What's the story with apprenticeship in Ireland?

Experiences of apprenticeship reform

in higher education 2016-2023:

an exploratory case study

Breda McNally, BA, MSc

Thesis submitted for the award of Doctor of Education to the Institute of Education, Dublin City University

December 2024

Supervisors:
Dr Jane O'Kelly
Professor Gerry McNamara

Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Education is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed: Breda McNally

ID No. 18213708

Date: 10th December 2024

Acknowledgements

Table of contents

List of figures

List of tables

Abbreviations

ACSS	Apprenticeship Client Services System
CAO	Central Applications Office
DES	Department of Education and Skills
DFHERIS	Department of Further and Higher Education, Research, Innovation and Science
ETB	Education and Training Board
FÁS	An Foras Áiseanna Saothair: National Training and Employment Authority 1988 - 2013
FET	Further education and training
HE	Higher education
HEA	Higher Education Authority
HEI	Higher education institution
Ibec	Irish Business and Employers Confederation
ILO	International Labour Organization
IoT	Institute of Technology
IUA	Irish Universities Association
NAA	National Apprenticeship Alliance
NAO	National Apprenticeship Office
NFQ	National Framework of Qualifications
NTF	National Training Fund
NTO	National Tertiary Office
QQI	Quality and Qualifications Ireland
RTA	Reflexive thematic analysis
SOLAS	An tSeirbhísí Oideachais Leanúnaigh agus Scileanna: Further Education and Training Authority Also, statutory and regulatory authority for apprenticeship in Ireland, and coordinating provider for craft apprenticeship
THEA	Technological Higher Education Association
TU	Technological University
VEC	Vocational Education Committee
WBL	Work-based learning
WIL	Work-integrated learning

Abstract

What's the story with apprenticeship in Ireland?
Experiences of apprenticeship reform in higher education 2016-2023:
an exploratory case study

Breda McNally

Apprenticeship forms a key element in Irish Government education policy. In the past 50 years or so the national apprenticeship system has gone through several formal national-level reviews that have led to major changes in the way in which apprenticeship is designed, developed, and delivered. The current national apprenticeship system is a statutory, regulated part of the formal tertiary education system. It includes a new 'consortium-led' or 'enterprise-led' model of apprenticeship that was first implemented in 2016 following a 2013 review of apprenticeship training in Ireland.

One of the most significant aspects of the recent reforms in apprenticeship is that for the first time higher education institutions (HEIs) including universities and independent HEIs can now be involved in the development and delivery of apprenticeships leading to higher education awards up to and including at doctorate level. This research examines understanding and experiences of these reforms since 2016 from the perspective of supply-side stakeholders involved at three levels in apprenticeship policy and practice in higher education in Ireland.

Primary data were gathered in semi-structured interviews. Reflexive thematic analysis was employed in the analysis of these data. The research provides a contribution to knowledge in an area that has been little explored in the literature.

Key findings relate to the demand for, implementation of, and success and sustainability of new apprenticeship in higher education. These include that new apprenticeship is experienced as different in many respects to HEIs' existing provision, including being more complex and resource intensive; progress in the implementation of the new apprenticeship model has been made but partly reflects traditional distinctions in the provision of higher education; different understandings, interpretations, and operationalisations affect activity in and impact of new apprenticeship but there is a dearth of data on associated metrics; and considerations related to concepts of ownership of and control over aspects of apprenticeship are likely to affect HEIs' engagement in and experiences of new apprenticeship at national and HEI-enterprise levels.

Recommendations include those relating to resourcing of apprenticeship; roles and responsibilities; metrics and data aligned with priorities; a work-integrated learning framework for apprenticeship; and future research.

Chapter 1 Introduction: rationale, background, and justification

1.1 Introduction

The aim of this chapter is to provide the rationale, background, and justification for this research, which relates to a period of significant change in apprenticeship between 2016 and 2023.

To meet this aim, the chapter commences with an outline of **what the research set out to do**, followed by a statement of the **aim of the research** and the **research questions.** A summary of the **key features of the Irish education and the statutory apprenticeship systems** is then provided with an explanation of **where this research sits in relation to these**. This is followed by an outline of the **methodology**, **limitations of the research**, **ethical considerations**, and some of the **key findings** from the research. The chapter concludes with a presentation of the **structure of the thesis** with reference to the aim of each chapter, in table format.

1.2 Rationale

The underlying 'problem' on which this research is based is that apprenticeship forms a key element in the Irish Government's policy to establish and significantly grow work-based learning - as outlined for example in the Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020 (Department of Education and Skills (DES), 2017a), and the Action Plan for Apprenticeship 2021-2025 (Department of Further and Higher Education, Research, Innovation and Science (DFHERIS), 2021a) which declares the Government's aim to 'significantly increase the footprint of apprenticeship within the education landscape over the coming five years' (p. 5) - but the story relating to the period of significant change in apprenticeship between 2016 and 2023, following the introduction of a new model of apprenticeship in 2015, has not been told.

Research involving apprenticeship in Ireland is scarce. Indeed, it is 'surprisingly low' (Thoma, B., 2016, p. 1). Apart from a small number of studies on consortium-led apprenticeships (for example, Giblin, 2020; Gray and Farrell, 2021; QQI, 2022a; Sheerin and Brittain, 2023) and research in the broader further education and training (FET) or higher education (HE) sectors that refers to apprenticeship in these contexts (for example, McGuinness *et al*., 2014; Clarke, 2016; O'Sullivan, 2017; Walsh, 2018; Maloney, 2021), research on apprenticeship in Ireland relates primarily to another period of significant change, leading up to and on foot of a formal review in the late 1980s to mid-1990s when the apprenticeship model changed from one that was time served to standards-based (Ryan, 1993; Ryan, 2000; Field and o dubhchair, 2001; O'Connor and Harvey, 2001; O'Connor, 2003; O'Connor, 2006; Nyhan, 2009; Ó Murchadha and Murphy, 2016, 2018; Thoma, 2016; Murphy, 2020; Ó Murchadha, 2022).

Albeit operating in a different historical and cultural context in the UK, recent research on the introduction of higher and degree apprenticeships in that particular national context indicates that there are specific challenges and opportunities associated with their introduction, including, for example, those related to programme design, programme delivery, and graduate attributes (Mulkeen *et al*., 2017), 'the potential to disrupt traditional approaches to university degree study' (Fabian *et al*., 2021), 'tensions' related to academic identity and the purpose of higher education, and opportunities in terms of curriculum innovations and partnerships (Graham, 2019).

There is therefore a gap - or even a 'neglect' (Cohen *et al*., 2018, p. 154) - to be filled in relation to research on apprenticeship in Ireland, particularly that relating to the reforms introduced in 2015.

This research is situated within, and aims to somewhat reduce, that gap by examining recent reforms in statutory apprenticeship in Ireland since 2016, primarily with respect to experiences of the new consortium-led model of apprenticeship, from the supply-side perspective of specified stakeholders involved at various levels in apprenticeship policy and practice in higher education.

The choice to focus in this research on apprenticeship in higher education - on apprenticeship that leads to higher education awards - rather than on apprenticeship in FET or the apprenticeship system as a whole - was made in light of the potential significance and impact of the reforms particularly in and for higher education, and therefore ultimately also in and for the apprenticeship and tertiary education systems as a whole.

1.3 Aim

The aim of the research is to examine understanding and experiences of recent reforms in statutory apprenticeship in Ireland since 2016, primarily with respect to the new consortium-led model of apprenticeship in the higher education sector, from the perspective of supply-side stakeholders involved at three levels in apprenticeship policy and practice in higher education.

The stakeholders in question are *'individuals holding a role related to [apprenticeship] policy production',* and *'participants working in higher education responsible for delivering the policy'* at different levels in the higher education system (Graham, 2019). In this research this means personnel working in the relevant Irish Government department and its relevant agencies operating at the macro level in apprenticeship policy and practice, and personnel working in the higher education sector at meso and micro levels in the design and delivery of apprenticeships that lead to higher education awards on the National Framework of Qualifications. The emphasis in this respect is on the coordinating provider (i.e. not collaborating) role in apprenticeship policy and practice.

This research did not seek to examine other key stakeholders' understanding and experiences, including, for example, those of employers or apprentices.

1.4 Research questions

The motivation for this research is the researcher's interest in exploring how this national apprenticeship reform initiative is experienced by supply-side stakeholders in higher education. These stakeholders are people who have played and continue to play a key role in the higher education system in apprenticeships that lead to higher education awards.

The central question in this research relates to these stakeholders as follows:

- What are supply-side stakeholders' experiences of recent reforms in apprenticeship in the higher education sector in Ireland?

The following sub-questions were considered in this context:

- What has been the experience of higher education institutions (HEIs) in the implementation of this national apprenticeship reform initiative?
- What are stakeholders' perspectives on this initiative now and for the future?

1.5 Background and context

This section presents an outline of the education and apprenticeship systems in Ireland that formed the background and context for this research, and where this research sits in relation to these. This is prefaced by a definition of further, higher, and tertiary education provision in Ireland.

1.5.1 Further, higher, and tertiary education - a definition

Further education and training in Ireland is 'education and training at levels 1-6 on the National Framework of Qualifications…..outside the traditional post-primary and Higher Education institute trajectory' (SOLAS, 2017, p. 15).

A higher education provider is 'a person or institution which provides at least one programme of education and training leading to the award of a degree or other qualification which is at least at bachelor degree level [level 7 or 8] and is included within the National Framework of Qualifications' (Ireland. *Higher Education Authority Act 2022*). In addition, higher education awards are awarded on successful completion of programmes - including some of the new consortium-led apprenticeship programmes - that lead to a higher certificate award at level 6 on the National Framework of Qualifications.

'Tertiary education' means 'further education and training and higher education and research' (Ireland. *Higher Education Authority Act 2022*). According to this definition, tertiary education includes all provision across all levels of the NFQ, from levels 1 to 10. Given the reference to the term 'tertiary', however, and the contexts within which is it commonly discussed, tertiary

education in Ireland may also be usefully considered to largely refer to provision across levels 5 to 10 on the NFQ, at the intersection with and beyond the level 5 element of post-primary 'senior cycle' of second level education.

Table 1.1 summarises the relative positioning of these aspects of the education system with reference to the National Framework of Qualifications.

Table 1.1: The National Framework of Qualifications and the education system in Ireland									
National Framework of Qualifications (NFQ) levels 1-10									
1	2	3	4	5	6	7	8	9	10
Post-primary (secondary or second level) 'Junior Cycle'			Post-primary (secondary or second level) 'Senior Cycle' Leaving Certificate 'Established', Vocational Programme, and Applied						
Further education and training (FET) levels 1-6									
					Higher education (HE) levels 6-10				
				Tertiary education levels 5-10					

1.5.2 Higher education institutions in Ireland

The main categories of higher education institution (HEI) in Ireland are presented in Table 1.2 and as follows:

- the seven publicly funded universities listed in the Universities Act, 1997 (Ireland. *Universities Act 1997*) and the Royal College of Surgeons of Ireland University of Medicine and Health Sciences that has dual functions as a 'professional training body' and a university

- two publicly funded institutes of technology (IoTs), and five publicly funded technological universities (TUs) that were established between January 2019 and May 2022 as a result of consolidation of some IoTs under the Technological Universities Act, 2018 (Ireland. *Technological Universities Act 2018*)

- a range of 'independent' HEIs (including 'not-for-profit' and 'private' HEIs) that are not publicly funded in the sense of their 'core' funding not being fully or at all public funding, though they may apply for public funding in specified areas (for example, Human Capital Initiative and Springboard+)

- other HEIs including colleges of education

Table 1.2: Main categories of higher education institution in Ireland		
Universities	**Maynooth University** **University College Cork** **University College Dublin** **University of Galway**	constituent colleges of the National University of Ireland (NUI)
	Royal College of Surgeons in Ireland University of Medicine and Health Sciences	independent, not-for-profit; recognised college of NUI
	Dublin City University	formerly National Institutes of Higher Education, Dublin and Limerick, respectively
	University of Limerick	
	University of Dublin, Trinity College	one constituent college of the university, Trinity College
Institutes of Technology	**Dundalk Institute of Technology** **Dún Laoghaire Institute of Art, Design and Technology**	most institutes of technology were former regional technical colleges
Technological Universities	**Atlantic Technological University** **Dublin Technological University** **Munster Technological University** **South East Technological University** **Technological University of the Shannon: Midlands Midwest**	formed by consolidation of former institutes of technology
Independent	including not-for-profit and private	for example, National College of Ireland (not-for-profit) and Griffith College (private)
Other	including colleges of education	for example, Marino Institute of Education, an associated college of Trinity College Dublin (the University of Dublin), and St. Angela's College, a college of Atlantic TU

The universities listed in the Universities Act are sometimes referred to as 'traditional' universities, partly to distinguish them from the more recently established technological universities. The five TUs' antecedent IoTs comprised Blanchardstown, Dublin, and Tallaght (TU Dublin, established in 2019), Cork and Tralee (Munster TU, established in January 2021), Athlone and Limerick (TU of the Shannon: Midlands Midwest, established in October 2021), Galway-Mayo, Letterkenny, and Sligo (Atlantic TU, established in April 2022), and Carlow and Waterford (South East TU, established in May 2022).

A total of 19 HEIs in Ireland, including the eight universities, five TUs and two IoTs, are 'designated institutions of higher education' meaning they are HEIs 'with whom the Higher Education Authority works under statute or who are in receipt of core public funding' (HEA, nd (HEIs)).

The universities, TUs and IoTs are also 'designated awarding bodies'. This designation 'respects the autonomy of these institutions, their self-accrediting status, and the principle of academic freedom' (QQI, 2021a), and the awards they make are included in the National Framework of Qualifications. Independent providers currently offer some programmes that lead to awards made by Quality and Qualifications Ireland (QQI), and, in some cases, also other national and international awarding bodies (QQI, 2023a). Some independent providers have indicated their intention to progress their plans to apply to QQI for delegated authority to make awards, meaning authority to make their own awards 'within the scope of authority delegated by QQI' and greater

autonomy in the process, and some have also indicated their ambition to become a designated institution of higher education (QQI, 2023a, pp. 99-100).

