a number of participants. Only small pockets of IFS employers are engaging with apprenticeship and the majority of those are engaging in a relatively small way.	The 'Strategy for the Development of Ireland's International Financial Services sector to 2025' sets out a vision for talent in the sector that has apprenticeship at its core (D22); however there is little guidance on how to instil a culture of apprenticeship in stakeholder organisations.
	HEI and Employer Engagement	The funding model is encouraging HEIs to get closer to industry, with many funding initiatives requiring evidence of close collaboration with industry. In the IFS sector, where many employers are US-parented multi-national corporations, employer engagement in large numbers remains a challenge.	The high level policy and strategy documents published by the Department of Education & Skills and the Department of Enterprise Business & Innovation promote engagement between HEIs and industry, with a number of streams of funding promoting such collaboration. Specific published strategies for the IFS sector support these policies in practice (cf. D8, D22).
Theme 3: Importance of the Apprenticeship	Leadership and Formation of the Consortium	The consortium approach was a disruptor in a number of ways as it was a requirement of funding that it had to be industry led. This was a significant move away from the structures supporting 'traditional' apprenticeships, for whom Solas is the co-ordinating body.	When the study commenced in 2016, there was very little documentation about the leadership and formation of the consortium but documents were subsequently developed. The participant-led document identification process revealed a

Stakeholder Relationships			number of new documents that had not been published at the time of the design and development of the IFS apprenticeships programme (cf. D13, D14, D15).
	Role of the HEI in the Consortium	The role of the HEI on the IFS consortium is much more than its typical role in such environments. The role of the HEIs in the wider system is of concern to a number of participants due to there being varying levels of clarity around the HEI role. For example, there is a perception that the HEI is taking the lead in some consortia when it should be led by the Industry partner.	The HEI and Industry roles are not elaborated on in the documentation. Clarification would aid consortia operation.
	Relationship between HEI and Employer Body	The relationship between the HEI and FSI is viewed by both parties as strong and robust. Not all apprenticeship HEI-IC are viewed as positive. Factors underpinning this discord include; mismanagement of expectations, misalignment of objectives and misunderstanding of each other's roles and responsibilities.	Relationship management is not mentioned in the documentation.
	Powers of the Consortium	The consortium has decision-making powers in relation to many aspects of the IFS Apprenticeship: setting salary and benefits; designing recruitment and selection processes; designing and delivering programme content; recruiting employers; and monitoring performance of apprentices and mentors. Some of the duties assigned to Authorised Officers, such as approval of employers, could be carried out by the consortium under the guidance of Solas.	Guideline documents have been developed by the Apprenticeship Council and Solas since the IFS Apprenticeships began, which provide more clarity on the powers of the Consortium and the stakeholders, based partly on initial feedback from stakeholders in 2016 (D13, D14, D15).
Theme 4: Confusion around Roles and Responsibilities	Policy Context	Understanding the policy surrounding Apprenticeships has emerged as being an important factor.	As the 'new' apprenticeship model emerged from various stakeholders' engagement with the planning process in Ireland, it became a key element in a number of policy documents, in particular from the Department of Education & Skills (cf. D4, D5, D6, D7, D8, D10, D12, D13, D14, D17, D18, D19, D20). It is also evident in sectoral strategy documents and, specific to this study, the IFS sector strategy documents (D8, D22).
	Statutory Basis for Processes	There are a number of processes that were established as a result of the 1967 legislation, which applied to existing apprenticeships. These also extend to the new apprenticeships. Participants have a	The Apprenticeship Review (2013) decided to establish the new apprenticeships under the 1967 legislation and 'to live with some of its

		collective view that the overall process should be more responsive and dynamic to fulfil ecosystem needs and requirements.	limitations', rather than wait for a considerable period of time for new legislation to be drafted, passed and enacted.
	Processes as Barriers	There was an overwhelming response from the consortium participants that some of the processes were initially barriers rather than enablers. It is acknowledged that they have improved over the interim years (2013- present) and a lot has been achieved in that time period.	Acknowledged limitations relating to the 2013 decision to establish the new apprenticeships under the 1967 legislation.
	Streamlining of Processes	While all participants recognise that a lot has been achieved since the introduction of the new apprenticeships in 2016, there is still a strong sense that the current processes could be streamlined further. The consensus is that the steps in some of the processes need to be removed to make it leaner. The most significant suggestion is that one government agency should be accountable for everything to do with apprenticeship.	Documentation developed when planning the Apprenticeships (D1-14) may need to be streamlined based on practical experience. The new Government Department of Further and Higher Education, Research, Innovation, Science established in July 2020 has responsibility for Apprenticeships.
Theme 5: Requirement for Robust Processes	Lack of Processes	Time, cost and availability of human resources are acknowledged challenges facing HEI and industry collaboration partners. Financial support, or lack thereof, was considered important by a number of participants. These views of consortium participants reinforce the perceived commitment of resources required by both the HEI and the employer to achieve Apprenticeship success.	The perceived lack of common process aligns with the current global and national debate about the need for integration of the further and higher education systems, in a move away from a binary system to a more seamless single tertiary education framework (cf. D17, D18, D19).
	Lack of Clarity and Understanding	A number of the consortium felt that lack of clarity and understanding challenged the overall process. Lack of understanding of each other's drivers, commitments, pressures and timelines are seen as barriers to creating the necessary levels of trust between both parties.	Some of the gaps in the process and supports, which had not been provided in the initial documentation, have now been at least partially fulfilled by documents published since 2017 (cf. D13, D14, D15).
	Navigation of Systems	Participants believe the system lacks cohesion, which employers found hard to navigate. The criticisms were on two levels; a need to streamline processes within the system, and the overall education system. Without exception, all participants were in favour of streamlining the overall apprenticeship process in order to remove barriers to HEI-IC.	Documentation developed when planning the Apprenticeships (D1-14) may need to be streamlined based on practical experience.
	Difference of Pace	There is an acknowledged difference of pace between how HEIs and industry operate and in most cases for very valid reasons.	There is potential to communicate the reasons why the pace differs between these stakeholders within the documentation.

Table 1: Summary of Findings

Theme 1: Ambiguity about the Use of Apprenticeship Terminology

As highlighted in Paper 3, one of the outputs of the Apprenticeship Review Process in 2013 was the decision to continue to use the term "Apprenticeship", reinforced by the continued use of the Industrial Training Act of 1967 to govern the new Apprenticeships and the subsequent establishment of the Apprenticeship Council in 2014. The continued use of the term Apprenticeships in the 2013 Review, as presented in the 1967 Act, appears to be driven by the pragmatic use of the existing 1967 legislation as a necessary protection, based on insights from some of the national policy stakeholders. However, there were quite different views expressed from the various participants as to how useful retaining the term "Apprenticeship" has been, with views expressed from the consortium members that the term was too closely associated with craft apprenticeships. This is partly due to history, as a glossary of terms has built up over the years in relation to apprenticeship that are associated with the craft apprenticeships and that now were being applied to the new apprenticeships. These were not understood by all of the consortia. This led to disagreements over the value of the term, and the employer body representatives in particular found it difficult to commit to the term. This in turn led to ambiguity about the use and understanding of the term.

Newly acquired terms around the new apprenticeships compound these issues. For example, even the researcher was not aware of the term 'Authorised Officers' until relatively late in the process of establishment of the IFS apprenticeships. Other terms include; 'Occupational Profile', 'Work-based Mentors', 'e-Portfolio', 'Work-based Assessments'. While understood by the national policy stakeholders and the HEIs, the Employer Body and Industry participants were unaware of, or unsure of, what these terms meant. This is a serious issue as these terms are fundamental to the design and operation of the apprenticeship education model, and need to be understood by all parties.

While finalising this thesis in July 2020, a new Government was formed in Ireland, and a new Department of Further and Higher Education, Research, Innovation, Science was established. This Department manifesto includes a renewed focus on apprenticeships, therefore it appears the term is here to stay. Thus, future consortia with aspirations of setting up new apprenticeships are advised to seek clarity about the term based on the

current study findings, including what it means in terms of statutory obligations and its operational deployment.

Use and understanding of term work based learning (WBL) and Link between Apprenticeship and WBL

The HEI participants and the national policy stakeholders had a very clear understanding of what WBL as 'work in the curriculum' (Boud & Solomon, 2000: 13) required and concurred that there were many challenges in planning the WBL curriculum straddling both the work place and the academic environment. This in particular brought challenges to the HE sector as the further education sector traditionally provided apprenticeship education (Anderson, Bravenboer and Hemsworth, 2012). One such challenge is that of WBL co-design, and meeting the needs of all stakeholders (cf. Bravenboer, 2016; Carter, 2010). Evidence suggests that WBL schemes designed with strong industry involvement are more sustainable Apprenticeship learning mechanisms.

Theme 2: Differing Stakeholder Motivations for Involvement

The researcher found that there were very mixed reasons for involvement in the apprenticeships with and between the policy and consortia participants, which was to be expected based on the variety of participants interviewed (Ankrah & Al-Tabaa, 2015).

Fulfil Statutory Obligation

In countries where apprenticeship make the strongest contribution to the economy and to society, the apprenticeship model has the support of employers, unions and government (G20, 2012; International Labour Organization (ILO), 2012; L20, 2012) and has strong statutory basis. In this study, all policy participants are members of the Apprenticeship Council and a number have been involved from the Review of Apprenticeships in 2013 through to present day (2020). Every policy stakeholder was clear that their organisation's reason for involvement included statutory obligation. However, they expressed views that went beyond statutory responsibility, as articulated by the Chair of the Apprenticeship Council, 'we are all motivated by the same desire, by maintaining a system that works for all'. Participants demonstrated a strong motivation to 'crack the code and make this work' (P6) and a very strong sense of 'doing the right thing for the Country' (P6) with an

undertone of 'even if the country doesn't realise it yet' (P4). The Department of Education was the parent department at the time, with the overriding accountability for apprenticeships with each of the relevant statutory bodies playing key roles. While Ankrah &Al-Tabaa (2015) refer to obligation as a motivation in Apprenticeships, there is nothing in the literature as reviewed for this study in the area of statutory obligation yet it a strong theme from the policy participants.