1.5.3 The apprenticeship system in Ireland

The current apprenticeship system in Ireland includes the standards-based model of apprenticeship that was introduced in 1993 to replace the then existing time served model, now also known as 'craft' or 'pre-2016' apprenticeship. The national apprenticeship system also includes the new ('consortium-led', 'new' or '2016+') model introduced in 2015 and first implemented with the launch of two new apprenticeships (Insurance Practitioner and Industrial Electrical Engineering) in 2016.

The Irish national apprenticeship system is a formal, statutory, regulated part of what has recently been referred to in policy documents and legislation as the tertiary education system (DFHERIS, 2023; Ireland. *Higher Education Authority Act 2022*).

Statutory apprenticeship in Ireland 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 (Generation apprenticeship, 2024a)

There are two main 'locations' for teaching, learning and assessment in statutory apprenticeship in Ireland, both of which may involve multiple sites. One location is the workplace or 'on-the-job' element of learning, which is provided by and is generally assessed in the workplace by or on behalf of the employer. The other is the 'off-the-job' element of learning which is provided and assessed by an education/training provider(s) in the FET and/or the higher education sectors. 'A minimum of 50 per cent of learning must be on-the-job' (Generation apprenticeship, 2024a, 2024b, 2024c). There can be only one national apprenticeship for any occupation (Generation apprenticeship, 2024d). All apprenticeships must lead to a qualification on the NFQ, and they may also lead to other 'professional' as well as 'academic' qualifications. For example, successful completion of the 3-year level 8 Insurance Practitioner apprenticeship leads to a BA (Hons) in Insurance Practice as well as other industry-required and industry-recognised qualifications at various stages in the programme.

The entry route to apprenticeship is based on an employer employing an individual as an apprentice and statutory approval of the employer and registration of the apprentice by the statutory authority for apprenticeship in Ireland (SOLAS), followed by registration of the student apprentice with the relevant education provider. This is separate from and outside the Central Applications Office (CAO) process which forms the basis for access to most undergraduate

programmes in HEIs in Ireland which is largely based on performance and associated points acquired in the Leaving Certificate examination taken at the end of post-primary, second level, education.

One of the most significant aspects of the recent reforms in apprenticeship is that, for the first time, since 2016, *all* HEIs, including IoTs, TUs, other universities, and other HEIs including private HEIs, and other organisations responsible for programmes that lead to higher education awards, can now be involved in the design, development, and delivery of statutory apprenticeship. This represents a significant change compared with the situation that existed until 2016, where only the IoTs and TUs operated - and continue to operate, along with the Education and Training Boards (ETBs) - on behalf of SOLAS (in its capacity as the further education and training authority) in the provision of craft apprenticeships, leading to a QQI Advanced Certificate Craft award at level 6 on the National Framework of Qualifications.

Between 2016 and 2020 some 34 new apprenticeships were developed and came into operation, along with the existing 25 craft apprenticeships (SOLAS, 2021a, p. 16). At end 2023 an additional 14 new apprenticeships were reported to be in operation (NAO, 2023, 2024), giving a total of 73 apprenticeships, 25 craft and 48 consortium-led. A further four new apprenticeships were reported to be in operation in August 2024, giving a total of 77 apprenticeships, 25 craft and 52 consortium-led.

At mid-2023, when the fieldwork for this research was undertaken, eight HEIs were involved as coordinating - 'ultimately responsible' (QQI, 2016, p. 1) - providers in the design, development, and delivery of 27 new consortium-led apprenticeships in Ireland (**see Table A1.2 in Appendix A, *HEI coordinating providers of new apprenticeships May 2023***).

The position of statutory apprenticeship in relation to the NFQ and education system, and with respect to off-the-job providers and awarding bodies, is summarised in Table 1.3 and Table 1.4 respectively.

Table 1.3: Apprenticeship in the National Framework of Qualifications and education system in Ireland									
National Framework of Qualifications (NFQ) levels 1-10									
1	2	3	4	5	6	7	8	9	10
Post-primary (secondary or second level) 'Junior Cycle'			Post-primary (secondary or second level) 'Senior Cycle' Leaving Certificate 'Established', Vocational Programme, and Applied						
Further education and training (FET) levels 1-6									
					Higher education (HE) levels 6-10				
				Tertiary education levels 5-10					
				Statutory apprenticeship levels 5-10					

Table 1.4: Off-the-job providers and awarding bodies in apprenticeship in Ireland									
National Framework of Qualifications (NFQ) levels 1-10									
1	2	3	4	5	6	7	8	9	10
Craft apprenticeship (level 6 only)									
Off-the-job providers					ETBs	IoTs			
Awarding body					QQI				
'New' consortium-led apprenticeship (levels 5-10)									
Off-the-job providers				ETBs		Higher education institutions including IoTs, TUs, other universities and other higher education institutions; also Teagasc (State agency)			
Awarding bodies				QQI		Various including higher education institutions and QQI			

Further details on the recent reforms in apprenticeship are provided in Appendix A, including milestones in the development of the new consortium-led model, the main types of stakeholders involved and their roles, HEI coordinating providers involved at mid-2023, and recent developments relating to a unified tertiary education system.

1.6 Methodology

Primary data were gathered in semi-structured interviews with a sample of key stakeholders involved in the supply of apprenticeship in higher education in Ireland. The sample was drawn from among those involved in the design, development, and delivery of recent Irish national apprenticeship policy since implementation of the consortium-led model of apprenticeship in 2016.

The sample was a purposive sample of 17 people as follows:
- five at macro level (in Government department and four agencies of this department)
- seven at meso level (executive/senior managers in five higher education institutions and in two representative bodies)
- five at micro level (academic and professional staff in five higher education institutions)

The data were analysed using reflexive thematic analysis (Braun and Clarke, 2022a).

The design and undertaking of the semi-structured interviews and the thematic analysis of the data gathered were also informed by an examination of publicly available data and information relating to apprenticeship in Ireland (e.g. reports, policy documents, public consultation submissions, apprenticeship website) and by a review of literature on work-based and work-integrated learning

and apprenticeship in higher education, including in higher and degree apprenticeships in the UK, particularly in England. A research diary and reflexive journal were also kept throughout the research process.

1.7 Strengths and limiting factors of the research

This research has several strengths. These include an appropriate methodology to answer the research questions; appropriate conduct of the fieldwork underpinned by the researcher's core values of integrity and professionalism which helped to ensure substantial levels of participation and engagement in advance of and during interviews; and robust analysis and reporting through application of the reflexive thematic analysis process. The resulting research provides a contribution to knowledge in an area that has been little explored in the literature.

The research also has some limitations. The main ones are:

- Due to the relatively small number of new apprenticeships in higher education in Ireland, and the relatively small number of organisations involved and the variety of ways in which these organisations and apprenticeships can be characterised, some quotes from interviews that the researcher considered to be particularly insightful or illustrative of an important point could not be used because of the potential for identification of the source.

- At mid-2023 most of the apprenticeships leading to higher education awards were developed at a time before TUs were established and when individual IoTs were responsible for apprenticeship proposals and development of the apprenticeships in question. Although four of the five TUs participated in the research, only one interviewee from each TU was involved and not all antecedent IoTs could be equally represented. Care was taken however to ensure that the sample was as representative as possible of the organisations involved and of the ways in which they and the apprenticeships for which they had responsibility could be characterised.

- This research includes an examination of experiences of HEIs as coordinating providers in apprenticeships leading to higher education awards. The collaborating provider role is also an important feature in the new apprenticeship model, however. This is an aspect of apprenticeship that further research may usefully incorporate.

- Due to limitations in terms of data availability nationally and internationally, and of availability and comparability of existing research, much of the research cited in the literature review is based on experiences of higher and degree apprenticeships in the UK (particularly England), despite the different national context and some limitations of that research. Given that this research is an exploratory case study, however, and given the dearth of research on

apprenticeship in Ireland, this approach is considered appropriate, and the results of this research provide a comprehensive 'baseline' on which future research can build.

1.8 Ethical considerations

Considerations relating to potential bias, and associated threats to reliability and validity throughout the research process, are particularly pertinent in cases of 'insider research', which may be defined as research in which the researcher has a direct involvement in or connection with the research setting (DCU, 2017). As an insider in this research according to this definition, the researcher's approach to addressing the challenges that this positioning potentially posed was to make good use of the advantages it presented and to try to overcome the disadvantages wherever possible, including, for example, in relation to access to people and information (Mercer, 2007, p. 13).

The researcher's core values of integrity and professionalism underpinned each stage of the research. These values and associated activity are in accordance with professional and ethical principles and requirements associated with academic research, including, for example, those related to concepts such as [no] harm to participants, dignity, informed consent, confidentiality, anonymity, honesty and transparency, reciprocity, and representation (for example, Bell and Bryman, 2007, p. 71).

1.9 Key findings

The **findings from the research** are firstly presented with reference to the **four themes** and **nine sub-themes** developed from a **reflexive thematic analysis** of data gathered in 17 semi-structured interviews. These findings are presented in Chapter 5 as a story of supply-side stakeholders' understanding and experiences of recent reforms in apprenticeship in higher education in Ireland. These represent participants' voices in the form of a repository or record of experiences at a particular point in time. In the researcher's view, these findings, this story, on its own represents one of the most valuable aspects of the research.

The key findings from the thematic analysis of the data are summarised at the end of Chapter 5 (and in table format in Appendix C with a comment on each in terms of what it means, why it matters) and they include the following:

1. ***Demand for new apprenticeship*** *in higher education*
-   Reasons for HEIs' involvement in new apprenticeship are largely framed in the context of a stated desire to have a positive impact while also operating in a competitive higher education

environment, and some apprenticeships, in some areas of activity, are reported to be considered to be more suitable for, and more readily accepted by some stakeholders in the higher education sector and in some parts of the sector than others.

- Perceived reasons as to why some HEIs have not engaged to a greater extent in new apprenticeship are frequently framed in the context of perceptions of distinct histories, missions, and status *vis à vis* statutory apprenticeship, as well as perceived concerns in some HEIs about the new apprenticeship model itself, and the relative newness of the model ('wait and see').

2. ***Implementation of new apprenticeship*** *in higher education institutions*
- Some HEIs' involvement in some apprenticeships has reportedly been more considered within the HEI or based on a greater understanding of the requirements associated with the consortium-led model of apprenticeship, than others. Different understandings and interpretations of how the consortium-led model of apprenticeship is intended to work, and different motivations for engagement in it, both within and between HEIs and reportedly also with respect to other stakeholders involved in individual apprenticeships, are reflected in different ways of its operationalisation, and different HEI experiences.

- New apprenticeship is reported to be different in many respects to HEIs' existing provision, and more complex and resource intensive, including with respect to: teaching and learning; assessment of learning; the number and nature of stakeholders involved; the level of control stakeholders have over aspects of apprenticeship, particularly with respect to learning and assessment of learning in the off-the-job element of apprenticeship for HEIs; and the level and type of additional resources needed, including some new roles and new ways of operating for HEI staff.

3. ***Success and sustainability of apprenticeship*** *- perspectives on the success and sustainability of apprenticeship in higher education and in the national apprenticeship system*
- Progress is being made at national, sectoral, and HEI levels, and with the FET sector, albeit with a particular need identified for a strategic national approach to identifying and addressing national and regional skills priorities; considerations related to the management and governance of the national apprenticeship system and associated concepts of ownership of and control over aspects

of apprenticeship are considered critical for the future success and sustainability of new apprenticeship in higher education.

The researcher's consideration of the findings from the thematic analysis and the results of this are presented in the Discussion (Chapter 6) and Conclusion (Chapter 7). These include the following:

1. ***Demand for new apprenticeship***
- Progress has been made but has been slow, and partly reflects traditional distinctions in the provision of higher education. The reported 'wait and see' approach among some HEIs, as well as different cultures and competing realities related to shortfalls in public funding, are likely to be factors in the pace of this progress, particularly in the context of the reported relatively resource intensive nature of consortium-led apprenticeship.

2. ***Implementation of new apprenticeship***
- Differences in ways of operationalisation and implementation of the consortium-led model of apprenticeship have implications in terms of activity and impact in the higher education and apprenticeship systems in Ireland. The relative dearth of data and information at a national level relating to participation in, outcomes from, and impact of apprenticeship, is a significant gap however in terms of identifying the impact of these differences or determining what and whose needs are being met by apprenticeship in higher education or by higher education in apprenticeship in Ireland. The extent to which policy objectives in the Action Plan for Apprenticeship are being achieved, or the extent to which this can be determined, is not clear, particularly with respect to availability of data on participation in apprenticeship and associated metrics and data systems.

3. ***Success and sustainability of apprenticeship***
- It is likely that the nature of HEIs' engagement in consortium-led apprenticeship in Ireland, and reported issues related to integration of learning, may be a reflection, at least in part, of stakeholders' decisions related to the levels of ownership and control they believe they are able or willing to exercise in the consortium-led model of statutory apprenticeship and in the design, development, and delivery of individual apprenticeships at both national and HEI-enterprise engagement levels.

A summary map linking research results to recommendations is presented in Table 1.5.

Table 1.5: Summary map of research results and recommendations				
Results				**Recommendations**
1. Demand	**Diversity and distinctions**	Progress has been made but parts of the higher education sector, and some HEIs, have been quicker than others to engage in new apprenticeship, for several reasons including those related to distinct histories, missions, and status vis à vis statutory apprenticeship	Progress made but slow, partly reflects traditional distinctions in the provision of higher education. 'wait and see', resource intensive, competing realities	**Resourcing** in a new, complex, resource-intensive environment and new thinking on work-based and work-integrated learning
2. Implementation	**Flexibility**	Different understandings, interpretations, operationalisations, affects activity and impact, but dearth of data	What and whose needs are being met?	**Roles and responsibilities** **Metrics and data aligned with priorities** **Apprenticeship proposals**
3. Success	**Ownership and control**	Considerations related to concepts of ownership of and control over aspects of apprenticeship likely to affect HEIs' engagement and experiences at national engagement and HEI-enterprise engagement levels	May feature more strongly in some occupations, sectors, industries, and types of education provider than others - area for future research	**Roles and responsibilities** **WIL framework for apprenticeship** **Future research**

1.10 Structure of the thesis

The structure of the thesis is presented with reference to the aim of each chapter as follows (Table 1.6):

Table 1.6: Structure of the thesis	
Chapter number and title	**Aim**
Chapter 1 Rationale, background, and justification	Provides an outline of the rationale, background, and justification for the research as well as the research aim, research questions, methodology, limitations, ethical considerations, and key findings from the research. **Further details on the recent reforms in apprenticeship are provided in Appendix A.**
Chapter 2 Historical foundations and recent evolution of apprenticeship in Ireland	Considers the historical foundations and recent evolution of apprenticeship in Ireland including the key actions, issues, and attitudes that informed and shaped these, and high-level data on reported activity in apprenticeships leading to higher education awards at end 2023. **Further details on key features of the current national apprenticeship system at end 2023 are presented in Appendix B.**
Chapter 3 Literature review	Reviews academic and other literature on the topics of apprenticeship and work-based (and work-integrated) learning in higher education.
Chapter 4 Methodology	Provides the rationale and justification for the approach adopted in undertaking this research.
Chapter 5 Findings	Presents findings with reference to the themes and sub-themes developed from a reflexive thematic analysis of data gathered in 17 semi-structured interviews with supply-side stakeholders operating at the macro, meso, and micro levels in apprenticeship policy and practice in Ireland.

	Also presents a summary of the key findings from this analysis, at the end of the chapter and in table format in Appendix C which also includes a comment on what each means, why it matters.
Chapter 6 Discussion	Presents consideration of key findings from the thematic analysis with respect to previous research and publicly available data and information.
Chapter 7 Conclusion	Presents answers to the research questions, recommendations, possible areas for further and future research, and a reflection on the significance of the research.

1.11 Conclusion

This introductory chapter provides the rationale, background, and justification for this research, as well as the aim of the research and research questions, and an outline of the methodology, limitations of the research, ethical considerations, and some of the key findings from the research.

The next chapter provides further context for the research with respect to the historical foundations and recent evolution of apprenticeship in Ireland, which is key to understanding the apprenticeship system in operation in Ireland today.

Chapter 2 Historical foundations and recent evolution of apprenticeship in Ireland

2.1 Introduction

The aim of this chapter is to consider the historical foundations and recent evolution of apprenticeship in Ireland as well as the key actions, issues, and attitudes that informed and shaped these.

To meet this aim, the chapter commences with a presentation of key milestones in the **development of the education system in Ireland since 1800** and **development of a modern standards-based apprenticeship system up to circa 2010** in this context. This is followed by a consideration of **apprenticeship policy and practice between circa 2011 and 2021**, a period of significant change in which the new consortium-led model of apprenticeship was introduced. The chapter concludes with an examination of **high-level data on apprenticeship activity** to give an indication of reported demand for apprenticeships leading to higher education awards at end 2023**.

Further **details on key features of the current national apprenticeship system at end 2023 are presented in Appendix B**. These include a **comparison of the craft and consortium-led models** of apprenticeship, **Irish apprenticeship in a national and international context**, further consideration of **data on current and in-development apprenticeships leading to higher education awards**, the **10-step national apprenticeship development process**, and recent and prospective **changes in the national apprenticeship infrastructure**.

2.2 Historical foundations and development of standards-based apprenticeship

The years 1800 to 2016 represent the 'modern era' in the history of education in Ireland (Coolahan, 2017, p. viii). This era, just over two centuries in time, has in turn been characterised by three distinct stages of development: 1800-1960 a period of 'great beginnings', expansion, and impact; 1960-1980 a period of 'huge change' in policy, infrastructure, and institutions; and 1980-2016 a period during which the 'impressive multifaceted educational development' that took place warranted its being called 'the era of lifelong learning' (p. viii). The extent of the changes and expansion that took place in the education system over this time is evident from the key components deemed to characterise each period - and the terminology used to describe them - starting with the 'four traditional pillars of a modern education system - primary, secondary, vocational and university education' - in the 1800-1960 period, to a system that now also includes early childhood education, special education, post-primary education, further education and

training, adult education, and higher education (p. viii). This section presents apprenticeship in terms of its evolution to form part of the formal Irish education system in this context.

2.2.1 Development of a formal education system in Ireland

2.2.1.1 Church and State

Conflict and struggles for control between the State and the Christian Church (and denominations within that Church) have long been a characteristic and a fundamental driver of developments in education in Ireland. The Act of Union in 1800 - which brought Ireland under the direct control of the British Government and Parliament - heralded a policy that would seek to use schools, and increasing State intervention in schooling, to cultivate cultural assimilation in Ireland (Coolahan, 2017, p. 4). While the State's intention at this time was to introduce a non-denominational primary school system to Ireland, wherein pupils of all denominations would be taught together except for religious instruction which would be catered for separately, 'this effort to draw a distinction between secular and religious instruction was to prove a most contentious one' among the various denominations (p. 4). Conflict regarding control of primary schooling subsequently led to a system which, by the middle of the century, in theory was mixed or integrated but in practice was increasingly denominational (p. 5).

The churches were similarly negatively disposed towards extending the concept of integration to secondary education, despite recommendations from high-level reports in 1838 and 1858 for the State to do so, and over time there was 'perennial opposition on the part of the churches in Ireland to state encroachment on secondary school management' (Coolahan, 2017, p. 43). Underpinning the parties' desire for their own control and influence over schools and schooling were different ideologies with respect to the purpose of education. Despite some criticisms and efforts over time to introduce more 'practical' subjects to the curriculum, secondary schools in Ireland at the turn of the twentieth century were largely private, denominational institutions whose curriculum largely fitted within the 'humanist grammar school tradition' and whose courses were largely linked to 'requirements of traditional university study and careers in the church and in the professions' (p. 43). In summary, secondary education in Ireland in the 1900s was largely provided in private, denominational, academically oriented, fee-paying institutions, and it was seen as 'a middle-class concern' (p. 44).

The Irish Department of Education was created in 1924 following the establishment of the Irish Free State in 1922. It assumed responsibility for national (primary) and intermediate (secondary) education as well as the technical education functions previously held by the Department of Agriculture since 1922 and the British Department of Agriculture and Technical

Instruction for Ireland before that (Coolahan, 2017, p. 75; Walsh, 2018, p. 136). As well as providing increased State funding to secondary schools, the Department of Education prioritised Irish culture, particularly the Irish language, in the few changes it made to the secondary school curriculum (Coolahan, 2017, p. 59; Walsh, 2018, p. 141). Four decades later, in 1962, a Council of Education on the secondary school curriculum reported that a grammar school type of curriculum - meaning one that provided a general, humanist, academic-type education - was the most common, and, in its view, the most preferable in Ireland at that time (Coolahan, 2017, p. 65). This preference reflected the esteem within which a 'liberal' education was held by the public, including parents, and the less than positive esteem within which technical, manual, and practical-type, vocational education and work were held (Coolahan, 2017, p 68, p. 74; Walsh, 2018, p. 141).

2.2.1.2 Development of a binary secondary education system

The relative role and perceived value of the academic and vocational in Irish education in Ireland was evident in the Irish Government's establishment of vocational schools in 1930 under vocational education committees (VECs). These schools were to be non-denominational and under secular control, and so the Church strongly opposed them (Coolahan, 2017, pp. 78-79). Ultimately it was agreed between the Catholic bishops and the Government that those attending secondary schools would have access to what became known as the Intermediate (later Junior) and Leaving Certificate examinations, while those attending vocational schools would not (Walsh, 2018, p. 144). Some 17 years later, students attending vocational schools would have access to what became known as the Day (later Group) Certificate. The Group certificate was not accepted for entry to university, however. This agreement between the Catholic Church and the Government resulted in the potential of the vocational sector being severely restricted and the vocational system largely being considered inferior (Walsh, 2018, p. 144). In effect

> ….. the State and the Catholic Church colluded to prevent students attending vocational schools from sitting the examinations which gave access to university. From a social mobility perspective, this resulted in vocational education being regarded as second rate. (O'Sullivan, 2017, p. 110)

There were other interests that shaped views about vocational education in Ireland at this time, including industrial interests, farmers' representatives, and members of existing Technical Instruction Committees who expressed their views to the Commission on Technical Instruction (Clarke, 2016, p. 299). In its 1927 report the Commission recommended full-time practical 'continuation' education for those aged between 14 and 16 who did not attend secondary school, technical education for specific jobs and apprenticeships, and higher technical education involving

courses and professional qualifications in technical subjects for managers and training of teachers (Coolahan, 2017, p. 299; Walsh, 2018, p. 142, p.145).

The 1930 Vocational Education Act (Ireland. *Vocational Education Act 1930*) ultimately led to the creation of a 'binary system' consisting of private fee-paying academic secondary schools that prepared students for the Intermediate and Leaving Certificate examinations and ultimately for university and the professions, and vocational schools that provided both continuation and technical education took place and prepared students for the Group Certificate and employment in trades, manufacturing, agriculture and industry (Clarke, 2016, p. 303). This situation was reflected in arrangements, accepted by the then Department of Agriculture and Technical Instruction for Ireland in the early 1900s, that higher level technical studies in areas such as science and architecture would be concentrated in existing colleges and newly created technical institutes rather than the universities (Walsh, 2018, p. 136). Higher technical education was not given much consideration in policy debates, however, and the lack of adequate development of technical and vocational education was particularly evident at higher level from the 1920s onwards (p. 150).

The evolution of apprenticeship in Ireland took place in the context of these developments in vocational and technical education generally, but it seems the Catholic Church took little or no interest specifically in apprenticeship (O'Sullivan, 2017, p. 111). In addition, the increasingly interventionist approach taken by the Government in the 1960s, including with the introduction of free secondary education in 1967, meant that the Catholic Church's influence was waning, in relative terms, with respect to education policy and administration (p. 115).

By the early 1960s, however, there were major concerns about the state of vocational education: the problems encountered included the social attitudes to practical and manual education and work, the size of the vocational schools which made it difficult to attract appropriate staff, competition with local secondary schools, the limitations of the Group Certificate in terms of progression options, high dropout rates, and, for a number of reasons, the vocational schools catering 'for a more than normal distribution of dull or under-motivated pupils who saw the 'tech' as a convenient stopgap until something better turned up' (Coolahan, 2017, p. 83). In summary, for most of the period from its formal introduction in the 1930s, 'vocational and technical education was under-valued both in terms of its contribution to education and the economy' (Clarke, 2016, p. 298).

The second level vocational education system nonetheless set the foundations for what is now known as the further education and training (FET) sector (Clarke, 2016, p. 307). This sector has seen major development and transformation over time, including, most recently, fundamental reform under the Education and Training Boards Act 2013 and the Further Education and Training

Act 2013 (Ireland. *Education and Training Boards Act 2013;* Ireland. *Further Education and Training Act 2013*). Key changes included the creation of a new further education and training authority SOLAS (An tSeirbhísí Oideachais Leanúnaigh agus Scileanna) and reconfiguration of the VEC system throughout the country to create 16 education and training boards (ETBs). Further education and training provision consequently now includes initial vocational education and training including some apprenticeships; 'second chance' education and training in areas such as literacy and basic education; professional or vocational provision for people in employment or re-entering employment; and community and other adult education and training (McGuinness *et al*., 2014, p. viii). At its core, FET is focused on skills development, learning pathways and inclusion (SOLAS, 2020a, p. 36) and it is perceived as addressing both labour market and social inclusion agendas (McGuinness *et al*., 2014, p. ix). Almost €1 billion funding is disbursed annually by SOLAS, primarily to the ETBs via a network of contracted training or community education and training providers; apart from this, about 25 independent community and voluntary secondary schools deliver Post Leaving Certificate courses, and a range of support organisations deliver specific services in areas such as adult literacy (SOLAS, 2020a, pp. 21-22).

This period also saw the early stages of the development of a national framework for recognition and quality assurance of programmes and qualifications, with the establishment in 1972 of the National Council for Education Awards (NCEA) for the higher technical sector (Walsh, 2018, p. 260), followed by the National Council for Vocational Awards (NCVA) in 1993 for an emergent further education sector, particularly Post Leaving Certificate courses and some elements of second level vocational courses (p. 336, p. 372). The establishment in 1995 of an interim national certification authority - TEASTAS - largely aimed to combine the functions of NCEA and NCVA (p. 374). Over time, further legislation, including the Qualifications (Education and Training) Act, 1999 (Ireland. *Qualifications (Education and Training) Act 1999*), provided the basis for the introduction of other elements of a national quality assurance framework including the National Qualifications Authority of Ireland (NQAI), the Higher Education and Training Awards Council (HETAC, to replace NCEA), and the Further Education and Training Awards Council (FETAC). The Qualifications and Quality Assurance (Education and Training) Act, 2012 (Ireland. *Qualifications and Quality Assurance (Education and Training) Act 2012)* subsequently provided for the establishment of Quality and Qualifications Ireland (QQI), the State agency now responsible for the external quality assurance of further and higher education and training in Ireland, which replaced NQAI, HETAC, and FETAC and took over the functions of the Irish Universities Quality Board set up in 2002.

2.2.1.3 Development of a diversified third level education system

Policy changes over time similarly led to the development of higher technical education as a distinctive component of the higher education sector. This diversification, which included the creation of the regional technical colleges (now institutes of technology (IoTs) and technological universities (TUs)) and the national institutes of higher education (now Dublin City University and University of Limerick), was influenced by international developments including support from the European Social Fund; it provided an option to those wishing to pursue higher and professional qualifications other than those provided in the universities, it provided a progression option for those attending vocational schools, and it represented 'one of the most radical education reforms in the twentieth century' (Walsh, 2018, pp. 267-269).