Desire to Influence Public Policy

There was a strong motivation and desire on behalf of a number of the participants to influence public policy through the expansion of the apprenticeships into higher education and into new sectors. The Chair of the Apprenticeship Council and the Ibec Director of Education Policy were part of the original Apprenticeships Review (2013) and they provided valuable insights into the policy landscape at that time of the review. Ireland was still emerging from the 2008-2011 recession and across Europe, there was in effect a European apprenticeship renaissance. There was a sense that countries with high performing apprenticeships were countries that had low levels of youth unemployment (OECD, 2017), reinforcing the value of the apprenticeship model at the time. The Department of Education and Skills saw apprenticeships as one way to realise its policy intention 'to make Ireland the best education and training system in Europe within a decade' (Action Plan for Education, 2018). In complement to this desire, the employer body (Ibec) and the specific sectoral representative body (FSI) wished to influence public policy in relation to skills development for their members.

In order to achieve this goal, the HE system need to produce graduates and life-long learners that will fulfil the skills and knowledge needs of a rapidly changing labour market (OECD 2017; World Bank 2017). Current tools of learner engagement include; the National Skills Strategy (2015) promoting flexible access to HE, Springboard access and apprenticeships models of education. However, as with many EU and national policies, these are primarily top-down government led (Trowler, 2002) with subsequent research focused on the response of policy recipients and its implementation (Bourke, Mentis & O'Neill, 2013; Ensor, 2015). As highlighted in Paper 1, it is the enactment of education policy that will garner anticipated results. In the context of this study, it is the group of

participants interviewed and their organisations that are the enactors of such policy relating to new apprenticeships.

Belief in Apprenticeship as a Mode of Work Based Learning

All participants articulated their own and their organisation's belief in apprenticeships as a valuable mode of WBL, reinforcing Raelin's (2008) view that the apprenticeship education mode of learning is one of the oldest forms of WBL. All saw it very clearly as 'win-win' for all parties in theory, yet all acknowledged a number of challenges in the operationalisation of the concept. This is consistent with the extant literature and those who have contributed to the debate (cf. Eraut et al., 1998; Eraut, 2004; Grangeat & Gray, 2007; Hughes, 2004; Kyndt et al., 2009). The views of the participants heighten the importance of the suggestion that this mode of learning needs to be 'reinterpreted for the 21st century' (Raelin, 2008), reinforcing the value of this study. The cautionary advice of Raelin (2008) and others (cf. Billett, 1996, 1999; Ellström, 2001; Ashton, 2004) of the need to build more potential into the apprenticeship education model through effort recognition and reward for cognitive and implicit knowledge is also aligned with the views of the participants. This is consistent with the documentary review of Ireland's approach to prior Higher Education policy, which had a strong emphasis on the vocational nature of higher education (cf. Industrial Training Act of 1967; Apprenticeships Review, 2013), with outcomes linked to the labour market.

There is an anomaly between the literature (Raelin, 2008) and the findings in this study. Raelin calls for the 'meta-competence' of learning to learn in apprenticeships and advises that the weighting of apprenticeship WBL programmes should be towards the principles of 'learning to learn' as opposed to role specific skills and knowledge. In this study, employers want the learning content of the apprenticeship education model to be customised to the needs of their industries. They also want apprentices who have learned how to learn and can pivot towards forthcoming opportunities, although practice suggests the former objective (skills and knowledge) are weighted more heavily in the current practice environment.

Raelin (2008) also advocates that for WBL to be successful the workplace needs to be recognised as the primary place of learning and that the role of the teacher and student are 'reimagined' to take consideration of this reality. This in many ways is reflective of

the success of apprenticeships in sectors with a long history of apprenticeships and of the views presented by the Chair of the Apprenticeship Council. In some of the new apprenticeships such an approach has been taken in the design of the curriculum and in the supports provided, but it takes time for the workplace to be seen as a locus of 'learning to learn' and for that to be valued. Participants acknowledge that in WBL and specifically in apprenticeship education, many people fulfil elements of the teacher's role – for example; line managers, peers, HEIs and/or industry subject matter experts, heads of functions, HEI/industry mentors, industry trainers. These roles need to be clearly understood to successful embed the ethos of WBL in the new apprenticeships so that these multiple roles can act as scaffolding for such learning in the workplace.

Competitiveness of IFS Sector

As previously noted, a key motivation for FSI involvement was to increase the competitiveness of the sector through the development of skills to enhance Ireland's destination of choice for Foreign Direct Investment IFS companies to locate here. The IFS apprenticeships create a pathway for a diversity of talent that may otherwise be attracted to the sector. The literature supports the recognition of an educated and diverse workforce as a key Irish national asset and a source of competitive advantage (Porter, 1990; Polyakova et al., 2019; Slowey & Zubrzycki, 2020). WBL can also help alleviate the current global skills shortage (Ireland's National Skills Strategy, 2025; OECD Assessing and Anticipating Changing Skills Needs, 2017; Action Plan to Expand Apprenticeship and Apprenticeship 2016-2020).

As highlighted in Paper 1 the government of Ireland and its policy makers have put HE at the heart of its economic development plans (Loxley and Seery, 2012; Walsh 2014a, 2014b; HEA, 2017; DES, 2018) in consideration of the emerging performance economy underpinned by current and future skill requirements. However, many have suggested that HEIs are producing graduates that are detached from the needs of the workplace (Eraut 2004a; Stenstrom 2006; Tynjala, 2006; Walsh, 2009), a view reinforced by the OECD Review of Higher Education in Ireland (2014) and the National Strategy for Higher Education to 2030. WBL, and more particularly apprenticeship education models, can help to bridge this skills need gap (Raelin, 2008).

It is against this landscape that the IFS2020 Plan and its successor the 'Strategy for the Development of Ireland's International Financial Services sector to 2025' has specific action points on the IFS apprenticeships that link directly to points made by the participants about apprenticeship aiding the competitiveness of the sector. Yet this insight is inconsistent with FSI's ability, or lack thereof, to attract significant numbers of participating employers. The message that this is a 'national talent play' as stated by one of the main supporting IFS employers is not being understood by the majority of IFS employers, despite the best efforts and intentions of the employer body and sectoral representatives. This points to a disconnect between the ambitions of the sectoral representative body and HEIs and the engagement levels of the IFS companies, a reality that will need to be overcome to facilitate operationalisation of the new apprenticeships on a large scale.

Culture of Apprenticeship

As highlighted in table 1 above, the IFS sector has a culture of graduate recruitment and not apprenticeship as observed by a number of participants. Only small pockets of IFS employers are engaging with apprenticeship and the majority of those are engaging in a relatively small way. The 'Strategy for the Development of Ireland's International Financial Services sector to 2025' sets out a vision for talent in the sector that has apprenticeship at its core. Both Ibec and FSI believe in the apprenticeship concept and have worked tirelessly to promote the IFS apprenticeships to the sector, but this has not resulted in sustainable numbers becoming involved in the new apprenticeships.

The Chair of the Apprenticeship Council is also CEO of the Irish Electricity Supply Board (ESB), a company with a long and proud history of apprenticeship. His personal interest in apprenticeship and his organisational experience made him an optimum choice for inclusion in the original review group (2013) and for Chair of the Apprenticeship Council. While providing valuable insights in to how and why apprenticeship works in his sector for both large and small employers, he acknowledges and observes that in organisations that were not historically involved in apprenticeships, it is much harder to inculcate the apprenticeship culture and the desire to build the necessary support structure.

While, this theme is growing in importance in the traditional apprenticeship literature through an education lens (cf. Fuller & Unwin, 2003; Billet et al., 2005;), the researcher could not identify studies relating to new apprenticeships or the services sector, suggesting this.

HEI and Employer Engagement

The socio-economic benefits of HE-IC engagement has been well researched (Ankrah et al, 2012; Bruneel et al, 2017; Guerrero et al, 2015; Gustavsson et al, 2016) and are echoed in national policy documents in the current study's context (Department of Business Enterprise and Innovation, 2016). Furthermore, the high level strategy documents published by the Department of Education & Skills and the Department of Enterprise Business & Innovation promote engagement between HEIs and industry (D2, D6, D8, D10, D12, D16 – D22), with a number of streams of funding promoting such collaboration (for example, Springboard+ and Skillnet Ireland). Specific published strategies for the IFS sector also support such engagement (D8, D22). This study aims to build on engagement in pursuit of HE-IC, utilising the apprenticeship education model as the collaboration tool.

Theme 3: Importance of the Apprenticeship Stakeholder Relationships

Based on the study findings, the Irish apprenticeship landscape is an eco-system involving many stakeholders. Stakeholder relationships are an important aspect of this eco-system, as evidenced in the literature (Ankrah and Al-Tabaa, 2015; Lehmann & Menter, 2015; Liew et al, 2013; Siegel et al, 2003) and reinforced in the current study. Relationship building in this case is partially fulfilled by the consortium.

Leadership and Formation of the Consortium

Consortia are a relatively recent addition to apprenticeships (Bravenboer, 2016; Mulkeen et al, 2019), 'heralding a new approach to collaborative working between universities, employers, students, professional bodies and independent training providers' (Mulkeen et al, 2019: 334). In this study, the consortium approach was a disruptor in a number of ways as it was a requirement of funding that it had to be industry led. This was a significant move away from the structures supporting the 'traditional' apprenticeships,

for whom Solas is the co-ordinating body. This transition presented a number of challenges, including organisational motivation to engage with new apprenticeships, a difference in the time taken to progress change in each stakeholder organisation, and agreement on the formation and leadership of the consortium. These findings are consistent with the perspective that a strong advocate and working group are necessary for a successful HE-IC outcome, suggesting that ideally, leader selection should be agreed among all stakeholders when forming a consortium.

Role of the HEI in the Consortium

The literature is consistent in the view that HEIs have a pivotal role to play in the co-design of apprenticeship programmes (Anderson et al, 2012; Bravenboer, 2016; Mulkeen et al, 2017). Historically, HEIs were the primary masters of the programme design (Bravenboer, 2016; Carter, 2010; King et al, 2016; Rowe et al, 2016), yet a new approach is required to produce apprenticeship education models that fulfil multi-stakeholder needs (Chankseliani & Relly 2015; Lambert 2016; Saraswat 2016; Mulkeen et al, 2019). Under the consortia model, the study HEI grappled with how the HE-IC apprenticeship model could be developed, implemented and enacted in practice and how best to manage the WBL curriculum design process while balancing the relationship with their industry partners. Consistent with prior studies (cf. Bravenboer, 2016; Mulkeen et al, 2017, 2019), relevant findings include: a consistent lack of clarity in relation to ownership of all aspects of apprenticeship programme including - programme quality; the need for higher levels of employer engagement; the requirement for HEIs to improve processes and levels of support when engaging with industry; the level and depth of rethinking of traditional boundaries required; and a focus on workplace mentorship. This is a very different role for HEIs and it requires significant consideration in terms of alignment with individual HEIs strategies and their ability to resource adequately.