In 1997, following a protracted period of 'conflict' and 'compromise' over issues of State control, among others (Walsh, 2018, pp. 364-374), the first piece of legislation on the place of universities in Ireland since the foundation of the State in 1922 - 'one of the most significant initiatives by the Irish state in higher education since 1922' (p. 368) - the Universities Act, 1997 was introduced (Ireland. *Universities Act 1997*). This legislation introduced a statutory institutional framework for universities in Ireland - including the four constituent colleges of the newly reconstituted National University of Ireland (Cork, Dublin, Galway, and Maynooth), University of Dublin (Trinity College), and Dublin City University and University of Limerick, formerly NIHE Dublin and NIHE Limerick, respectively, that were established as universities by statue in 1989 - and it 'redefined the relationship between universities and the state' (Walsh, 2018, p. 368). This included recognition of the universities' right to operate, and their staff to carry out their roles, in accordance with traditional principles of institutional autonomy and academic freedom, but within the context of a requirement for greater accountability and other obligations including those related to strategic planning, quality assurance, staffing, and 'implicitly, responsiveness to national priorities', as well as a greater regulatory and monitoring role for the Higher Education Authority (HEA) (pp. 368-369).

Almost 20 years later, in 2018, the Technological Universities Act, 2018 (Ireland. *Technological Universities Act 2018*) set out a process whereby consortia of IoTs could be designated as TUs in a new model of university that would be focused on 'vocationally and professionally' oriented science and technology programmes, leading to awards up to level 10 on the NFQ, and on industry-focused research, as a means of addressing the social and economic needs of their regions (HEA, nd (TUs)). Five TUs have been established since 2019, and two IoTs are still operational.

Over time, and particularly following the global financial crisis in 2008 and a parallel drive for internationalisation in higher education and recognition in global university ranking systems that prioritise research activity, Irish HEIs, particularly the universities, increasingly needed to attract

international students and other sources of funding in their 'struggle for survival in a pitiless global marketplace' (Walsh, 2018, p. 392). Inadequacies in public funding for HEIs are ongoing and the subject of much debate (IUA, 2022, 2023; THEA, 2022, 2023), particularly with respect to the Government's policy document on funding the future of higher education in Ireland which committed to increasing funding for HEIs and reducing the cost of education to students (DFHERIS, 2022b).

2.2.2 Development of modern apprenticeship in Ireland: time served to standards-based

Up to the 1990s, Ireland's industrial relations system largely reflected its origins in the system in place in the UK before Ireland achieved independence in 1922 (von Prondzynski, 1992, p. 70). Ireland's apprenticeship system had a similar genealogy, and up to the 1990s Ireland's apprenticeship policy largely mirrored the UK's. In the 1980s the Irish apprenticeship system was 'like its UK counterpart…..an archaic, publicly unregulated and declining institution, restricted mostly to craft occupations in industry and construction, that certified apprentices according to time served rather than vocational competence' (Ryan, 2000, p. 59). The Department of Labour's 1986 White Paper on Manpower Policy stated that apprenticeship in Ireland at that time was 'costly, inefficient and inflexible' and that a directive had been issued for the system to be revised and modernised so that it would

> [be] based on standards achieved rather than time served; ensure a satisfactory balance between supply of and demand for apprentices; reduce the financial cost to the State while maintaining quality (Department of Labour, 1986, p. 30)

Starting with a formal review of apprenticeship that commenced in 1988 and leading to the introduction of a new standards-based apprenticeship system in 1993, fundamental reform of the Irish apprenticeship system culminated in a system that linked apprenticeship to the formal education system for the first time, further developed social partnership to support apprenticeship design and administration, and, very significantly, underpinned it all with a State-regulated statutory framework (Ryan, 2000, p. 62). The State in turn delegated statutory responsibility for apprenticeship at this time to the National Training and Employment Authority (FÁS, an Foras Áiseanna Saothair) which reported to the Department of Enterprise, Trade and Employment (O'Connor, 2006, p. 35).

This fundamental reform saw a movement away from the UK model in that it embodied 'continental' principles including '*mandatory educational content*, *joint regulation of work-based training*, and *full public funding of the institutional costs of part-time education and training conducted away from the workplace*' (Ryan, 2000, p. 59; italics added). It also involved a reduction of

employers' control over their apprentices, because, as noted by Ryan, as well as integrating apprenticeship into the national education system, another function of the statutory regulation of apprenticeship is to regulate the on-the-job element 'where the individual employer might otherwise play an exclusive role' (p. 54). The package of statutory regulation and reform was designed therefore not only to ensure training standards but also to increase employer and trade union buy-in (p. 60) and it represents a momentous re-calibration of relative control over aspects of apprenticeship between employers, employee (apprentice) representatives, and the State.

The 1993 reform of apprenticeship in Ireland took place in the broader context of the influence of the European social policy environment along with European Social Fund subsidies for training, the Irish Government's wish to increase national skills and attract more foreign investment, and social partnership agreements (Ryan, 2000, p. 60). The social partnership agreements ultimately led to the setting up of the National Apprenticeship Advisory Committee with representatives of education, employers, and unions to steer the new apprenticeship initiative (Nyhan, 2009, p. 462). According to Field and o dubhchair (2001) it was in the context of this consultative social dialogue that apprenticeship training first became part of the debate (p. 251). This dialogue included 'hard fighting' between employers and education to gain control of the new apprenticeship programme 'in accordance with their traditional positions'; employers, for example, who supported the new system, argued that 'the state should pay for it but that they (employers) were the best people to control it' (Nyhan, 2009, p. 462). In the end, however, the National Training and Employment Authority 'won the battle' with employers and education to gain the leadership role in the design and implementation of the standards-based craft apprenticeship programme, apparently helped by the 'major part played by the Department of Enterprise and Employment in conjunction with members of the active market coalition from different quarters' and the FÁS Board (p. 463).

As later noted by the Department of Education and Skills (DES), the statutory basis for the education of apprentices, as set out in Section 32 of the Industrial Training Act 1967 (Ireland. *Industrial Training Act 1967*) gave FÁS responsibility for making arrangements for the provision of that education - 'courses of instruction in the nature of technical education' - by the VECs as well as requiring apprentices to avail of that provision and requiring employers to release apprentices from their duties for this purpose (DES, 2013b, pp. 8-9). In addition, it noted that because the IoTs were initially part of the VEC structure - in the form of the original technical institutes - and the colleges of further education continued to be part of that structure, both the IoTs and the colleges of further education would be 'key actors in determining the suitability of the nature and type of instruction in agreement with FÁS'. In this way the joint provision of education for apprentices was allocated to both the further education colleges and the IoTs on behalf of FÁS, with FÁS being titled the 'first

named provider' and the further education colleges and IoTs titled the 'second named provider' in the 1999 Qualifications (Education and Training) Act (pp. 8-9). This model of provision involving both the further education colleges - now ETBs in the FET sector - and the IoTs and now also TUs in the higher education sector - continues to the present for craft apprenticeship, and these providers now provide all the off-the-job element of apprenticeship to craft apprentices, on behalf of SOLAS.

The new standards-based apprenticeship system for craft apprenticeship was introduced on a phased basis from 1993 to 1995 (O'Connor, 2006, pp. 34-35). A further framework agreement which featured an extension in the number of primarily construction-related 'trades' or occupations included in the new apprenticeship system was finalised in 1994 (Field and o dubhchair, 2001, p. 251). In this new system, which had taken over 20 years of work (p. 250), the employer paid the apprentice wage for the on-the-job element; the State, via the National Training and Employment Authority, paid a training allowance for the off-the-job element; employers also contributed to the overall scheme via a 0.5% levy on payroll; and the State paid for off-the-job training facilities and other resources.

In summary, issues related to supply and demand, cost, quality, and control underpinned the formal review of apprenticeship that commenced in 1988 and culminated in a fundamental reform of Irish apprenticeship with the phased introduction of a new standards-based system in the 1990s. Critically, this tied apprenticeship closely to the formal education system and it included regulation of the work-based training element and public funding of the off-the-job element of apprenticeship.

Over time apprentice registrations reached a then all-time high during the 'Celtic tiger' era in Ireland, with the overall apprentice population participating in standards-based (and not time served) apprenticeship reported to have reached over 20,000 in each of the years between 1999 and 2007, and almost 30,000 in each of the years between 2005 and 2007, before starting a downward trend in 2008 at the beginning of the global economic crisis and into subsequent years of the 'financial crash' in Ireland (DES, 2013b, p.6).

2.2.3 Conclusion: historical foundations and development of standards-based apprenticeship

The development of the formal national education system including a formal national apprenticeship system in Ireland has been characterised by efforts to gain or maintain control over different aspects of those systems by different parties, including the Church, the State, and employers, over time. Terms such as conflict, control, cost, quality, and compromise feature in much of the literature, as does the concept of a binary education system and associated perceptions of relative superiority and inferiority.

The national statutory apprenticeship system that evolved within this context was characterised by increasing State intervention in the form of a standards-based apprenticeship system that included regulation of the work-based element and public funding of the off-the-job element delivered by providers in FET and higher education, along with requirements associated with an emerging national quality and qualifications infrastructure.

In January 2011, almost two decades after implementation of standards-based apprenticeship, the Minister for Education and Skills signalled an intention to undertake another major review of the apprenticeship system (DES, 2011, p. 49), and, in May 2013, a review was commissioned to determine if the standards-based model should be retained, adapted, or replaced. This 2013 review formed the basis for the subsequent introduction of a consortium-led model of apprenticeship, which now forms a key part of 'an employer-led demand model' of apprenticeship (Joint Committee on Education, Further and Higher Education, Research, Innovation and Science, 2024, p. 7). **See Table B1.1 in Appendix B,** *Key features of statutory apprenticeship in Ireland end 2023*, which provides a summary comparison of the key features of the standards-based (craft) and consortium-led models of apprenticeship.

This decade between circa 2011 and 2021 represents the most recent period of significant change in the development of apprenticeship policy and practice in Ireland, and its evolution during this period is considered in the next section.

2.3 Re-imagining apprenticeship 2011-2021: a new model of apprenticeship

In this section the development of recent apprenticeship policy and practice in Ireland, between circa 2011-2021, is outlined. This period broadly equates to the decade that started with the first formal announcement of plans to again review the national apprenticeship system and the end of the first Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020, just before publication of a new Action Plan for Apprenticeship 2021-2025.

This section also presents evidence of some of the issues, influences, actors, actions and outcomes involved during this period. It draws on the stages in the 'cycle or process model' of public policymaking as described by and summarised from Howlett and Cashore (2014) - agenda-setting, policy formulation, decision-making, policy implementation, and evaluation of progress - as a means of presenting this. Some evidence of 'struggle and compromise and *ad hocery*' (Ball, 1993) in the process is also presented, and evidence of the growing influence of the perceived need for greater flexibility, responsiveness to labour market needs, and numerical targets, in the evolution of apprenticeship in Ireland.

2.3.1 Review of Apprenticeship Training in Ireland

As noted, the formal review of apprenticeship that commenced in 1988 culminated in a fundamental reform of Irish apprenticeship that linked apprenticeship more closely to the formal education system and heralded the phased introduction of a new standards-based apprenticeship system between 1993 and 1995.

A 'crisis in vocational training' (Thoma, 2016, p. 52) as well as associated concerns related to on-the-job quality assurance, the limited number of sectors involved, and the high cost of apprenticeship (p. 56) were among the triggers for another review of apprenticeship which commenced two decades later, in May 2013, to determine if the standards-based model should be retained, adapted, or replaced. At this stage the Irish economy had been in recession for nearly five years, the reliance of the apprenticeship system on the construction industry along with the collapse of that industry had led to there being 'more unemployed than employed apprentices in Ireland' in 2010, so the review was not before time (Ó Murchadha and Murphy, 2016, pp. 385-386).

2.3.1.1 Agenda-setting

In May 2013 a Review Group was appointed to examine the future of apprenticeship in Ireland, particularly in light of the difficult economic environment, ongoing reforms in FET, and the need for alignment with the needs of the labour market (DES, 2013a, p. 131). The Group would be made up of 'academic, business, and employee interests' and it would 'consult widely with training providers, trade unions and employer representatives'. The ensuing membership of the Group, aside from the Chair, was consequently made up of two academics, based in schools of economics; four employer representatives; and one trade union representative (DES, 2013a, p. 22). The absence on the Group of academics - or any other type of professional - from education or training disciplines is notable. The Review Group did have a Technical Group to support its work, however, which comprised representatives from FÁS (3), HEA (3) and DES (2), including the Secretary to the Review Group who was also the Chair of the Technical Group.

A Background Issues Paper was published in May (DES, 2013b) followed by a 'consultation framework' in June (DES, 2013a, pp. 140-151). The Paper, prepared by the Technical Group, provided a context for the review. It and the associated consultation framework were comprehensive, seeking detailed views on key areas such as funding, recruitment, providers, curriculum, delivery, assessment, expansion into other sectors, equity, and impact on the economy. The agenda for the review was therefore well and truly set by the time the announcement was made in May 2013, although there was the potential for this to be influenced further in the consultation process.

The Review Group invited submissions from 128 organisations, placed a public advertisement in national newspapers inviting submissions from any other interested parties, and received approximately 70 written submissions. Representatives of the Review Group and the Technical Group also held meetings with 25 organisations with an actual or potential role in apprenticeship in Ireland (DES, 2013a, p. 5).

2.3.1.2 Policy formulation

In this second stage of the process, during which options or possible actions are formulated (Howlett and Cashore, 2014), the key actors were those 'academics, business, and employee interests' appointed to the Review Group by the Minister, and their considerations concluded with a comprehensive report that made some far-reaching recommendations, underpinned by a commitment to partnership and collaboration.

One recommendation, relating to the cost of apprenticeship, gives some insight into the likely 'struggles' encountered, and 'compromise' reached. Despite the Group noting that 'employer organisations were adamant that employers could not absorb more costs' (DES, 2013a, p. 21), it nonetheless recommended that, in a departure from the existing scheme, in the proposed new apprenticeship model 'the on-the-job costs should be borne by the employer, together with the apprentice's wage costs for the entire duration, to the maximum extent feasible' (p. 112). This recommendation was clearly not in accordance with employers' demands, but the reference to 'to the maximum extent feasible' is notable. In addition, the Group recommended that recruitment of apprentices would continue to be the responsibility of employers (p. 114), meaning that they would largely retain control of that element of the process.

The subsequent Implementation Plan (DES, 2014a) did not make specific reference to the issue of full wage costs being 'borne by the employer' or to the 'maximum extent feasible', but rather noted that the key recommendations made by the Review Group included the 'requirement that apprentices should continue to be paid both on and off the job with no reduction in earnings during periods spent in education and training institutions' (p. 3).

These issues of costs are ongoing, and they are referenced further in sections on the policy implementation and evaluation stages below.

2.3.1.3 Decision-making

The Minister for Education and Skills considered and 'accepted the thrust of the Review Group's recommendations and asked the Department to develop an Implementation Plan', albeit on foot of further consultation with key stakeholders (DES, 2014a, p. 4). The Plan was published in June

2014. This, in effect, represented the Government's new national policy on apprenticeship in Ireland. It was incorporated into the Action Plan for Education 2016-2019 which included global targets - 100 new apprenticeship 'schemes' and 31,000 apprenticeship places by 2020 - and a pledge to develop a 'roadmap' to deliver on these commitments (DES, 2016a, p. 46). The Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020, published in 2017, was this roadmap (DES, 2017a). This also included the specific annual targets relating to the number of apprenticeship participants and programmes (number of programmes reduced from 100 to 67), as well as associated actions. The basis for the targets, in either document, is not clear.

This review of apprenticeship and Implementation Plan were part of a wider programme of reform in the FET sector and it represented 'one of the most fundamental changes to apprenticeships in Ireland's history' (Thoma, 2016, p. 55). The key changes included that apprenticeships would now lead to awards on the NFQ from levels 5 to 10 (not level 6 only), the duration would be between 2 and 4 years (not 4 years mainly), apprenticeships would be developed in a wide range of sectors (not only or primarily in construction-related areas), they would be steered by industry-led consortia of industry and education partners (not SOLAS) with new governance arrangements and models of delivery, and the employer would now pay the apprentice's wages for the entire apprenticeship, including for the off-the-job element (Generation apprenticeship, 2024b, p. 5). SOLAS, the further education and training authority established in 2013 after the disbandment of the National Training and Employment Authority, would retain the role of statutory and regulatory authority for all apprenticeship. Along with previously identified issues relating to quality, cost, and control, therefore, the goals of greater flexibility, greater responsiveness to labour market needs, and of focusing and reporting on numerical targets were increasingly crafting the story of apprenticeship policy in Ireland. Subsequent iterations of the Government's policy around that time in relation to apprenticeship emphasised that the underpinning purpose of growing apprenticeship, through the development of new programmes and increased participation in existing ones, is to meet identified skills needs (for example, DES, 2019, p. 37).

The role of national numerical targets in driving and reporting on apprenticeship activity in Ireland was new, and it was in keeping with international and national developments in education. In this regard, Lingard's perspective on the 're/emergence' and dominance of 'policy as numbers' in contemporary education policy is potentially of interest: he is of the view that a number of factors, including the 'dominance of the neo-liberal social imaginary' have led to a situation where 'numbers have almost substituted for values' in public education policy (Lingard, 2011, p.378). While it is open to further consideration and research as to whether and to what extent this assessment might apply

to apprenticeship (and/or other aspects of Government policy in Ireland) - and it is considered further in Chapter 6 (Discussion) - it is noted at this point as an indicator of a particular perspective on the matter.

2.3.1.4 Policy implementation - implementation of new consortium-led model of apprenticeship

The Apprenticeship Council was launched in November 2014. Its establishment was considered to be a key element in the implementation of the review recommendations and in the expansion of apprenticeship into new sectors of the economy; its membership was 'drawn from Employers, Trade Unions, Government and relevant state agencies' and it was tasked, in particular, with the expansion of apprenticeship into new sectors of the economy (DES, 2014b).

The Apprenticeship Council submitted a report to the Minister for Education and Skills in June 2015 which included an update on the process and outcome of the first public call for new apprenticeship proposals that had resulted in 86 submissions (DES, 2015). These were assessed by a panel that included representatives of DES, the HEA and SOLAS, and a total of 25 new apprenticeships were proposed for immediate further development, while a further 35 needed further work before a recommendation could be made. In July 2015 the 25 proposals were approved by the Minister for Education and Skills. A further 26 were approved in December 2017 following another public call for proposals that year (DES, 2017b).

At this point it should be noted that at this time SOLAS played, and, at end 2021 and to the present (end 2024), continues to play, several roles specifically related to apprenticeship in Ireland:

- in its role as the statutory and regulatory authority for apprenticeship in Ireland, and in conjunction with its network of Authorised Officers, SOLAS *designates* and *regulates* all apprenticeship in the national apprenticeship system, in both the further and higher education sectors
- as a QQI-approved provider, SOLAS *is responsible for all* craft apprenticeship
- as a key stakeholder in FET and craft apprenticeship in Ireland, SOLAS *collaborates* with other stakeholders to inform and steer the development of the national apprenticeship system
- as the further education and training authority, SOLAS *funds, monitors and coordinates* all apprenticeships and most other provision in the FET sector
- SOLAS was a member of the Apprenticeship Council as well as providing the secretariat for the Council, and it was and continues to be a member of the National Apprenticeship Advisory Committee (NAAC) which advises the Board of SOLAS on craft apprenticeships in place prior to 2016

Apart from information issued at the launch of the Apprenticeship Council regarding its remit as well as the Council's report to the Minister in June 2015 and supporting documentation for the second call for proposals in 2017, however, there is very limited information available publicly relating to the actual workings of the Apprenticeship Council or the apprenticeship system during this time and during the lifetime of the Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020. High-level information on the number and status of new apprenticeships, largely with respect to national-level targets, was largely communicated publicly in responses to parliamentary questions or in Ministers' speeches or announcements in DES press releases. The Council published a Review on Pathways to Apprenticeship in 2018 which included targets for female participation and a commitment to set targets for other underrepresented groups (SOLAS, 2018, p. 13), but it did not subsequently publish annual or other publicly available formal reports relating to its activities or opinions as a Council or the operation of the new apprenticeship system.

There is therefore no information available on the Council's workplan, meetings, debates, or decision-making processes at those meetings, and little on how it aimed to, could, or did inform policy, particularly in the absence of the underpinning legislative basis initially envisaged for both the Council and the apprenticeship system itself (DES, 2014b).

In this context, statements from individual organisations represented on the Council, as articulated in publicly available records, and other related developments, provide a source of information on the implementation and then status of apprenticeship policy in Ireland, as well as its then possible future direction. These sources include communications to and at the November 2018 meetings of the Joint Oireachtas Committee on Business, Enterprise and Innovation discussing Ireland's skills needs (Joint Committee on Business, Enterprise and Innovation, 2018a, 2018b) and the Joint Oireachtas Committee on Education and Skills discussing the uptake of apprenticeships and traineeships, (Joint Committee on Education and Skills, 2018a, 2018b), as well as the results of a review of participation and costs of apprenticeships undertaken by the Department of Public Expenditure and Reform.

Statements made to the two Oireachtas Joint Committees provide some indication of the then implementation and possible future direction of apprenticeship policy at the time, and they include the following (the organisation making the statement is highlighted in bold):

> The development of new apprenticeships has been underpinned by a broad level of consensus among the various players (**Irish Congress of Trade Unions**); with streamlined employer support, a focus on simplifying the interpretation of the regulations, a re-visit of the recruitment targets…..and a targeted public awareness campaign, the model can be enhanced to reach its full potential (**Technological Higher Education Association (THEA)**). (Joint Committee on Business, Enterprise and Innovation, 2018a, 2018b)

Apprenticeship programmes have taken longer to get off the ground than originally envisaged and registrations on new apprenticeships are approximately a year behind the targets set in the Action Plan; female participation in apprenticeship remains low, and recovery in numbers on craft apprenticeships has not been evenly spread across all trades; an additional €27 million has been allocated in Budget 2019, a tangible commitment to these programmes at a time when there are many competing demands for investment in education and training (**DES**); the cost of funding off-the-job wages for apprentices involved in the new consortium-led model of apprenticeship, plus travel and subsistence costs where necessary, should be supported through the National Training Fund (**Irish Business Employers Confederation (Ibec)**). (Joint Committee on Education and Skills, 2018a, 2018b)

In July 2017, a review of the National Training Fund (NTF) was announced along with the announcement that there would be an incremental annual increase of 0.1% in the NTF levy, bringing employers' contributions from 0.7% to 1% over the period to 2020. The Minister also announced at this time that employers would have a greater role in informing the priorities of the National Training Fund. As noted by THEA in its submission to the review, the terms of reference for the review already suggested 'a number of the actions that were likely to emerge' (THEA, 2018).

The NTF review report was published in August 2018 (DES, 2018a), followed by an Implementation Plan which the Minister had asked his officials to prepare (DES, 2018b). This process of commissioning a review, consulting with stakeholders, and preparing a plan on foot of this, mirrored to some extent the approach taken in the 2013 apprenticeship review and subsequent Implementation Plan process.

In the event, the NTF Plan aimed to support implementation of most of the recommendations from the NFT review. These included reform of the future direction of the NTF to include more targeted programmes related to 'close-to-labour market skill requirements', more - and more focused - expenditure on programmes relevant to employers, more input from employers and greater alignment of the Fund with their needs, greater transparency and evaluation, and new funding models in higher and further education and training based on performance agreements that would be aligned with national, regional and local priorities. Developments in relation to the NTF are of interest also as they provide evidence of compromise between the State and employers - i.e. increased financial contribution from employers in return for potentially greater input and control in how it is used.

As noted, the new model of apprenticeship in Ireland was announced in June 2014, and the first of the new apprenticeships were approved for further development in July 2015 following a public call for proposals. The first apprenticeship action plan was not published until January 2017, however. The handbook for Developing a National Apprenticeship was published in May 2017 along

with guidance relating to the second (2017) call for proposals. Apprenticeship-specific quality assurance guidelines were issued by QQI in June 2016. At end 2021, following publication of a new Action Plan for Apprenticeship 2021-2025, the underpinning legislative and regulatory apparatus had not yet been put in place.

This means that at the time, when the new model of apprenticeship was first introduced, all involved initially were operating within a realm of relative unknowing, dealing with questions and challenges as they arose, learning as the work progressed, and effectively, to some extent at least, 'muddling through' so to speak and operating in a scenario of *ad hocery* (Ball, 1993, p. 16) to varying degrees.

According to Fullan, 'ambitious projects are nearly always politically driven' and so the 'the time line between the initiation decision and start-up is typically too short to attend to matters of quality' (Fullan, 1991, p.72). Furthermore, as Bowe *et al*. (1992) suggest, this situation may lead to perceptions among politicians and others of 'weaknesses or resistance of those burdened with the tasks of changing' (p. 2). While this perception is not necessarily the case in relation to the challenges initially encountered in implementing new apprenticeships, as indicated by the public statements and comments by individual members of the Apprenticeship Council to various fora already discussed, it is clear that the early development and promotion of the new model of apprenticeship and new apprenticeships involved many challenges. As noted by Ibec, for example, in its statement to the Joint Committee on Education and Skills in November 2018

> The landscape around the development and promotion of apprenticeships is extremely fragmented with multiple actors….. These include the Department of Education and Skills, the Higher Education Authority, Quality and Quality Assurance Ireland, two apprenticeship advisory committees, education and training boards, higher education institutions, industry groups and trade unions. (Joint Committee on Education and Skills, 2018c)

2.3.1.5 Evaluation of progress

As noted, publicly available information on the number and status of new apprenticeships, particularly in relation to targets in the apprenticeship Action Plan 2016-2020, was mainly limited to responses to parliamentary questions or in Ministers' speeches or announcements in DES press releases. In addition, while the targets in the plan extended to 2020, the actions in it extended only to the first quarter of 2018. This was on the basis that a formal review of the plan was due to take place at the end of 2017, including a review of the annual targets in the plan, and an updated action plan to end 2020 was to be agreed. This did not happen however, and while there were indications that the Apprenticeship Council did embark on a form of review at a later date, it is not clear exactly what was reviewed, by whom, in what timeframe, how, or with what results.

The Department of Public Expenditure and Reform undertook a review of participation and costs of apprenticeships, based on a desk-based quantitative analysis of data, and it published the results in July 2019 as part of the Government's 2019 Spending Review (Department of Public Expenditure and Reform, 2019). Among the key trends and features reported were significant expenditure in apprenticeships by the Exchequer and the NTF, low uptake of the new apprenticeships and associated new apprentice registration targets not having been met, strong growth in craft apprentice registrations such that 'aggregate targets' had been met - as also subsequently reported in the 2020 Consultation Paper to inform the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2020a) - but overall apprentice registrations nonetheless low compared with a decade previously when registrations on craft apprenticeships were particularly high due to the boom in construction during the 'Celtic tiger' era.

Among the key findings reported were that assessing the cost of apprenticeships was difficult, partly due to inadequacies and inconsistencies in the collection of data, and that potential mismatches between current and future workers' skills and those of the economy should be minimised. The review recommended that in order to support 'proper evaluation of policy interventions to determine their effectiveness and efficiency' (Department of Public Expenditure and Reform, 2019, p. 24), a consistent approach to data collection and annual publication of specified data should be implemented by DES, the HEA and SOLAS (p. 24) and a formal evaluation of new apprenticeships 'including value for money and cost effectiveness' should be undertaken in order to inform the next action plan for apprenticeship (p. 25). There is no record of this evaluation, or annual or other publication of other specified data having taken place.

A financial incentive scheme for employers to take on apprentices was launched in August 2020. A grant scheme was also subsequently introduced in January 2022 to encourage employers to employ apprentices on new apprenticeships established since 2016. This meant that associated financial subsidies were potentially available to all apprentice employers, not just to employers of craft apprentices who receive subsidies in the form of allowances, paid by the State to craft apprentices, during the off-the-job training phases of their apprenticeships.