Relationship between HEI and Employer Body

When the Consortium members were asked to identify the defining qualities of the relationship, they used the words 'trust', 'transparency' and 'mutually agreed goals' as a basis for a strong and robust relationship between the HEI and the Employer Bodies (FSI, Ibec). Findings in this study are consistent with the wider HE-IC literature, which focuses

on the importance of trust in HE-ICs (Schilke & Cook, 2013; Vanneste, Puranam and Kretschmer, 2014). In the current study, trust was built based on repeated patterns of reciprocal behaviours and interactions over time (Ring, 1996; Levin et al; 2006; Poppo, 2013) leading to an enhanced mutual understanding by all partners (Plewa et al., 2015). When collaborative relationships positively impact management and organisation of both parties (Barnes et al., 2002; Siegel Waldman and Link, 2003) and contribute mutual economic (Lehmann & Menter, 2015), institutional (Liew et al, 2013) and social (Ankrah & Al-Tabaa, 2015) gains, this strengthens the relationship. However, these benefits can only be gleaned when both parties negotiate a balanced socio-economic approach to collaboration, where the learner remains at the heart of the collaborative activity. Policy stakeholders noted that, in their experience, not all HEI- industry partnerships in the apprenticeship context are viewed as positively as in this case, nor are they as equally weighted.

Powers of the Consortium

The consortium has decision making powers in relation to many aspects of the IFS Apprenticeship: setting salary and benefits; designing recruitment and selection processes; designing and delivering programme content; recruiting employers; and monitoring performance of apprentices and mentors (D9). As indicated earlier, prior research does not specifically address the powers of the consortium beyond the HEI's right to bestow an academic award (Mulkeen et al, 2019). The consortium, when viewed through the lens of the chosen underpinning theory, is a boundary organisation and Apprenticeship Education Model is its output. In addition, the employer representative body has identified powers that currently rest with Solas, which they believe should rest with the consortium. In particular, some of the duties assigned to Authorised Officers, such as approval of employers, do appear to be ones that could be carried out by the consortium, under the guidance of Solas. The need for clarity around individual stakeholder roles and responsibilities arose as an important aspect of consortium activities, as discussed below.

Theme 4: Confusion around Roles and Responsibilities

Policy Context

The importance of understanding underpinning policy has emerged as being an important factor. The policy context as explored in Paper 1 describes how the government of Ireland and its policy makers have put HE at the heart of its economic development plans in consideration of the emerging 'performance economy' underpinned by the aforementioned current and future skill requirements. The recent introduction of new higher education apprenticeship education models in Ireland has created an opportunity for a new form of collaboration between HEIs and industry (Apprenticeship Action Plan, 2016). The Action Plan to expand Apprenticeship and Traineeship in Ireland (2016-2020) has addressed some of the gaps in HE apprenticeship offerings, propelling the need for, and value of the current study.

In recent years, a gradual shift from the knowledge economy to a performance economy (Sutin, 2018) has 'seismic and potentially tectonic' (Staley and Trinkle, 2011) implications for HE globally. Factors suggesting such a change include; increased global labour mobility; changing needs and profiles of students; a refocus on middle skill jobs; the need for abstract reasoning and specialised skills among graduates; a re-emphasis on lifelong learning and a shift in the perceived value of HEIs in apprenticeships (Staley and Trinkle, 2011; Immerwahr et al, 2008; Mulkeen et al, 2019). The new Department of Further and Higher Education, Research, Innovation & Science (2020) places a strong emphasis on the value of apprenticeship education as an element of the recovery in a post pandemic era. This brings apprenticeships policy full circle, as the new apprenticeships were conceived as a post- 2008-11 recession mechanism in the first instance.

Statutory Basis for Processes

There are a number of processes that were established as a result of the 1967 legislation, which applied to existing apprenticeships prior to the introduction of the new apprenticeships (see paper 1 for further details). As highlighted in table 1 above, the Apprenticeship Review (2013) decided to establish the new apprenticeships under the 1967 legislation and 'to live with some of its limitations', rather than wait for a considerable period of time for new legislation to be drafted, passed and enacted. The

policy stakeholder participants support the statutory basis, although ideally, the underpinning legislation could be more reflective of contemporary WBL environments. Other participants have a collective view that the overall process could be more responsive and dynamic.

From Relational Barriers to Streamlined Processes

There was an overwhelming response from the consortium participants that some of the processes were initially barriers rather than enablers to HE-IC, as anticipated by Ryan et al. (2008). These amounted to financial, cultural and structural differences between the collaborators. A number of participants expressed the view that the availability of financial support, or lack thereof, resulted in an under- commitment of resources required by both the HEI and the employer to achieve success at the beginning of the process. HE governance and process was at times at odds with those required by industry; initial negotiations were complex and time-consuming and HE bureaucracy was perceived to be slow and difficult to navigate. It is acknowledged that the processes have improved over the interim period. By placing the learners at the heart of the collaborative activity in this study (Billett, 2004; Boud and Solomon, 2000; Marsick and Watkins, 1992; Wielenga-Meijer, 2010) and adopting a co-creation ethos, the partners, through their behaviour and reciprocal action built trust in each other over time (Ring, 1996; Levin et al; 2006; Poppo, 2013), which allowed for decisions to be made more easily.

This new approach to multi-stakeholder collaboration produced an apprenticeship education model that fulfilled all stakeholder needs (Anderson, Bravenboer and Hemsworth, 2012; Bravenboer, 2016). While it took time for the HE-IC partners to find their roles in such a model, the streamlined benefitted all Consortium parties. Successful collaboration was dependent on a number of factors (Plewa et al., 2015): agreeing to work together (pre-linkage), a contract (establishment), delivery of the project (engagement), ongoing partnership (advancement) and potential future cooperation (latent phase). These phases have in the main been replicated in this study of the IFS Apprenticeships (see Appendix 1 for statistics on the IFS Apprenticeships).

Theme 5: Requirement for Robust Processes within the Co-Creation Education Model

Clarity and Understanding

A number of the consortium felt that lack of clarity and understanding challenged engagement in the early stages of the process, reinforcing extant literature (Ankrah and Al-Tabaa, 2015; Bravenboer, 2016; Mulkeen et al, 2017). This lack of understanding of each other's drivers, commitments, pressures and timelines acted as a barrier to creating the necessary levels of trust between the various parties (Schilke & Cook, 2013; Vanneste, Puranam and Kretschmer, 2014), including the policy stakeholders. Over time, repeated patterns of reciprocal behaviours and interactions (Ring, 1996; Levin et al, 2006; Poppo, 2013) lead to an enhanced communication, understanding, and trust in each other (Schilke & Cook, 2013; Vanneste et al, 2014). Thus, trust is a key variable in this study, reinforcing prior research (Ring, 1996; Levin et al; 2006; Poppo, 2013).

However, not all HE-ICs are a success and not all apprenticeships are or have been successful. As referenced in Paper 1 Liew et al. (2013) cited a number of studies that suggest only a fifth of HE-ICs have resulted in industry applicable outcomes and conclude that one of the key contributing factor is the 'Outcome-Impact Gap', where the collaborating HEI and industry partner(s) have different sets of expectations and requirements. On means through which to alleviate this gap is through the application of mutually agreed Key Performance Indicators (KPI). The inputs from the HEI and industry partners in this study have modelled how best to collaborate using this KPI system.

As was evident from the documentary review (Appendix 3, Paper 4), some of the early-stage gaps in the process were compounded by a lack of supports, which have since been partially fulfilled by documents published since 2017. This has increased the levels of clarity and understanding between consortium partners, especially for those being asked to operationalise new apprenticeships.

Navigation of Systems

A further challenge to HE-IC is the lack of a cohesive apprenticeship education system, which employers found hard to navigate. The criticisms were on two levels; that of the

apprenticeship system and the streamlining of processes that were needed within that system, and of the overall education system. Without exception, all participants were in favour of streamlining the overall apprenticeship process in order to remove barriers to HE-IC. Participants spoke about such streamlining with reference to the interface between the Consortium and the policy stakeholders. This extends the application of the conceptual framework and the activity systems (Engestrom, 1987) contained therein beyond the interacting systems of the HEI and Industry, to the interacting activity systems of the Consortium and the policy context.

Alignment of Expectations

While originally titled 'Difference of Pace', on reflection this sub-theme is more appropriately entitled 'Alignment of Expectations'. The participants all spoke of the need for expectations to be aligned. The expectations of FSI and NCI were clearly aligned, albeit with an understanding that each had varying motivations that still resulted in achieving the same outcome. The overarching goal was to build a groundbreaking apprenticeship education model for the International Financial Services sector. While the statistics (Appendix 1) show the success of these apprenticeships across a range of academic and employer KPIs (Retention, Promotion, Employment within the Sector, Recommendation, Academic Outcomes, Overall Satisfaction), both NCI and FSI acknowledge that a crucial element is missing - the number of employers offering apprenticeships.

This model alignment is in contrast to the challenges identified by the literature relating to a misalignment of partner expectations and requirements, aggravated by the absence of mutually agreed KPIs. The consortium as a boundary crossing entity (Rajala and Vadi, 2017; Santos and Eisenhardt, 2005; Mulkeen et al, 2017) provided a mechanism that facilitates fulfilment of multiple stakeholder expectations. In looking more specifically at HE-IC through an apprenticeship education lens, there is relevancy in Plewa et al.'s (2015) representation of HE-IC Phases (Paper 1) that adds value to the researcher's objective to propose a HE-IC apprenticeship education model.

REFINED CONCEPTUAL FRAMEWORK

At the outset of the study the researcher developed a literary-informed conceptual framework (figure 2 below), partly based on Engestrom's (1987) proposition that the activity taking place at the boundary between the two activity systems (in this instance HEI and industry) is the collaborative learning opportunity. In the upper half of the framework, the activity systems (represented as triangles and sub triangles formed from arrows at fig. 2) comprise the individual practitioner, colleagues, the workplace community, practical and conceptual tools in both the HEI (left) and Industry (right). The uppermost sub-triangles represent individual and group actions embedded in a collective activity system. It also reveals the decisive feature of multiple mediations in activity, as within each activity system there are contradictions and tensions both within and between the interacting systems. The subject and object – or actor and environment – are mediated by artefacts that function as instruments, including symbols and representations of various kinds.

In the context of this study, the shared object is a dynamic united whole, which intends to link individuals and the society in which they live and work. It is depicted by an oval and is a collectively constructed entity through which the meeting of a particular human need is pursued (Leontjev, 1978; Engestrom, 1990; Foot, 2002). Figure 2 also incorporates the conceptual framework designed by Sternlieb et al. (2013) to help analyse transboundary organisations (e.g. HEI and Industry). By combining the frameworks of Engestrom (1987) and Sternlieb et al. (2013), the concept of boundary crossing is elaborated on by activity theory in the lower part of the conceptual framework. New meaning is formed by the two activity systems negotiating beyond the boundaries of both to generate a shared object of activity, which in this study is the HE apprenticeship education model.
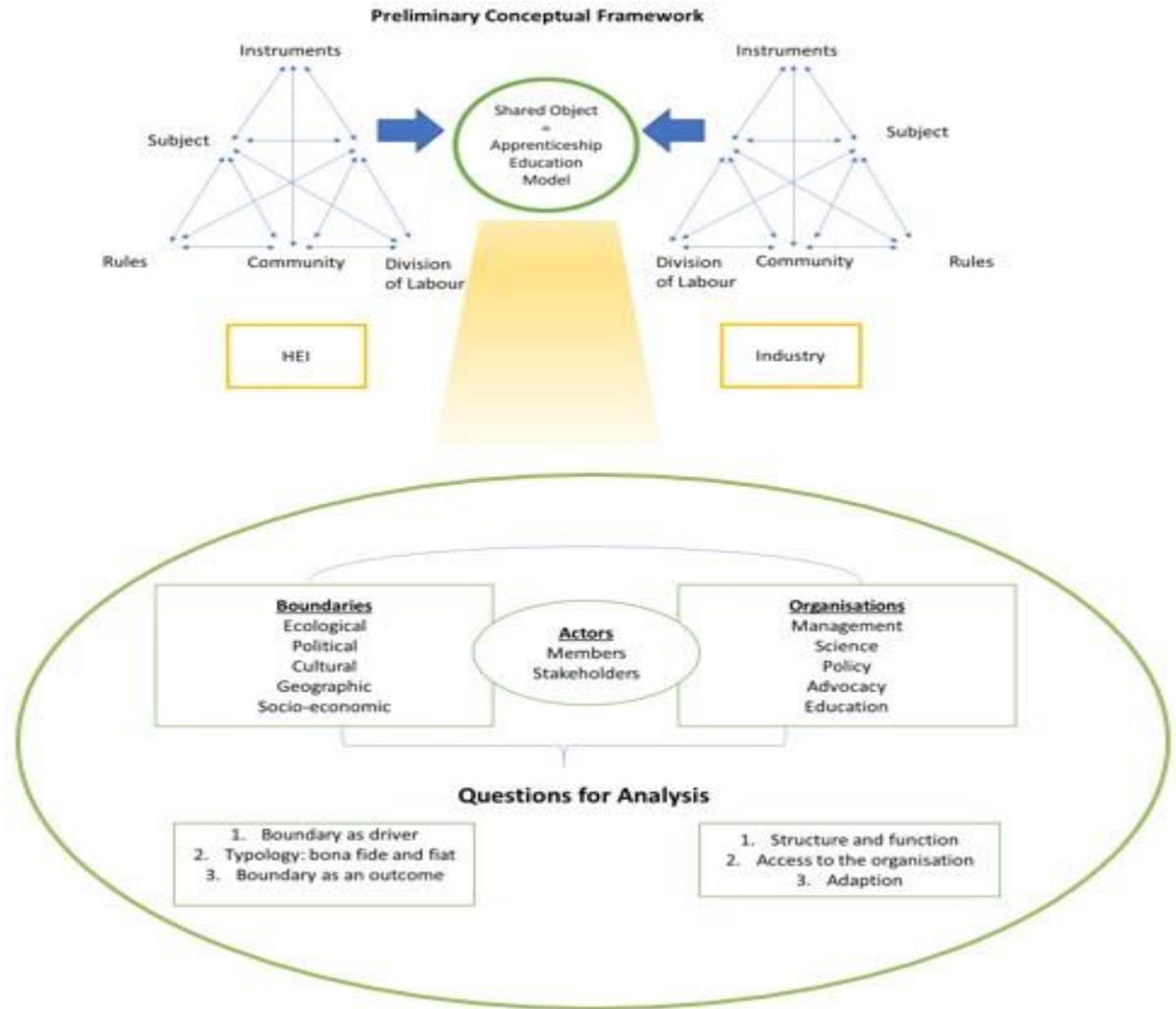
Figure 2 HE-IC Preliminary Conceptual Framework

When selecting theory to guide this study, activity theory, expansive learning theory and boundary theory were competing for attention. Boundary theory was selected as the main theory with elements of activity theory and expansive learning theory was discounted. Contemplating the research findings and in consideration of the thematic extraction and analysis, it is valuable at this stage to reconsider the preliminary conceptual framework. In doing so, the researcher contemplates 'the conceptual leap that generates abstract theoretical ideas from empirical data' (Klag and Langley 2013, p 149).

At the outset of the study the focus was on the activity taking place at the boundary between the HEI and industry but as the study progressed the importance of the policy stakeholders (DES, SOLAS, Apprenticeship Council, HEA, QQI) became more evident (see refined thematic map above, fig 1). The activity at the boundary between Consortium

(HEI + Industry = Consortium) and the policy stakeholders emerged as being significant. Contradictions and tensions both within and between the interacting consortium and policy stakeholder systems are explored in the findings. 'New meaning' has also been formed by how the HE and industry activity systems interact with the emergent significance of the policy stakeholders, findings that needed to be exhibited fully in the framework.

In pursuit of an empirically informed refined framework, the researcher considered the preliminary conceptual framework (figure 2), the thematic map (figure 1) and the differences between the two. In light of the findings, the researcher extended the oval in the lower half of the conceptual framework to surround the entire framework. While the 'questions for analysis' (fig 2) influenced the interview questions put to the participants, their value has now been gained and they have no place in the refined framework and were therefore removed.

The study is firmly rooted in boundary management theory with elements of activity theory and the 'Actors' described by Sternlieb et al. (2013) as 'Members' and 'Stakeholders' have come more to the fore throughout the course of this study. Therefore, research participants are clearly divided between Consortium Members ('Members') and Policy Stakeholders ('Stakeholders') in the refined framework, emulating Sternlieb et al.'s findings.

The refined framework retains the activity systems of the HEI and Industry, adding the consortium (HEI-IC) as a boundary organisation that: "performs tasks that are useful to both sides and involves people from both communities in their work but play a distinctive role that would be difficult or impossible for organisations in either community to play" (Guston 2001, p 403). As exhibited in the refined framework, the consortium fulfils the following three criteria for boundary organisations: 1) they mediate between a field of knowledge and policy, 2) they exist between two distinct social worlds with definite responsibility and accountability to both sides of the boundary, and 3) they use boundary objects. In summary, the HEI-IC consortium makes collaboration possible by engaging actors on the basis of their convergent interests.

Within the central column, the emergent themes (fig. 1) illuminate the 'Shared Object', which in this context is the Apprenticeship Education Model. This is exhibited as a

product of the Consortium and is set in the policy context. The refined framework recognises the importance of the policy environment and the emerging prominence of the policy stakeholders, who have the capacity to impact on the success of both the HEI-IC and the Apprenticeship Education Model. These influences emulate the original taxonomy drawn from the literature and set out in the cumulative paper series, and remain embedded in the refined framework (figure 3).
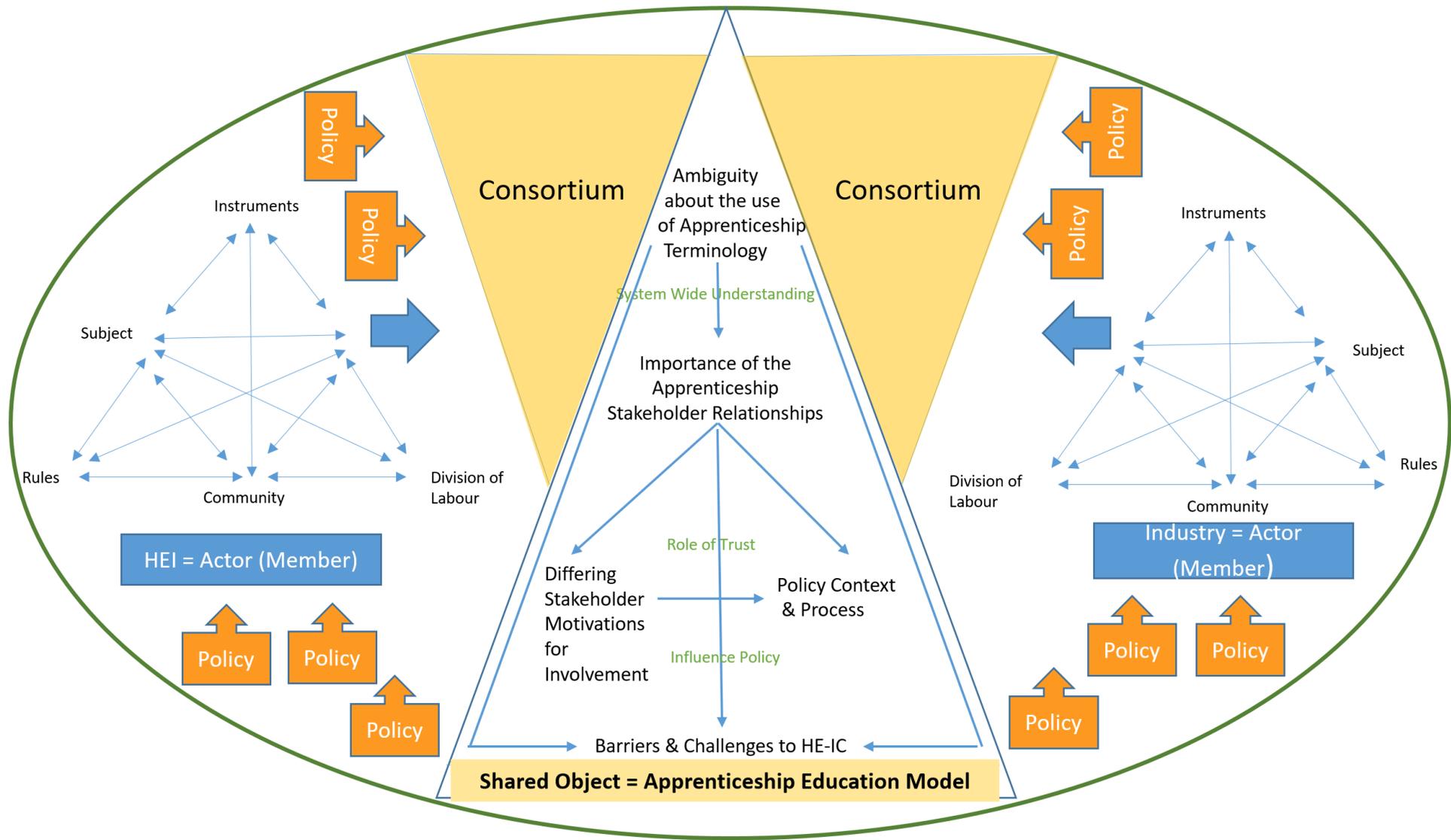
Figure 3 Refined Conceptual Frame

PURSUIT OF THE RESEARCH QUESTIONS AND RESEARCH OBJECTIVES

The aim of this research was to create a process for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration (HE-IC). The thematic analysis organised the findings in a manageable format and highlighted the findings to facilitate the researcher to answer the research questions, as discussed below.