2.3.2 Action Plan for Apprenticeship 2021-2025

Legislation was published by the Government in July 2020 to establish the new Department of Further and Higher Education, Research, Innovation and Science (DFHERIS), which, in accordance with commitments set out in the Programme for Government, was charged with progressing the development of a new apprenticeship action plan. A consultation paper on the proposed new action plan was published in July 2020.

The Department also issued a process for consultation on a proposed departmental Statement of Strategy 2021-2023 in December 2020 (DFHERIS, 2020b). The consultation period extended from 02 December to 18 December (2 weeks), and responses to two questions were invited relating to the Department's policies and challenges in the context of the needs of the Further and Higher Education, Research, Innovation and Science sector. Submissions were received from nine Government departments, including DES; some 80 submissions were received from organisations, including SOLAS and the HEA, and from over 20 individuals; and a summary of the themes that emerged on foot of an analysis of submissions was also published (DFHERIS, 2021b).

In contrast, the consultation period for submissions on the proposed new apprenticeship action plan extended from 31 July 2020 to 18 September 2020 (almost 2 months) and contained a total of 29 questions on specific issues such as the definition of apprenticeship, legislation, governance structures, development and delivery of apprenticeships, funding, supports for employers, and increasing participation (DFHERIS, 2020a). Some 64 discrete publicly available submissions to the consultation were received, including some joint submissions. These do not include submissions from any Government department, or from SOLAS or the Higher Education Authority. The submissions that were received also formed the basis for further discussion with stakeholders to develop the actions and timeframes for inclusion in the Action Plan for Apprenticeship 2021-2025 though no information is publicly available about these discussions.

The written submissions were further supplemented with feedback from SME employers through the Regional Skills Fora and through feedback from 3,700 apprentices in response to a questionnaire issued to apprentices by SOLAS. A presentation of findings from the consultation process at a webinar hosted by DFHERIS in November 2020 was structured with reference to the written submissions, employer feedback via the Regional Skills Fora, and the apprentice survey (DFHERIS, 2020a).

Key messages that were reported to have been identified in the submissions included the need to communicate a more attractive and accessible definition of apprenticeship; provide supports for SMEs, apprentices, and underrepresented groups; and make it easier to engage with the apprenticeship process. Challenges identified included the complexity of the governance model; lack of awareness (among potential employers and apprentices); the timeframes and processes involved, and costs associated with the consortium-led model.

Data relating to programmes and new apprentice registrations and apprenticeship populations for craft and new consortium-led apprenticeships between 2015 and 2019, and data relating to targets and actual numbers of programmes and new apprentice registrations between 2016 and 2020 (actual to June in 2020), were also reported in the 2020 Consultation Paper to inform

the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2020a). These data show targets for new apprentice registrations on craft apprenticeships being exceeded in each year between 2016 and 2019, and significant underachievement of registration targets for consortium-led apprenticeships in these years.

The Action Plan for Apprenticeship 2021-2025 was published in April 2021. The plan contains commitments to building on the structures in place to create a single apprenticeship system. Among other commitments are new supports for employers and apprentices and increased participation in apprenticeship by underrepresented groups, as well as a target of 10,000 new apprentice registrations per annum by 2025.

A National Apprenticeship Office (NAO) was set up in 2022 'jointly by SOLAS and the Higher Education Authority on behalf of Government' which, 'when fully established…..will have responsibility for all aspects of the management, oversight and development of the apprenticeship system and for implementing the Action Plan for Apprenticeship 2021-2025' (Generation apprenticeship, 2024c, p.7). A National Apprenticeship Alliance (NAA) was also set up to replace the Apprenticeship Council and to represent apprenticeship stakeholders and provide guidance and advice to the National Apprenticeship Office. Terms of reference have been published for the Alliance (Generation apprenticeship, 2024a). During this time, and currently, the craft model of apprenticeship continues to be operated separately by SOLAS, in its role as the organisation responsible for the provision of all craft apprenticeship.

The establishment of the NAO potentially changes some of SOLAS's statutory, regulatory and other roles in relation to apprenticeship, as does the commitment in the Action Plan for Apprenticeship 2021-2025 to the development of a single integrated national apprenticeship system in relation to SOLAS's role in the provision of craft apprenticeship. Amendments to the underpinning legislative, regulatory and governance apparatus for these new arrangements are likely to be required.

2.3.3 Conclusion: re-imagining apprenticeship 2011-2021

Significant progress has been made on the development and implementation of the sizeable national change project that is the modern apprenticeship system. As noted in the Action Plan for Apprenticeship 2021-2025, the number of apprenticeship programmes grew to 60 (25 craft and 35 new) between 2016 and 2020, female participation in apprenticeship grew from 26 in 2015 to over 1,000 at end 2020, and the apprenticeship population more than doubled to 19,630 at end 2020 compared with end 2015, largely as a result of growth in craft apprenticeship. In addition, over €620m was invested in apprenticeship between 2016 and 2020, and investment in apprenticeship

via the NTF grew from almost €75m in 2016 to €200m for 2021. At the beginning of 2021 a range of new programmes were in development and an ongoing open process was in place for submission of new apprenticeship proposals.

The recent story of apprenticeship in Ireland nonetheless also includes that it has evolved slower than anticipated. The story has been underpinned by a commitment to the principle of partnership and collaboration among key stakeholders, and, in addition to previously identified issues relating to quality, cost, and control, more recent considerations such as flexibility in the system, responsiveness to labour market needs, more representative participation, and numerical targets, have been articulated in the Action Plan for Apprenticeship 2021-2025. The relative dearth of data and information on the evolution of the apprenticeship system in the previous period appears to be a significant gap however in terms of providing evidence of the basis on which that evolution may or may not have been informed.

As noted, publicly available information and academic research on apprenticeship in Ireland generally is scarce. In the context of this relative dearth of information and research, high-level data that are publicly available on apprenticeships leading to higher education awards are examined in the next section to provide some insight into current apprenticeship activity at end 2023.

2.4 Apprenticeship activity in higher education at end 2023 - an examination of demand

This section presents an examination of high-level data on activity at end 2023 relating to current and in-development apprenticeships that lead to higher education awards. These data provide an indication of reported demand for apprenticeships leading to higher education awards at different levels on the NFQ and in different industries, and of apprentice participation in these apprenticeship programmes since 2019.

2.4.1 Current apprenticeship coordinating providers

At end 2023 a total of 73 apprenticeships were listed as 'current' apprenticeships, including 48 consortium-led apprenticeships (Generation apprenticeship, 2024e). This means that 48 consortium-led apprenticeships had progressed through the 10 steps in the national apprenticeship development process between 2016 and 2023, and, at least in principle, were officially 'operational' in the sense of having been designated as a statutory apprenticeship by the statutory and regulatory authority for apprenticeship in Ireland, SOLAS, and therefore open for statutory employer approval and statutory apprentice registration by SOLAS. A further 22 new apprenticeships were listed as being 'in development' at end 2023 - that is, at various stages of development and not yet open for employer approval and apprentice registration by the statutory and regulatory authority for

apprenticeship (**see also Table A1.2 in Appendix A,** *HEI coordinating providers of new apprenticeships May 2023* and **Table B1.3 in Appendix B,** *Coordinating providers of new apprenticeships leading to HE awards May 2023 and December 2023,* **for further details***).*

Reports on apprenticeship activity in Ireland show that demand to date for consortium-led apprenticeship in the higher education sector, as expressed in the number of current apprenticeships leading to higher education awards officially listed on the national apprenticeship website at end 2023, is primarily from the technological universities.

Of the 30 consortium-led apprenticeships being led by eight HEIs at end 2023, five of these HEIs are TUs, one is a university, and two are 'independent' HEIs (one not-for-profit and one private).

The five TUs are coordinating providers for 18 (60%) of HEI-led apprenticeships; the university is coordinating provider for seven (23%); and the two independent providers are coordinating providers for five (17%) HEI-led apprenticeships.

This means that at end 2023, only one of Ireland's eight universities is involved in new apprenticeship, in any capacity - coordinating and/or collaborating provider - in any of the 48 current new apprenticeships. This university is the coordinating provider for a total of seven apprenticeships (previously eight, one having been transferred to another HEI to assume the coordinating provider role), representing 15% of all 48 current new apprenticeships, and representing almost one-quarter of the 30 current new apprenticeships being led by HEIs, the most of any coordinating provider, either in FET or higher education, in the consortium-led apprenticeship system.

According to the NAO 2023 Progress Report (NAO, 2024), there were 143 new apprentice registrations in 2023 on these seven programmes (including two programmes on which there were no new apprentice registrations that year). This represents 15% of the 972 new apprentice registrations on 34 programmes leading to higher education awards in 2023 (i.e. including State agency Teagasc-led apprenticeship programmes) and 16% of the 902 new apprentice registrations on 30 HEI-led apprenticeships programmes (i.e. excluding Teagasc) that year.

2.4.2 Current apprenticeship level of awards, apprenticeship categories, and occupations

Reports on apprenticeship activity in Ireland also demonstrate a difference between the universities and TUs when considered with respect to the demand to date for consortium-led apprenticeship in the higher education sector as expressed in the number of apprenticeship programmes leading to awards at different levels on the National Framework of Qualifications (**see Table B1.4 in Appendix B,** *Current new apprenticeships led by HEIs December 2023).*

The 30 HEI-led apprenticeships lead to awards at levels 6 to 10 on the National Framework of Qualifications. Most lead to awards at levels 6, 7 or 8, and all but three of the 18 apprenticeships being led by TUs lead to awards at levels 6 or 7. Most of these current apprenticeships were developed several years ago, at a time when individual IoTs were responsible for the apprenticeship proposals and development of the apprenticeships in question, and the TUs had not yet been established. Apprenticeships leading to awards at levels 9 and 10 are being led by the one university involved in current consortium-led apprenticeships.

Data on apprenticeship activity show that the profile changes somewhat with respect to apprenticeships that are at various stages of development and therefore based on more recent proposals for new apprenticeships. At end 2023, eight of the 13 HEI-led apprenticeships in development (over 60%) will be led by three TUs, and five apprenticeships (almost 40%) will be led by three universities. Most of the 13 HEI-led in-development apprenticeships (almost 70%) are expected to lead to awards at levels 8 or 9 on the NFQ, with the remaining 30% leading to awards at levels 6 and 7. **See Tables B1.5, B1.6 and B1.7 in Appendix B,** *New apprenticeships in development with proposed HEI coordinating provider,* **for further details***.*

2.4.3 Apprentice participation in current apprenticeships

Apart from the number of current and in-development apprenticeship programmes, however, the demand to date for consortium-led apprenticeship in the higher education sector, or apprenticeships leading to higher education awards, can be gauged also to some extent with reference to the number of participants - apprentices and employers - participating in these apprenticeship programmes annually.

While there may be specific industry requirements or other capacity constraints in terms of numbers of apprentices participating in some apprenticeships, apprentice registration data for consortium-led apprenticeships between 2019 and 2023 (NAO, 2024) do show that relatively high apprentice registration figures have been consistently reported for some apprenticeships (for example, Insurance Practitioner, level 8 on the NFQ). Relatively modest but steady or incrementally increasing apprentice registration figures have been reported for some other apprenticeships (for example, Manufacturing Technology level 6 and Manufacturing Engineering level 7), and relatively low figures have been consistently reported for some other apprenticeships. In addition, some apprenticeships are reported to have had very low or no apprentice registrations for several years.

2.4.4 Conclusion: apprenticeship activity in higher education - an examination of demand

Parts of the higher education sector, and some HEIs, have been quicker than others to engage in new apprenticeship, and in particular occupations, such as those categorised under 'Engineering', with varying degrees of success when considered with reference to the one key metric on which data are published annually, that is new apprentice registrations on individual apprenticeships. This analysis of apprenticeship activity also confirms trends with respect to the TUs' move to offer apprenticeship programmes that lead to higher levels on the NFQ, and in areas traditionally perceived to be the preserve of the universities, such as Civil Engineering, as well as potentially greater engagement by universities in apprenticeship in the future. Of note also in relation to the changing landscape of apprenticeship in the higher education sector is the proportion of consortium-led apprenticeships - one-fifth of the HEI-led apprenticeships at end 2023 - being led by independent HEIs, including one private higher education institution.

2.5 Conclusion

This chapter presents the background context for this research by charting key milestones in the historical and recent evolution of apprenticeship policy and practice in Ireland. It presents an exploration of how social views and institutional conflicts shaped the development of a formal national education system and component parts of that system, including FET, higher education, and apprenticeship, as well as the development of the concept of a diversified education system and associated perceptions of relative superiority and inferiority. It highlights key stakeholders' efforts over time to gain or maintain control over different aspects of the education system, how the national statutory apprenticeship system evolved within this context, and how it came to be characterised by increasing State intervention in the 1980s and 1990s in the form of a standards-based apprenticeship system that included regulation of the work-based element and public funding of the off-the-job element, along with requirements associated with an emerging national quality and qualifications infrastructure.

This chapter also shows that significant progress has been made between circa 2011 to 2021 with respect to the development of a new consortium-led model of apprenticeship including apprenticeships leading to higher education awards for the first time, and that, notwithstanding a relative dearth of data and information relating to this period, the available data show that demand for consortium-led apprenticeship in the higher education sector is concentrated in some occupations more than others and in HEIs in some parts of the sector more than others, at end 2023.

This chapter sets the context for this research by charting the historical foundations and recent evolution of apprenticeship policy and practice specifically in Ireland. The next chapter builds

on this to examine academic and other literature on apprenticeship and work-based (and work-integrated) learning particularly in higher education in Ireland and beyond.

Chapter 3 Literature review

3.1 Introduction

The aim of this chapter is to review academic and other literature on the topics of apprenticeship and work-based (and work-integrated) learning in higher education.