Pursuit of Research Question 1

(a) What is the process for developing, implementing and enacting a HE apprenticeship education model?

The selection of boundary management theory provided the foundation for answering the first research question. It also provided a lens by which such a process could be explored and was evident in the preliminary conceptual framework, combined with the models of Engestrom (1987) and Sternlieb et al. (2013). The review of the literature confirmed that a gap existed in the literature relating to the process for developing, implementing and enacting a HE apprenticeship education models. Documentary evidence portrayed the evolution of elements of the apprenticeship education model, while the research participants providing insights, experience and knowledge to enable the researcher to attempt to fill this gap.

When the IFS Apprenticeships in this study were first developed in 2014 (with IFS Apprentices commencing in 2016), there was very little guidance about the HE-IC process. This improved significantly in 2017 with the production of a range of guides produced by the Apprenticeship Council, based on learning extracted from across the eco-system.

The revised conceptual framework at Fig. 3 provides a map for the process of developing, implementing and enacting a HE apprenticeship education model. A narrative of the process has been distilled from the revised conceptual framework. The findings and analysis under each of the five themes (Table 1 above) point towards the need for a step by step guide for consortia who are considering setting up a new apprenticeship. Solas and the Apprenticeship Council developed a 'Critical Path to Developing a National

Apprenticeship' in 2017 and this is very useful as a logistical and technical 'How to' document.

Pursuit of Research Question 2

    (b) How can this model serve as a mechanism for higher education institute (HEI) and industry collaboration?

At the outset of this study, the second research question was set in the context of HE-IC to help achieve mutually beneficial outcomes and, most importantly, benefits for the learners. In 2020, these learners are on a range of HE-IC programmes including; CAO programmes designed with Industry, Springboard+ programmes, Skillnet programmes, the Solas and ETB programmes in collaboration with Industry. As referenced in Paper 1, collaboration is a key future of the HEI funding landscape, reinforced by new funded initiatives such as the 'Human Capital Initiative'[i].

A key outcome of this research in relation to research question 2 is the guide developed by the researcher (Appendix 2). This guide offers insight into the apprenticeship education model (figure S3.4), which is directly relevant to any HEI and Industry collaboration and also extends to Further Education and Training (FET) collaborations with industry. As evidenced by the literature, apprenticeship is an excellent example of critical close collaboration between the two parties, education provider and industry, therefore what is applicable to establishing and maintaining such a collaborative relationship for apprenticeship is relevant to other scenarios where such a close collaboration is critical for successful WBL outcomes.

Pursuit of the Research Objectives

In supporting the research questions, there were three research objectives, which have also been fulfilled by this study:

  (1) Develop a HE apprenticeship education model incorporating roles, responsibilities and accountabilities

The revised conceptual framework brings to the fore the importance of the 'actors' in the apprenticeship eco-system and their roles, responsibilities and accountabilities within a consortium. The activity systems of the HEI and the Industry partner join to create the 'shared object', which in this instance is the Apprenticeship Education Model. The role of the Consortium gains prominence as without an effective consortium there is no Apprenticeship Education Model. A cohesive model is required to ensure all levels, from statutory recognition through to meeting funding criteria to the successful design, development and operation of the apprenticeship are addressed. The researcher has developed a document which outlines the roles, responsibilities and accountabilities which can be found at Appendix 3, which can be used in tandem with the 'Matters for Consideration' guide (Appendix 2).

(2) Identify the internal and external organisational supports required to implement the HE apprenticeship education model

The insights provided by the participants have informed prior research to identify the internal and external supports required to implement the HE apprenticeship model. Within their own organisations, both the HEI and the industry partner need strong support for apprenticeship and represented at top level management. This was provided by the Vice President of the HEI and the Executive Director of the employer body in the current study. Top level support allowed for the necessary allocation of internal resources to the consortium. Organisation wide support for the concept and support for the practicalities of apprenticeship operationalisation was required to embed the model in the stakeholder organisations. Apprenticeship needed to be a strategic imperative for both the HEI and industry partner, and this was an important factor when inevitable internal competition for resources arose. A vision of what apprenticeship success looked like for each of their organisation helped establish coherent KPIs in pursuit of success. Role clarity and project focus created the internal environment needed to achieve success in this study. External organisational supports provided by employers and policy stakeholders (Department of Further and Higher Education, Research, Innovation & Science, SOLAS, Apprenticeship Council, HEA, QQI) were vital components of the apprenticeship eco-system. So too were the external supports from policy stakeholders to ensure governance, statutory approval, guidance and funding complemented the education model.

(3) Explore the key drivers for the successful enactment of the HE apprenticeship education model.

The key drivers have been explored in the literature and combined with the insights from the participants. These drivers have been identified as: trust; transparency; mutual understanding; necessity; reciprocity; efficiency; stability; legitimacy and asymmetry (Schilke & Cook, 2013; Vanneste, Puranam and Kretschmer, 2014; Ankrah and Al-Tabaa, 2015) which can combine in different ways at different stages of the collaboration relationship (Plewa et al., 2015). Without a pledge for actual apprenticeship places, there is no apprenticeship, so the support of the employers is crucial.

CONTRIBUTION TO PRACTICE AND THEORY

The contributions of this research are of value from both a practical and theoretical perspective. One of the attractions for this researcher to the DBA mode of learning was the ability to create practical additions to the knowledge base, which is an expected outcome of the programme. Towards the end of the study it became apparent that the researcher had also made a contribution to theory.

Practical Contributions to Knowledge

This research has produced practical insight, which offers policy stakeholders, HEIs, Industry, consortia and those interested in the successful enactment of an apprenticeship education model a process by which to achieve successful higher education and industry collaboration. The process is exhibited in the Revised Conceptual Framework (Fig 3) and has been distilled into a 'Matters for Consideration Guide' for industry representatives considering developing a new apprenticeship (Appendix 2 and 3). Initially the researcher had assumed that the primary audience for such a guide would be the audience described above but as she further considered the possible extended use for such a guide, she realised that it would be useful for a broader audience and for different purposes, such as:

- HEIs (and FET providers) considering involvement in new apprenticeships;

- Industry representative bodies and employers considering involvement in new apprenticeships;

- Existing HEIs and industry partners evaluating whether to design, develop and deliver a new apprenticeship;

- The Apprenticeship Council and related bodies who will be evaluating the suitability of future apprenticeships submitted by consortia;

- Quality Qualifications Ireland (QQI), who will be accrediting new apprenticeship education models;

- Solas and the Higher Education Authority as they evaluate existing and future funding of existing and future apprenticeships;

- The Department of Further and Higher Education, Research, Innovation and Science as they consider, in consultation with all of the relevant stakeholders, the future of apprenticeships and the new Action Plan for Apprenticeships (2021-2025);

- Ibec, as the largest employer representative body in Ireland, as it considers and evaluates their position as the industry partners in a number of existing and future apprenticeships.

The conceptual framework presented at Fig. 3 is of itself, a contribution to theory, specifically extending our understanding of boundary theory. It is also a contribution to practice. It is a tool that can be used to conceptualize the HE-IC environment, and help position the guidelines within the HE-IC environment. In doing so, figure S3.4, in unison with the proposed guidelines, can be used to operationalise the apprenticeship education model. Collectively, these tools will facilitate both decision making at a strategic level and operational 'enactment' by those whose role it is to operationalise the plan. Holistically, the conceptual framework represents the vision of apprenticeship for the specific sector or organisation, while the guideline documents can help operationalise this vision. These are organic tools that will evolve as they are utilised. They can and will be adapted and customised to each sector, thus the 'Matters for Consideration' Guide has been designed as an organic document that can be adapted to each context. Thus, the Guide is a tool of engagement for those in operational roles, similar to a Standard Operating Procedure (SOP). As with any SOP, it will evolve through the contributions of those who use it.

Dissemination of Knowledge

The researcher has, while undertaking the Doctorate in Business Administration, contributed to the practical application of the new apprenticeships education model in a number of ways:

- Engaging with key national policy stakeholders on the apprenticeship landscape many of whom were interviews in this study;
- Inputting in to national policy on apprenticeships;
- Speaking at practice-based and academic conferences and events about the study at various stages of progression, and
- Applying learning from this study to the FSI/ NCI new apprenticeships.

Early on in this research process, an invitation was received from the Apprenticeship Council to present the initial findings from the literature and my plans for the study (December 2018). This was the start of a dialogue with the Apprenticeship Council about this study, which has continued throughout the study. The first presentation was followed by an invitation to present to the Dublin Regional Skills Forum (February 2019) of which the researcher is also a member, and this engagement resulted in ongoing dialogue and presentation of updates at regular Forum meetings. The researcher was also invited to speak at QQI's inaugural apprenticeship conference (April 2019). The keynote topic specifically addressed 'A look at research on the Irish model of apprenticeship - where quality assurance fits'.

Solas, as the main body accountable for apprenticeships, established a relationship with the researcher whereby the content of each of the papers in the cumulative paper series was presented to Solas. Elements of these papers were used to inform actions of Solas and the Apprenticeship Council. The researcher was invited in June 2020 to input in to the COVID-19 pandemic stimulus package known as the 'July Stimulus Package' for the apprenticeship measures, which resulted in a range of practical and financial supports and incentives being provided to employers of apprentices. A specific range of accelerated indirect supports has also been budgeted for by Solas based on this advice including; supports for screening and recruitment of apprentices and further support for on-the-job

education. More time has been allocated for working more closely with the consortia as part of this package. This package was announced by the Department of Further and Higher Education, Research, Innovation and Science in July 2020. In light of this thesis, the researcher has also been invited to input in to the forthcoming 'Action Plan for Apprenticeship 2021 -2025'.

Application to new apprenticeships

As this study progressed, the findings were shared with the researcher's organisation (National College of Ireland, NCI). Levering this knowledge, NCI in collaboration with the National Recruitment Federation have developed Recruitment Apprenticeship degree, a global first. The findings are also being channelled in to a team, which the researcher is a member of, which is considering the development of an ICT apprenticeship straddling the further and higher education worlds at the request of the Office of Government's Chief Information Officer (OGCIO).

The Apprenticeship Council has recently decided to use the term 'Consortia-Led Apprenticeships' to describe all of the 'new' apprenticeships, both further and higher education, developed and approved using the consortium model. The newly established Department of Further and Higher Education, Research, Innovation and Science has recommitted to the expansion of apprenticeships in to new sectors and to attracting new employers and apprentices to existing apprenticeships.

Theoretical Contribution to Knowledge

From a theoretical perspective, while Boundary Organisation Theory had been applied to higher education this study is the first time that that it has been applied to Higher Education Apprenticeships. In doing so, this study reconceptualises the co-design of HE apprenticeship education in an Irish context. It identified factors that can enhance HEI-industry collaboration to the benefit of national and regional socio-economics. Previous research has explored many of the elements explored in this study: higher education landscape, work based learning and apprenticeship but what this study does is it brings together the previous learning in these areas in the context of HE-IC, combines them with

the primary research as outlined in the study which created the refined conceptual framework.

The refined conceptual framework is a key theoretical contribution resulting from this study. The framework extends the conceptual framework designed by Sternlieb et al (2013) to help analyse transboundary organisations (e.g. HEI and Industry). By combining the frameworks of Engestrom (1987) and Sternlieb et al (2013), the concept of boundary crossing is elaborated on, as informed by activity theory in the lower part of the conceptual framework. New meaning is formed by the two activity systems by negotiating beyond the boundaries of both to generate a shared object of activity, which in this study is the HE apprenticeship education model.

The researcher has already made a contribution to theory while undertaking the Doctorate in Business Administration (DBA) by presenting her conceptual paper at the Irish Academy of Management Annual Conference in 2019.

RECOMMENDATIONS

Holistic use of the exhibited framework (fig. 3) and the 'Matters for Consideration Guide' (Appendix 2 and 3) is recommended as when used in unison, these can be used to operationalise the apprenticeship education model. They also offer policy stakeholders, HEIs, Industry, consortia and those interested in the successful enactment of an apprenticeship education model a process by which to achieve successful higher education and industry collaboration and are available as a key resource for industry representatives considering developing a new apprenticeship.

Considering the Apprenticeship Council has recently decided to use the term 'Consortia-Led Apprenticeships' to describe all of the 'new' apprenticeships, both further and higher education, developed and approved using the consortium model, this is the opportune time for the new Department of Further and Higher Education, Research, Innovation and Science (DFHRIS) through its Apprenticeship Consultation Process 2021-2025 to deliver on its ambition for apprenticeships to be a valid alternative route to a higher education qualification combined with an occupation. To achieve this ambition there will hopefully

be a number of outcomes from the consultation process. The researcher, if she may be so bold, hopes that some of the findings from this study will form part of a reinvigorated apprenticeship education model.

AVENUES TO FUTURE RESEARCH

The topic of higher education apprenticeships in Ireland presents an intriguing avenue for future research.

Researchers could consider studying apprenticeships in other sectors, and/ or other countries as there are potentially sectoral and country- specific nuances that may apply. Such research need not be confined to higher education apprenticeships.

Creating a culture of apprenticeship is a sub theme that emerged in this study that warrants further consideration and research. As the new Department is about to issue a consultation on the Action Plan for Apprenticeships 2021-2025, a study focused on the potential to develop a national culture of apprenticeship emanating from this study could be fruitful.

The Guide presented in Appendix 3 is the beginning of an SOP. The evolution and development of a full SOP could be pursued in a future study.

The consortia configuration of an apprenticeship education model is worthy of consideration for future research. For example, a study underpinned by team configuration and the principles of team role (Belbin, 2004) may help guide consortia configuration in light of the activities exhibited in the proposed model.

RESEARCH LIMITATIONS

The very nature of doctoral research, and in this case its professional basis as a Doctorate in Business Administration, is that there will be limitations associated with it as a research approach. The researcher was studying part time while working full time and was operating as a sole researcher, albeit with the support of supervisors. The findings, while significant, are focused on the study of a single apprenticeship programme in one sector. The researcher and the participants would concur that there are nuances in the International Financial Services sector, and in Ireland that may not be replicated in other sectors or countries. Finally, the researcher-as-insider (Kock, 1994; Carcary, 2009) acknowledges the potential for both conscious and unconscious bias in the pursuit of this study and the underlying research questions. Mitigation against these challenges included the maintenance of a reflective log, referral to academic literature relating to dual role challenges, and full engagement with the researcher's academic supervisors and practice and academic peers.

REFLECTIVE INSIGHTS

As a personal insight, this section is written in the first person.

A requirement of the doctoral programme was the maintenance on an on-going reflective log for me to reflect on my progress, emergent insights and various challenges and opportunities faced through the research study. As this proved very beneficial, particularly in the earlier stages of the programme, I decided to use a reflective log as an additional data collection technique for this study.

The log facilitated working through challenges experienced by me as in insider researcher when designing the research process (explored in Paper 2). I also recorded my experiences and thoughts of conducting the research, with the objective of increasing my self-awareness of the research process (Kock, 1994; Carcary, 2009). In doing so, I recorded my observations and thoughts of the interview process and its inherent challenges and possible improvements (Walsham, 1995; Holstein and Gubrium, 1997; Brinkmann and Kvale, 2015). Practical guidance was taken from Kelliher and McAdam

(2018) in relation to the maintenance of a reflective log, motivating me to record my reflections within a 72- hour period of each interaction.

An area of specific concern my dual role as insider researcher-practitioner (Brannick and Coughlan, 2007). Paper 2 focused my mind on issues for consideration as an insider such as; confidentiality, intimate knowledge and the filtering process (Brannick and Coughlan, 2007). I reflected to an appreciable amount on trying to ensure that my practical experience and prior knowledge of both the topic and of many of the participants did not negatively impact the study. I was also anxious that such knowledge and experience be utilised as a positive tool of engagement where relevant and appropriate. This balance was further tempered by my cognisance that familiarity and collegiality with the participants, many of whom I had known prior to this study, may lead to the assumption of a shared knowledge (Mercer, 2007). Unchecked, this could create a situation where participants may assume I knew more than I do to the detriment of full data collection. I reflected on this in my log along with associated ethical considerations.

On a broader level, the research reflections allowed me to observe the phenomenon of the study outside of my own practical experiences and to see it through the lens of the literature, combined with the insights of the participants and underpinned by the documentary evidence. In doing so, the reflective log played an active role in my ability to answer the research questions and achieve the research objectives.

On a personal level, the dual research and reflection process has enhanced and developed my critical thinking and writing skills. Allowing myself time for ideas and concepts to evolve and develop has also been a key skill acquired through this process. As my professional work context has changed over the course of this programme, these new skills have become essential to my current role, of which a large part of, is aligned with impacting, influencing and implementing higher education policy.

While I believed I already had a strong competence in the area of dealing with ambiguity, the doctoral process has strengthened that. Throughout the ups and downs of the process I believed that when there was lack of clarity, and at times some uncertainty, that the scaffolding provided by the DBA programme team (especially by my supervisors) and classmates combined with my own personal resilience would carry me through and it did.

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Appendix 1: IFS Apprentices Outcomes
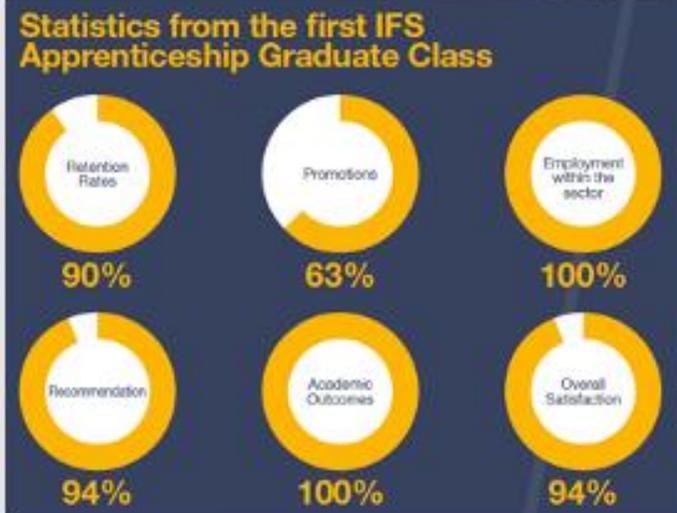
Appendix 2: Matters For Consideration Guide

The objective of this Guide is to facilitate and enhance the collaborative relationship of the HEI and Industry partners. As apprenticeships are industry led this guide is written from the perspective of industry considering developing an apprenticeship.

Policy

- Be aware of the policy environment in relation to:
  - Apprenticeships
  - Further and Higher Education (depending on whether the apprenticeship under consideration will be a further or higher education one)
  - The specific sector and occupation the apprenticeship under consideration will be operating in
- Are you aware of the legal standing of apprenticeships and what your obligations would be under the governing legislation?

Understanding of Key Terms

- Do you understand what the definition of 'Apprenticeship' currently being used by the Apprenticeship Council is?
- Do you understand what 'Work-Based Learning' means and what resources it requires?
- Do you understand what the term 'Consortium' means in the apprenticeship context?
- Do you understand what an 'Occupational Profile' is?