To meet this aim, the chapter examines literature related to the key concepts in the conceptual framework for the review: **apprenticeshi**p, **work-based/work-integrated learning**, and **apprenticeship in higher education** (Figure 3.1):

Figure 3.1: Literature review conceptual framework
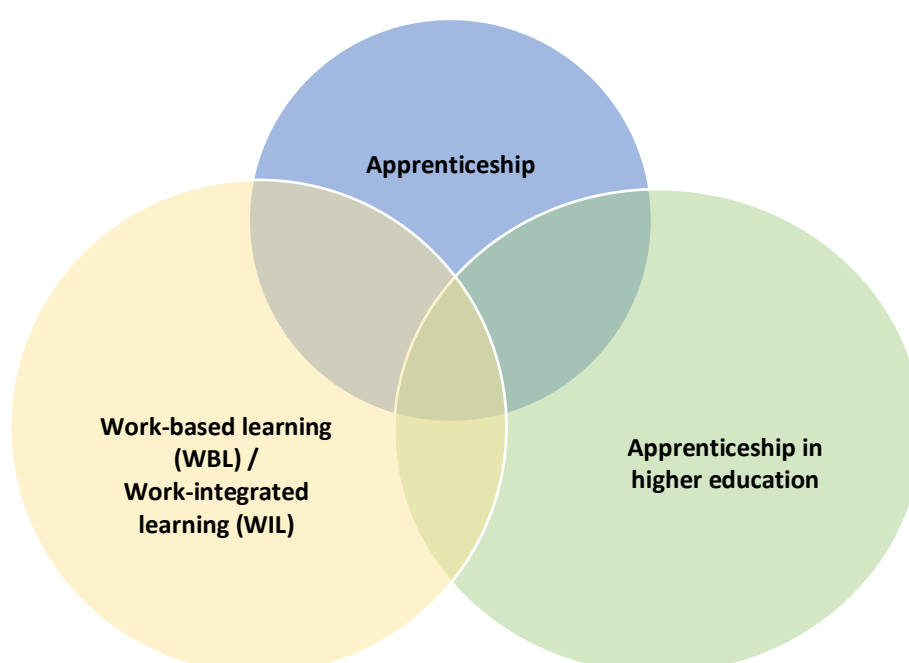
Although most apprenticeship systems incorporate work-based learning, this conceptualisation allows for the rare situations where apprenticeship systems do not include a compulsory work placement (for example, Cedefop, 2018a, p. 12).

The review commences with an examination of **terminology and associated issues** in the literature on apprenticeship and work-based/work-integrated learning, and it includes reference to theoretical underpinnings and pedagogy of apprenticeship as well as issues related to 'integration' of learning and assessment of learning in different sites of learning in apprenticeship. This is followed by an examination of the literature on **work-based learning in higher education**, **apprenticeship in higher education**, and **Irish apprenticeship in an international context**, as follows:

- **work-based learning in higher education**, which focuses particularly on Ireland, but also firstly highlights the challenges associated with transferring what works from one system, country, or context to another

- **apprenticeship in higher education** focuses particularly on research on higher and degree apprenticeships in the UK

- **Irish apprenticeship in an international context** highlights some commonalities, differences and issues arising, including challenges associated with the availability of data on apprenticeship

The conclusion to the chapter includes a summary table **linking this secondary research to the questions asked in interviews** in this study, as stated in the Interview Protocol (Appendix D).

This review takes the form of a literature review as described by Grant and Booth (2009) in their analysis of 14 review types and associated methodologies, and it includes reference to policy documents and other grey literature where relevant, particularly in its aim to identify and examine previous work on the topic and to facilitate, *inter alia,* summation of and building on this work and identification of omissions or gaps (p. 97).

3.2 Terminology and associated issues

3.2.1 Terminology

Apprenticeship in Ireland is 'a work-based learning opportunity' and 'a work-based route to internationally recognised qualifications and experience' (DFHERIS, 2021a, p. 16, p. 35).

Work-based learning has been defined as 'all forms of learning that takes place in a real work environment' (Interagency Group on Technical and Vocational Education and Training (IAG-TVET), 2017, p. 2). Work-based learning has also been defined as 'learning through work, learning for work and/or learning at work' which is usually designed to meet both work-related learning needs of employees and business development needs of a work organisation (The Quality Assurance Agency for Higher Education (QAA), 2018, p. 1). Work*place* learning has also been defined as 'learning at, for, and through work' (Evans *et al*., 2006, p. 20), and work-*integrated* learning as combining learning on a programme in an educational institution (usually a HEI) with learning through work placement that is relevant to the programme (Coll *et al*., 2009, p. 14).

Research on learning in the workplace has highlighted different uses, and some confusion, with respect to basic terms (Linehan, 2008, p. 20). In a meta-review of research on and an analysis of the main topics and trends emerging from the literature, for example, Olsen and Tikkanen (2018) suggest that the defining feature of workplace learning is that it is 'a combination of planned formal

learning and informal learning occurring while working' (p. 548). Citing Fenwick, however, who had earlier also undertaken a meta-review (Fenwick, 2006), they conclude that despite 'a prolific production' of research on workplace learning since the late 1990s, there is still no agreement on the use of terminology (p. 548). Similarly, writing in the context of the goal of improving vocational education and training, Mulder (2017) - himself seemingly using the terms work*place* learning and work-*based* learning interchangeably - notes that the concept is 'ill-defined', often incorrectly operationalised and 'open to different theoretical perspectives' (p. 283). The variety of terms used to refer to learning that takes place in the workplace is demonstrated also in the range of keywords used in a systematic literature review of the quality of work-integrated learning assessment design in higher education programmes, including 'workplace learning', 'industry-based learning', 'practicum', 'internship', 'experiential learning', and 'work-based education', among others (Lasen *et al.,* 2018, p. 792).

In its *Insight on Work-Based Assessment OF/FOR/AS Learning*, the National Forum for Enhancement of Teaching and Learning in Higher Education in Ireland (NFETL, 2017), referring to the increasing requirement at national policy level for higher education programmes to include work-based learning (WBL) opportunities, identifies a continuum of such opportunities ranging from those that are 'strongly aligned with the education institution's curriculum or programme to those that are more loosely aligned'; among the former are 'internships, clinical placements, cooperative education, and apprenticeships' (p. 1). While this conceptualisation reflects a consideration of how work experience aligns with an education institution's provision, it is of course important to consider also how educational experience is or can be aligned with or integrated into work (Grollmann, 2018). Similarly, with respect to higher education in the UK, work-based learning is conceptualised as being on a continuum that reflects the extent to which the work and learning are 'integrated' to a greater or lesser degree, and 'higher education apprenticeships' are positioned at the 'most integrated' end of this work-based learning continuum, with 'work-integrated higher education' itself, work placements, assessed work experience, and live work-based projects, positioned in descending order below this towards the less integrated end of the continuum (QAA, 2018, p. 6). Higher education apprenticeships are, therefore, in this conceptualisation, considered to be something apart from, and more integrated than, what is called 'work-integrated higher education' (Figure 3.2).

Figure 3.2: Higher education apprenticeships in a work-based learning continuum in the UK
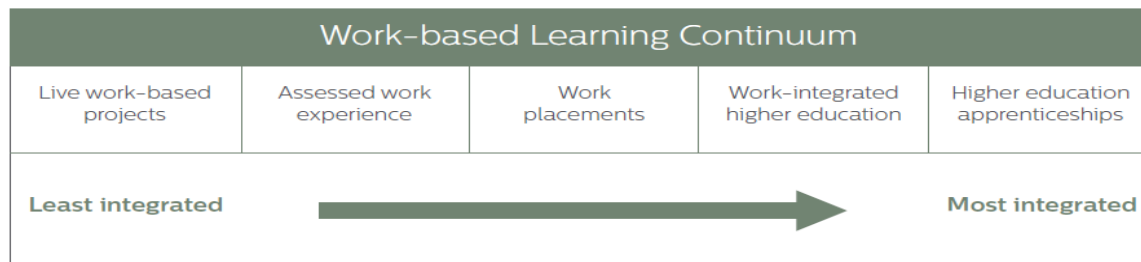
Source: QAA, 2018

Work-integrated learning (WIL) can be distinguished from workplace learning on its own by the integration of the learning gained in the workplace with that gained in the educational or training institution (Coll *et al.*, 2008, p. 38; Eames and Coll, 2010). From this standpoint apprenticeship itself may be considered a form of work-integrated learning. The view that apprenticeship must include off-the-job learning that takes place only *outside* the workplace itself is not universally held, however (IAG-TVET, 2017, p. 2). Rather some modern apprenticeship systems are still entirely workplace-based - i.e. they do not include an off-the-job element (for example, Cedefop, 2018a, p.14), and in some apprenticeship systems - for example, in England - what is called off-the-job learning can also take place *in* the workplace, through job shadowing, for example, but it must not be part of the apprentice's normal work duties (QAA, 2022, p. 6). In addition, in some apprenticeship systems work placement is not compulsory (Cedefop, 2018a, p.12).

Apprenticeship itself operates on a continuum, one that ranges from informal to formal (Steedman, 2012). Formal apprenticeship is 'structured and regulated, usually by legislation at national level, is waged, is based in the workplace, based on a contract which specifies duration, programme of learning (including transferable skills), assessment and final certification, and the entitlement to off-the-job learning' (p. 4).

The Irish national apprenticeship system is a statutory, regulated part of the formal tertiary education system and 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 (Generation apprenticeship, 2024a)

The definition of apprenticeship provided in the Action Plan for Apprenticeship 2021-2025 does not refer to this 'dual system' or to on- or off-the job training, however, but does also refer to other defining features of apprenticeship in Ireland including the statutory, occupation-specific and

apprentice employment elements of apprenticeship, as well as successful programme completion leading to awards at levels 5 to 10 on the NFQ (DFHERIS, 2021a, p. 9).

Although it is not explicitly stated in the definition above, or anywhere in the Action Plan for Apprenticeship 2021-2025, a definition of apprenticeship that refers to formally combining learning in the workplace with learning in an education or training centre could, perhaps, be deemed to be *implying* that there should be at least some alignment - if not 'integration' - between the two. This alignment between the curriculum in the two locations of learning (Lauterbach, 2009) is more clearly referenced in the HEA's submission to the 2013 Apprenticeship Review Group, in which it expressed its preference for 'the blended mode of delivery, with alternate periods on and off the job to ensure effective learning and achievement of job competence', with 'off-the-job training and education…..to consolidate learning…..' (HEA, 2013, p. 5). The QQI quality assurance guidelines for providers of statutory apprenticeship programmes specify that the 'time the apprentice spends with the off-the-job provider are likely to provide much of the essential theoretical and situational context for the apprentice's learning', that this 'must be integrated with the on-the-job learning in a mutually supporting relationship for reinforcing and expanding learning' (QQI, 2016, p. 19), and that the off-the-job periods should 'integrate and strengthen' the experience gained on the job (p. 22). In addition, and where applicable, apprenticeship programmes should facilitate professional and regulatory licensing (p. 21).

Several challenges related to work-integrated learning have been identified in the literature, including the actual integration of learning gained in the workplace and that gained in the educational or training institution, as well as integration of assessment of the learning gained in the two locations (for example, Lasen *et al*., 2018; Ajjawi *et al*., 2020). Challenges identified specifically in relation to apprenticeship include the time pressures associated with balancing the requirements of assessment of learning with a busy workplace and balancing the theoretical and practical elements in apprenticeship training (Fuller *et al*., 2015, p. 63). The OECD (2018) also notes that while on-the-job training is a 'critical element' of any apprenticeship, this does not mean that employers necessarily have the capacity to provide this and there may be a need for employers, their supervisors and/or managers to undertake training themselves (p. 13). The need for rigorous and consistent use of assessment is also noted as are the tensions that arise between education institutions' primary goal of teaching and employers' primary goal of producing (p. 21).

3.2.2 Theoretical underpinnings and pedagogy

In a 2006 publication on *Assessment and Learning*, James (2006) presented three 'clusters' of theories of learning and discussed their implications for assessment on the basis that there is - or

should be - some alignment between assessment and our conception of learning and that 'alignment of assessment with learning, teaching and content knowledge forms a basis of claims for validity of assessment' (p. 47).

James emphasises that there is some overlap between the clusters and so they are not 'watertight' in terms of what each includes and excludes. The three clusters are '*behaviourist*' theories where learning is viewed as a response to external stimuli; '*cognitive, constructivist*' theories that focus on how people construct meaning and create and use 'mental models'; and more recent '*socio-cultural, situated and activity*' theories that draw particularly on the work of Vygotsky, Engeström, Rogoff, Lave, and Wenger. These latter theories view learning as an interaction 'between the individual and the social environment' and as 'a social and collaborative activity' (James, 2006, pp. 55-56). Apprenticeship is firmly placed in this cluster.

James suggests, however, that the implications for teaching and assessment from this perspective are not well worked out yet, the conceptual basis for assessment is therefore weak, and work remains to be done in this area (James, 2006, pp. 56-57). She also suggests that there is a movement taking place in which the constructivist approach is increasingly taking account of the social aspect of learning ('social constructivism') and socio-cultural and activity approaches are increasingly taking account of the cognitive aspect, leading James to posit that perhaps there is a movement towards a synthesis of key elements of existing theories to form a meta - or 'more complete and inclusive' - theory to guide learning theory and practice in the future (p. 58).

In a second edition of the publication in 2012, and citing Watkins (2003, pp. 10-15) who aimed to make the terminology more understandable to teachers, a summary of the delineation of learning theory in the literature was re-stated as follows:

Behavorist/behaviourist	- learning is being taught
Cognitive/constructivist	- learning is individual sense-making
Situated/socio-cultural	- learning is building knowledge as part of doing things with others (James, 2012, p. 190)

A more recent categorisation of learning theory identifies three not dissimilar 'strands': behaviourist, cognitive and socio-constructivist (Baird *et al*., 2017, p. 318). Learning in the workplace, including in apprenticeship and other forms of work-integrated learning, continues to be primarily conceptualised as a social process underpinned by socio-cultural and socio-constructivist theories of learning (Fleming and Haigh, 2018).