Selecting an education partner with which to build an apprenticeship education model

- In consultation with Solas and the Regional Skills Manager consider whether the proposed apprenticeship should be a further education or higher education one
- If a further education apprenticeship is considered the best solution Solas will provide guidance as to how the further education apprenticeship provision works
- If a higher education apprenticeship is considered the best solution then Solas, the HEA and the relevant Regional Skills Forum Manager will provide guidance
- Are they accredited by Quality Qualifications Ireland?
- Do they have expertise in the occupational area you are considering?
- Do they have geographic reach into the regions you want? If not are they willing to work in collaboration with other education providers?
- Do they have a strong online or blended delivery track record?
- Have they ever delivered apprenticeships before?
- Have they worked closely with industry before and if so in what capacity?
- Are they resourced adequately to commit to developing an apprenticeship?
- What is their motivation for getting involved?
- Do they and you understand what level of commitment and resources an apprenticeship entails?

- Do you have a shared understanding of the apprenticeship eco-system you will be entering and the roles of Department of Further and Higher Education, Research, Innovation & Science, SOLAS, Apprenticeship Council, HEA, QQI in the system? (See Roles, Responsibilities, Accountabilities document)

Appendix 3: Policy Stakeholder Roles, Responsibilities and Accountabilities

Solas

1. Governance, funding and promotion of the further education and training system

2. Overall governance of the apprenticeship system

3. Provider of Craft Apprenticeships

Apprenticeship Council

1. The Apprenticeship Council has a specific remit to expand apprenticeship into new sectors of the economy

2. Membership of the Council includes representatives of all stakeholders, and statutory bodies and institutions, from the education and training sector

3. The Council is responsible for developing calls for proposals for new apprenticeships, monitoring the development of proposals by industry led consortia, and advising the Minister on issues relating to the development and expansion of new apprenticeships.

Higher Education Authority

1. The HEA is the statutory body responsible for the governance and funding of the higher education system

2. It plays a significant role in the development and approval of the consortia led apprenticeships as well as the funding, operation and monitoring of both craft and consortia led apprenticeships

3. It also oversees all capital and development funding for higher education providers in support of their apprenticeship provision

Quality Qualifications Ireland

1. QQI is the statutory body responsible for overall arrangements for quality assurance for further and higher education and training in Ireland, including apprenticeship

2. It is also an awarding body for some programmes, including some apprenticeships, and is responsible for the National Framework of Qualifications and for developing and monitoring access, transfer and progression policies for learners within the system.

Department of Further & Higher Education, Research, Innovation & Science

1. The Dept is ultimately responsible and accountable for apprenticeships with all of the above bodies reporting in to it

2. The Dept is the guardian of the National Training Fund and is ultimately accountable financially to Depart of Public Expenditure for the costs and the outcomes of the apprenticeship education model

Regional Skills Fora

1. Regional Skills Fora provide an opportunity for employers and the education and training system to work together to meet the emerging skills needs of their regions

2. The nine Regional Skills Fora will have an important role in assessing and identifying regional skills needs and in promoting apprenticeship and traineeship, particularly in the context of the new call for proposals

Consortia-led Apprenticeships

These apprenticeships are developed by industry led consortia that include representatives of employers, employees, education and training institutions and public bodies. Regulatory and sectoral bodies have also participated in individual consortia.

Programmes are currently offered at levels 5 to level 9 on the National Framework of Qualifications and vary in duration from 2 to 4 years. Different methods of 'off-the job' training apply to programmes which can include 1-2 days per week, or a 'block release' for up to 11 weeks at a time, as well as a combination of online and blended learning. The employer continues to pay the apprentice a wage for the duration of the 'off-the job' phases.

The consortia are responsible for completing the detailed design and content of the apprenticeship programme, for securing approval and certification from the relevant awarding and quality assurance body, and for delivery of the apprenticeship on an ongoing basis.

	Craft apprenticeship	Consortia led apprenticeship
Apprentice Wages/PRSI while on-the job	Employer : wage rates are set centrally, often by reference to registered agreements for sector	Employer: determines the wage rate in line with the pay setting arrangements in the sector in question
Apprentice payment during off-the -job training	Government NTF funded (allowance is paid by ETB)	Employer continues to pay wage
In company staff time on training, mentoring and admin	Employer	Employer
Materials and overheads	Employer	Employer
*Off-the -job programme costs**	Government	Government
Off-the job programme development/QA/ Assessment costs	Government via specific apprenticeship funding allocated to SOLAS/HEA plus proportion of core funding to E&T institutions and QQI	Government via allocation by SOLAS of development grant to consortia plus apprenticeship, specific apprenticeship funding allocated to SOLAS/HEA plus proportion of core funding to E&T institutions and QQI
Regulatory oversight and operational support, inc. -operational support to Apprenticeship Council -Registration systems -Authorised Officer network -Apprenticeship promotion GA	Government via SOLAS	Government via SOLAS

*Apprentices pay a pro rata student contribution when the formal training is delivered by a Higher Education Institute. No contribution is payable by apprentices for training which takes place in an Educational Training Board institution.

Section 4

REFLECTIVE LOG EXTRACTS

INTRODUCTION

I have incorporated extracts from the reflective log in this section that I have maintained throughout my DBA journey. I thoroughly enjoyed the reflective part of this process as I am by nature reflective and in my professional practice would categorise myself as a 'reflective practitioner'. There were a number of challenges I encountered in this DBA - academic, professional and personal, all of which I reflected on at various junctures throughout my studies.

The logging of my reflections started when I received the first pack of readings before the first workshop. I was excited and eager to get started but a bit daunted by what I deemed to be some of the more difficult readings. There was one article which I stopped and started so often, due to having to look up the meaning of a significant amount of words. The pages of the article were covered with yellow highlighter marker and had so much writing in the columns. While I felt my acute lack of understanding, I could see the purpose of the reading and even when I genuinely had no understanding of something I would say to myself "but over time I will understand so stick with it".

LOG EXTRACTS

"In sorting through this first pack of articles I read what looked to be the 'easier' ones first – easy being very much a relative term here! This left me with the most difficult article last. I took photos of the proliferation of yellow highlighter marker on each page and all of the scribbled definitions in the margins and sent them in response to friends who texted to see how I was getting on. I am acknowledging that this is all Double Dutch to me now but I know there will be a time when I understand it – at least a bit more than I do now."
October 10th 2016

The first workshop and meeting my DBA classmates was fantastic. I am a very sociable person and highly value a sense of belonging and I was really looking forward to meeting my new 'tribe' and to getting started on the workshop. I wrote a lot in my reflective log (maintained in the Notes section in my iPhone for immediacy and spontaneity), around those few days. I gained so much energy and motivation from my classmates and from

the DBA faculty team. I have been very lucky to study for this DBA with my good friend and colleague Donnchadh O'Madagain and we often travelled to Waterford and back together. Many of the discussions we had in the car fed into my reflective log also. My big take away from the first workshop was when Dr. Felicity Kelliher explained that that faculty would be providing the scaffolding for our studies and that gave me so much reassurance, even though I also understood the requirements of I as a student on a Level 10 programme where independent learning is a key requirement.

"Really enjoyed meeting my classmates – a diverse bunch in many ways with classmates travelling from Dubai, Bahrain and Canada for the programme – but interesting to note that there are only two females including me. Great fun getting to know each other and I can already sense that the social scene when we get together will be good – better make sure the lads who fly in from Dubai do not lead Donnchadh and myself astray!"
October 30th 2016

"Talking to Donnchadh in the car on the way home and we both really enjoyed the content and the camaraderie. We really feel that the structure of the programme will serve us both well and were heartened by Felicity's "scaffolding" comment. We have come away both committed and motivated."
October 31st 2016

Completing the first workshop assignment was a different story! I felt challenged by it even though I actually enjoyed the process. My concern when contemplating the DBA programme was always about my academic writing. I write a lot of policy and sales and marketing documents in my professional role and I was very anxious about the academic writing, but was comforted by knowing that the majority of my classmates felt the same.

"From the earliest stage of attending the open night for the programme, I have expressed my concern about my academic writing ability. I now realise that it is only with practice and receiving and applying feedback that it will get better. I need to stop worrying about it and stop procrastinating and put away the yellow highlighter and start writing!"
November 20th 2016

While the structure of the programme attracted me to this specific DBA programme I still did not fully appreciate the value of the structure and how much it made sense for me, and how I work. I reflected a lot over the first 18 months of the programme, on my development through that period and how the purpose of that time was for me to develop as a researcher. Each assignment was challenging but manageable. A notable workshop for me was the one where I discovered what my philosophical orientation was, and that discovery provided me with a foundation for the rest of my studies and particularly the transition from the workshops to the cumulative paper series.

"*I really enjoyed the sessions around philosophical orientation. The majority of the class found their orientation relatively quickly, but there was actually a lot of learning in the lecturers working with those who didn't. I was happy to have hit the road for Dublin knowing where I was on the continuum and how that potentially would impact my choices around methodologies etc.*"
October 22nd 2017

Choosing my topic for my study was quite straightforward for me. I am passionate about the world of apprenticeship in Ireland, especially the new consortia-led higher education apprenticeships which I have been directly involved with. My biggest concern was that my professional practitioner knowledge, while very useful, could actually be an impediment to utilising the opportunity provided by this programme to pursue an academic path to answer what eventually became my research questions. I did find that there was a distinct step up from the assignments of the first 18 months to the requirements of the cumulative paper series. My academic concern was that I may be challenged by being a 'researcher as insider' but I felt being aware of it, and working through it in my reflective log, was very helpful.

"My initial concerns about being a 'researcher as insider' revisit me every so often but when I prep for each interview I think about it and again when I reflect on each interview after I do the same. I feel that I need to keep the awareness to the front of my consciousness. I felt that the first few interview, which were with colleagues that I have the closest relationship with, that I really needed to be very careful not to in anyway put words in their mouths in the way I asked the question. Extra focus was placed on keeping the questions as open as possible."

December 20th 2017

The allocation of supervisors was also a pivotal point in the programme. It was much anticipated by the whole class, as through the workshops we had come to know a number of the WIT faculty and we were curious for ourselves and for each other as to whom we would be allocated. I was delighted to be contacted by the Programme Director, Dr. Patricia Bowe, to be advised that both herself and Dr. Felicity Kelliher would be my supervisors. I really felt very lucky that I knew, liked and respected them both and felt very positive about moving forward with their guidance.

"Delighted to have been informed that Trish and Felicity will be my Supervisors! When sharing the information with the class a lot of them were envious. Gas that Lorraine also has them both. I feel this is where a whole new level of learning is about to take place".

January 8th 2018

As cautioned by the Programme Director, Dr. Patricia Bowe (& now my Supervisor), at the outset of the programme that sometimes life events might get in the way, and if that was the case the team would work with us to find solutions. Unfortunately for me while I was writing Paper 1, my mother died suddenly, which was a horrendous shock as she had been hale and hearty. After her death I had pneumonia for 6 weeks and in that period I was diagnosed with breast cancer. This was a very upsetting time for me and my family. I kept writing the paper but a few weeks before the submission date I was advised not to submit. I was devastated by this decision and it took me a while to understand that this decision was made in my own best interest as I was in treatment for my cancer and had just experienced my mother's sudden death. I attended the colloquium for Paper 1 and was the only one not presenting. I felt awkward but was overwhelmed by the support of my class mates and of the DBA team. I am naturally a positive person but had to give

myself a tough talking to in order to get the best from the colloquium. I actually learned so much from the colloquium and the overall experience. It was a setback but I picked myself up, dusted myself down and got on with it.

"This very much feels like a 'Dear Diary' entry. On February 22ⁿᵈ my biggest problem was that I had 'lost' a large part of Paper 1 on my laptop. I brought it in to the IT crew at work and they did their best to recover it but to no avail. I had organised to meet my mother and sister for dinner and went to meet them with a heavy heart. My mother said she felt that she had a sick stomach so we stayed in. My sister decided to stay with my mother that night and while Mam was not feeling great we still had some good chats before I left. The next morning after leaving an early morning event with the then Taoiseach Leo Varadkar in Trinity, I received a call from my sister to say that she had woken up to find that my mother had died in her sleep. I was beyond shocked. Thankfully I was in the company of a very good friend and colleague who immediately took over and made sure that I got to my mother's home to see her before the coroner's undertaker arrived to take her for her autopsy, for which I will be forever grateful."
February 28ᵗʰ 2018

"Continuing with my sorrowful mysteries (I am trying, and failing, to laugh here) I now have pneumonia and have no energy so on the advice of Trish, am going to get better first before I return to Paper 1".
March 2ⁿᵈ 2018

"Ah, now, I must have been really bad in a previous life! I have been diagnosed with breast cancer and have surgeries and treatment ahead and still can't get rid of the pneumonia. I have tried to finish Paper 1 for the deadline, I hope I can get it done"
March 5ᵗʰ 2018

"Got a call from Trish to say that my Paper 1 is not there yet and that the advice of her and the DBA team is to take a break from the studies to concentrate on my health. I cry on the call with the Trish and ask can she work out some way that I can catch up with my classmates and she promises that she will. I arrange with Trish to attend the colloquium but not to present – not at all what I want but over time I realise that advice is right."
March 20ᵗʰ 2018

"Felt very awkward the first day of the colloquium – especially when some of the other Supervisors asked me what time I was presenting, and I had to say I wasn't and then felt the need to say why. The goodwill of my classmates and the programme team kept me going. Plus I learned what to expect for when I would have my chance to present."
April 30th 2018

My reflective log entries from this point on became very much focused on the specifics of each paper I was writing and observations of what was happening in the apprenticeship and higher education world. At this juncture my role with my employer changed. I took 6 months off work for cancer treatment and recovery and was appointed to a new, more senior role on my return. I moved from being Head of Professional Education & Training to be the Director of Development & External Development. In my reflective log I expressed concerns about moving further away from the mechanics of the IFS apprenticeships which were central to this study, but working through my reflections I realised that this new distance between myself and the day to day operations of the apprenticeships actually came at a good time in my studies and helped me gain a new perspective.

"Delighted to have some normality back in life with returning to work and to a new role that I am very excited about. One concern I have is that I am moving further away from apprenticeships on an operational level, but in my new role I am moving closer to the bigger picture policy stakeholder world. I am interested to see how this may impact my studies."
September 26th 2018

When Paper 1 had been examined I gained some more confidence in my academic writing and this also coincided with receiving invitations to present my work to date at a range of fora, and this was professionally very satisfying and also presented opportunities for a wider peer group to provide feedback which was very useful.

"I was flattered and delighted to be asked by the Apprenticeship Council to present elements of Paper 1. It was a fascinating experience to have a roundtable discussion after my presentation with all of the stakeholders, and I learned so much."
November 6th 2018

"Nervous about presenting at the inaugural Quality Qualifications Ireland Conference in Dublin Castle but also invigorated by the experience. Great to be in such a large venue where everyone in attendance had a strong connection with apprenticeship. The sense of community was palpable. I received very positive feedback and invitations to speak at more events"
April 8th 2019

I found the designing of the preliminary conceptual framework challenging and at times could not see the woods for the trees. I had a eureka moment when I discovered boundary organisation theory and that opened up what felt like a door into a world where I could now see what I wanted the conceptual framework to look like and how it would guide my study.

"I felt the pressure of having to come up with a preliminary conceptual framework but I rose to it and when my Supervisors were happy with it, it again gave me more confidence. I could see at this stage how useful the literature and the theories could combine, to be applied to a practical situation."
September 12th 2018

I really enjoyed the interviews with the participants. Part of my data collection involved reflecting on each interview within 72 hours and this was very useful. It helped me get up close and personal with the data very quickly and for the immersion process to start. I was a Human Resources Director in a previous life so interviewing people is second nature to me but I had to be clear in my own mind of these being different types of interviews albeit while using the obvious transferable skills in a positive way. I was also very conscious of my professional relationship with many of the participants and in particular of the possibility of familiarity bias.

"I am a very curious person and love interviewing people so I often need to reign myself in and to remain very focused on the objectives of the interview. I also revisited the 'researcher as insider' aspect of my study which I do before each interview. I also recognise that being an insider in the apprenticeship eco-system has gained me access to my interview participants."

May 6th 2019

I also enjoyed the thematic analysis process. The room at home that I used for studying was overtaken with large colourful sheets of paper on the walls with literally hundreds of multi-coloured sticky post-its. I was very hands on, literally, with this process. I originally had intended to use Nvivo to help me with this stage, but decided to stick with the manual process as I felt it was more 'me' and that it would aid this part of the process more.

"My plan was to use Nvivo but I am enjoying being very hands on with the data in a visual way so will check with Trish if she think it's ok to continue in this manual way. My front room is covered with posters and post-it notes and I feel very immersed in the data. When I take a break and walk back into the room after, I feel that I can get back in to the zone very quickly".

January 12th 2019

The presentation of the paper series and the experience of the examination process was also cause of a lot of reflection. I am comfortable with presenting and I also enjoy putting presentations together visually. I was very curious about the examination process and looked forward to each one. I saw the value of the examiner feedback and in particular how a change of direction can occur based on such feedback. After Paper 2 I was advised by the Examiners to position the study as a single case study and after Paper 3 I was advised by the Examiners to position it as sectoral study.

"Reflecting on the examination process it is clear to me the value it adds to the study and how much it is part of the overall learning experience. It provides two other sets of eyes on the study and it gives more confidence each time a paper passes through the process."

February 20th 2019

I reflected a lot on the supervision process throughout the timespan of the DBA process. It took me a while to realise that to a certain extent, being a DBA student is a little like being an apprentice, in that I was learning my craft - that of a researcher, very much through my interaction with my Supervisors. In particular the area in which I found most challenge, was that of academic writing. Throughout the process I had a number of eureka moments and many of those were after interacting with my Supervisors, which I then reflected on in my log.

"Had a good call with Trish discussing the draft I had sent her for Section Three and looking forward to the remaining sections. While discussing the actual outputs of the study and the difference between the guide I hoped to develop, based on the findings and existing guidance provided by Solas, Trish fed back to me that she felt what I was producing was "the preface to the novel". This absolutely resonated with me as I feel that some of the documents that Solas have developed since 2017 are the 'novel' and my guide comes before that stage so mine is the 'preface'. Thanks a mill Trish!"
August 7th 2020

Due to the pandemic it was unfortunate that we as a class did not get to present Paper 4, nor did we get to meet in person as a group for what would have been the last time. As I gained so much energy and motivation from the group, I found this particularly hard and while I increased the online and virtual communication with various classmates, I still missed the in person group dynamic. Understandably this is a very small concern against the backdrop of a global pandemic that has taken the lives of many and looks set to be with us for a significant amount of time to come.

"Gutted at not being able to present Paper 4 even though I fully understand why. I was really looking forward to seeing everyone and hearing how they are getting on. I will also miss seeing how each of their studies have developed. This would have been our last time together as a group so I am really missing that."
April 22nd 2020

As this study drew to a close I unfortunately was hit with a reoccurrence of my original cancer and after a few days of feeling a bit sorry for myself I again dusted myself down and got back on the road. While I, like many of my classmates, have definitely

experienced stress in the juggling of studies with family life and work, this DBA programme has been a huge positive and a strong focus during this period and for this I am very grateful.

"Feeling grateful for the focus of working on the last stage of the DBA to distract me from my latest medical news. Again the support of Supervisors, classmates and programme team has been fantastic. Looking forward to taking a break after submitting my thesis and then applying myself to preparing for the Viva – bring it on!"
April 14th 2020

As I put the final touches to this study and as I reflected on the contribution I hope my study will make to the apprenticeship landscape in Ireland, I was buoyed and motivated by a number of very timely practice developments.

"I am literally in the last few days of writing my thesis and though very tired (major work deadlines occurring at the same time!), I am delighted how much momentum and focus apprenticeship has gained in the last few weeks with the establishment of the new Department of Further & Higher Education, Research, Innovation & Science. This has really energised me in the last few weeks as I head towards a submission date. I was delighted to have been asked to submit ideas to the July 2020 Stimulus Package about apprenticeships and also to be invited to respond with elements of my study to the Consultation on Apprenticeships 2021-2025. Today I am absolutely thrilled with a range of things: 1) We at NCI have won the Generation Apprenticeship award today for Consortia-led apprenticeships, as announced by Minister Harris, and I could not be more proud of the IFS apprentices and the programme team 2) We launched a global apprenticeship first – a 3 year Recruitment Apprenticeship Degree in partnership with the National Recruitment Federation. Much of the learning from this study was applied to this new apprenticeship. What I am most happy about is how the Minister has put apprenticeship very much at the heart of the new Department. To hear him say the words today on August 12th 2020 "I have no doubt that the apprenticeship model has a major role to play in our country both socially and economically" was so gratifying."
August 12th 2020