While James further highlighted issues associated with socio-cultural approaches, she specifically identified apprenticeship as a model from which solutions might emerge. Her comment in this regard, and her reference to Sadler, is worth quoting in full:

Although socio-cultural approaches can make claims for greater validity, they are a long way from providing convincing assurances about the reliability of assessment results. Nevertheless, apprenticeship models, from which many socio-cultural ideas derive, may offer solutions because underpinning such models is the concept of the 'community of practice' - the guild which is the guardian and arbiter of developing standards. In other words, validation of standards by a community of experts, or, at least, 'more expert others', may be a way of assuring quality. Furthermore, the dialogue and interaction, which socio-cultural approaches prioritise, promise profound educational (formative) benefits because, in assessment conversations between students and their teachers and peers, they can deepen their understanding of what counts as appropriate responses to problems or tasks, what counts as quality and how criteria for judgement are interpreted and applied in complex activities (Sadler, 2010). Clearly, more work needs to be done to develop approaches to assessment that are coherent with socio-cultural perspectives on learning, but the potential is there. (James, 2012, pp. 203-204)

James evidently saw the potential for assessment strategies already in use in apprenticeship to inform assessment practice in schools. Others, for example, Tanggaard and Elmholdt (2008), drawing on previous research, agreed that 'forms of assessment in apprenticeship that have functioned as an acknowledged form of learning for many years can inspire a more effective implementation of assessment practices in school' (p. 102).

Around the time of James' research, however, the literature on pedagogy in apprenticeships was found to be relatively small (Smith, 2010). This echoed earlier findings, for example of Harris and Simons (1999), who, although they stated that the three primary influences on the quality of training in apprenticeship are the quality of off-the-job element, the quality of on-the-job element, and the integration between the two, also reported that the issue of integration particularly had not received much research attention (p. 3). Some of the possible reasons given for this were researchers' perceptions of the relatively lower value of research in this area, the separation of the two locations (on- and off-the-job) in the research as discrete foci for examination, and the challenges associated with researching informal as opposed to formal on-the-job training (p. 4). Following a decade of significant reform in apprenticeship and traineeship in Australia, Strickland *et al.* (2001) also found that discussions and debates relating to the changes focused largely on institutional arrangements and issues such as access to apprenticeships, rather than on learning and assessment in apprenticeships or the experience of the apprentice in this (p. 199).

A review of the later literature suggests that the situation remains largely the same, particularly, as referred to by Harris and Simons, in relation to the issue of integration of learning and assessment between the on-the-job and off-the-job elements of apprenticeship. Indeed, Erica Smith, one of the foremost experts on apprenticeship in Australia and internationally, notes that while quality in apprenticeship should focus mainly on learning, both on- and off-the-job, 'this can get forgotten in

policy debates' (Smith, 2019, p. 71). In their systematic review of the literature on assessment design in work-integrated learning in higher education between 1990 and 2015, Lasen *et al.* (2018) reported high-quality assessment design overall, but also a need for greater alignment between assessment tasks and learners' work-integrated learning experiences (p. 788). They also reported several challenges identified in the work-integrated learning assessment literature and concluded that Orrell's finding that assessment is 'one of the biggest challenges in designing work-integrated learning programmes' (Orrell, 2011, quoted in Lasen *et al.*, 2018, p. 789) still remains. While apprenticeship is unique in its legislative and other formal underpinnings that are not included in Lasen *et al.*'s review, many of the principles and insights from work-integrated learning research are nonetheless likely to be applicable to apprenticeship to a greater or lesser extent.

A more recent literature review which aimed to identify 'success characteristics' in work-integrated learning pedagogical principles and practices that may be applicable to the design and delivery of degree level apprenticeships in the UK found that such characteristics include, *inter alia*, dialogue and agreement between the three main parties to the learning - learners, employers and institutions - in areas such as learning processes and assessment methods (Lillis and Bravenboer, 2020, p. 730).

In addition, in a review that sought to identify good practice in work-integrated learning to support the development of degree apprenticeships, and drawing on the work of Lester (2009), four main routes to initial professional development were highlighted that differ according to the relation between theoretical and practical learning: sequential, parallel, integrated and experiential (Lester *et al.*, 2016, p. 7). Sequential routes were presented as normally being characterised by learning of theory in an educational institution followed by learning in the workplace, as is often the case in degree or professional programmes; parallel or 'dual' routes involve provision of the theoretical and practical elements of a programme closer in time together, for example in a day-release format, but in which there may not be a requirement for any coordination between the two; integrated routes are presented as involving greater alignment and coordination between the theoretical and practical, as may be the case in degree programmes that include work-based learning and in some apprenticeship programmes; and experiential routes that may sometimes involve more individualised and ad hoc learning built around an individual's work (p. 7). Work-integrated degree programmes in the UK at the time were found to similarly operate on a continuum extending from those in which the academic structure was dominant but where there was also a significant degree of workplace practice to those designed around workplace learning, and components of the programmes themselves could also be characterised in terms of having a sequential, parallel or integrated relationship (pp. 8-9).

Drawing on these conceptualisations of theoretical and the practical, the academic and the workplace, in describing professional entry routes and work-integrated degree programmes, Lillis and Bravenboer (2020) helpfully took the concepts further to specify more clearly what 'work-integrated' might mean in this context:

> Work-integrated models involve theoretical and practical learning taking place in a more co-ordinated and interrelated way. The workplace is positioned as an equally important source of learning, and "knowledge" and "competence" are integrated. This is predicated on the conception that professional competence requires the integration of knowledge, skills, behaviours and values…..There is some evidence that the work-integrated model facilitates a more effective route to professional competence. (Lillis and Bravenboer, 2020, p. 730)

As already noted, apprenticeship in Ireland is officially defined with reference to its being a programme that formally 'combines' and 'alternates' learning in the workplace with learning in an education or training centre, and that while this definition may imply that there should be some alignment - if not 'integration' - between the two, this is not specified. It is not clear whether this is intentional or what the implications may be. Lester *et al*.'s work, and Lillis and Bravenboer's work may potentially be helpful however in contributing to further research on apprenticeship in Ireland, including on experiences of apprenticeship in higher education in Ireland.

3.2.3 Integration issues in apprenticeship in Ireland

In 2016, research on apprenticeship in Ireland was reported to be 'surprisingly low' (Thoma, B., 2016, p. 1), and the situation has not changed to any great extent in recent years. Existing research relates primarily to a period of significant change, on foot of a formal review in 1993 when the Irish apprenticeship model changed from time served to standards-based (for example, Field and o dubhchair, 2001; O'Connor and Harvey, 2001; O'Connor, 2006). Some concerns relating to on-the-job assessment in the new standards-based model were noted in this research (Field and o dubhchair, 2001, p. 254; O'Connor and Harvey, 2001, p. 337). O'Connor also noted that in 2006 the apprenticeship assessment system in the then new model was under review (O'Connor, 2006, p. 39).

Notwithstanding the dearth of research on apprenticeship in Ireland, the issue of integrating learning and assessment between the on-the-job and off-the-job elements of apprenticeship, and the challenges associated with this, have been considered at a national level in findings from the statutory apprenticeship programme validation process and in a consultation process on assessment. Some of the challenges identified include integration of learning and assessment of that learning between the on-the-job and off-the-job elements of programmes and possible inconsistency in approaches to assessment across different employers (QQI, 2018, p. 84; QQI, 2019,

pp. 36-38, p. 43). In its 2018 Green Paper on Assessment of Learners and Learning, for example, and in particular with respect to apprenticeships, QQI reported that it had 'noted from previous applications for [apprenticeship programme] validation that there can be a lack of sufficient integration between on- and off-the-job training and assessment' and that 'viewing on- and off-the-job assessment as being independent can be problematic because it runs the risk that the apprentice will lose opportunities to integrate their different learning experiences and develop integrated competence' (QQI, 2018, p. 84). Statutory Quality Assurance Guidelines for Providers of Statutory Apprenticeship Programmes were issued by QQI in 2016 (QQI, 2016), along with other statutory guidelines for all providers of education and training programmes leading to awards on the National Framework of Qualifications. In its Insight on Assessment 2021 which was published following informal 'soundings' with personnel in FET, higher education and professional, statutory, and regulatory bodies, QQI reported that 'greater alignment is required between assessment and intended programme learning outcomes', that there are 'provisions' for what is called 'integrative assessment' in some programmes, including apprenticeships, but there is room for greater use of this type of assessment across all programmes, and, that the establishment of national principles to support quality assurance in work-based assessment may be beneficial (QQI, 2021b). Following publication of research commissioned by QQI to review new consortium-led apprenticeships in Ireland - in particular the quality assurance, governance arrangements and processes in place at mid-2022 (QQI, 2022a, p. 1) - QQI indicated that a revision of the statutory quality assurance guidelines for apprenticeship, and associated procedures and qualifications infrastructure, was planned, and in April 2024 QQI issued a request for tender for research to inform the development of statutory guidelines on work-integrated learning (QQI, 2024).

3.2.4 Conclusion: terminology and associated issues

While the theoretical framework underpinning learning in apprenticeship is evolving - primarily in the realm of 'socio-cultural and socio-constructivist' theories of learning (Fleming and Haigh, 2018) - it is clear that there are challenges and complexities for which all parties in apprenticeship may not be adequately resourced, meaning that there are likely to be differing levels of quality in the learning and assessment experiences of those ostensibly participating in the same or similar programmes (Newton *et al*., 2019, p. 1). It is likely also that the inconsistency and other issues referred to by QQI in relation to apprenticeship in Ireland (QQI, 2018, 2019) may be a reflection, at least in part, of the relative complexity including the number of stakeholders involved in apprenticeship. Further work is needed on identification of good practice and challenges in relation to learning and learning assessment strategies and associated infrastructure, as well as the solutions

to address these challenges, taking account of the complex environment in which apprenticeship operates.

3.3 Work-based learning in higher education

3.3.1 Transferring what works elsewhere

The challenges associated with transferring what works in one system, country or context to another - or the question of whether what works in one system or context *can* be transferred to another - has been widely debated in relation to vocational education and training (for example, Powell *et al*., 2014; Valiente and Scandurra, 2017; Grollman, 2018; Chankseliani and Anuar, 2019; Fortwengel *et al*., 2019; Gerloff and Reinhard, 2019; Grollman and Markowitsch, 2019; Markowitsch and Grollmann, 2019; Markowitsch and Wittig, 2020; Šćepanović and Martín Artiles, 2020; Gonon and Deissinger, 2021; Li and Pilz, 2021). The overall conclusion appears to be that while national systems of education and training certainly are shaped by economic, social, political, and cultural matters within their own national and other contexts, lessons from one system can inform the development of another.

In an editorial for a special journal issue on the history of vocational education and training that aimed to answer the question of why VET systems developed as they did, for example, which included input on the development of VET systems in a range of countries in Europe as well as in Australia, South Africa, and South America, the editors conclude that although it is unlikely that a one-size-fits-all model exists, or will exist in the future, and while each country follows its own 'agendas', all 'still share a common purpose: how to make education and training more adaptable to the economy and the world of work without losing sight of the individual learner' (Gonon and Deissinger, 2021, p. 195). The focus on developments in different countries also highlighted that while VET systems and VET are shaped by issues within their own national settings and by different ways of adapting to these (p. 195), the 'dual system' - involving the workplace and education or training institution - appears to be increasingly supported among governments and other stakeholders (p. 195).

In Germany dual learning programmes are increasingly being offered in higher education, but their key characteristic and their aim - to offer the advantages of integrating academic and vocational learning - is reported to also be their greatest challenge, that is, to integrate the academic and vocational learning, and the level of curricular integration is reported to vary on a continuum from a 'parallel' type of 'integration' to a type that operates at the level of the individual (Mordhorst and Jenert, 2022, p.1). This continuum is similar, in some respects, to elements of the sequential to entrepreneurial continuum identified by Lester *et al*. (2016) and drawn on by Lillis and Bravenboer

(2020) in relation to entry routes to initial professional development and work-integrated degree programmes in the UK.

While there is a growing awareness of the benefits of work-based learning, at least in some countries and in relation to some disciplinary areas such as business and engineering (Perusso and Wagennar, 2021, pp. 1424-1425), research on work-based learning in higher education in seven different European countries indicates that there are different understandings of what work-based learning is, differences in its perceived relevance to higher education, in how it is designed and in how it is delivered, and these differences are reported to relate in part to different educational philosophies, histories and cultures (p. 1437). Although apprenticeship was not included in the modes of work-based learning delivery chosen for analysis - those examined in this study were work placement, traineeship and entrepreneurship - and the analysis of 77 cases related to four disciplinary areas only (mathematics, engineering, history, and business), the state of work-based learning in higher education was found to be 'more satisfactory' in countries where there was close alignment between work-based learning and market needs, and where there was close cooperation between higher education and industry in the design and delivery of programmes; these countries were Germany, the UK, and the Netherlands, where evidence of a broad understanding of work-based learning was found - underpinned by a history of a 'binary' higher education system that had a clear division between 'research-driven education and applied education' - and which had previously been reported (p. 1427) in an examination of work-based academic education in Austria, Germany and Switzerland by Graf (2015).

Perusso and Wagennar (2021) report also that while there is a general acceptance of the positive impact of work-based learning on employability, there is currently insufficient evidence to fully support this assertion (p. 1429). Similarly, while the results of the first systematic and peer-reviewed synthesis of the impact of degree apprenticeships in the UK indicated that they are meeting the UK Government's high-level productivity and social mobility goals, the analysis also highlighted a deficiency in terms of robust and peer-reviewed evidence on the impact of these apprenticeships (Nawaz *et al.*, 2022; also Quew-Jones, 2023).

3.3.2 Work-based learning in higher education in Ireland

In Ireland, publicly funded universities, IoTs and TUs are the main providers of higher education, with some smaller private providers making up the remainder (Winberg *et al*., 2022, p. 465); QQI refers to this latter category as 'independent/private' providers (QQI, 2023a, p. 11). As already noted, this 'binary' - or 'diversified' - system involving the universities and the technological institutes in higher education had its roots in developments associated with the creation of the 1930

Vocational Training Act (Clarke, 2016, p. 303) followed by a series of Government policies in the 1960s and 1970s that aimed to diversify the third level education sector and which led to distinct differences in mission and governance between academically oriented universities and the new technical institutions (Walsh, 2018, p. 281). These differences included the provision of elements of craft apprenticeship by the technical institutions but not by the universities, and the continuing emphasis in the universities on academic studies and education for the professions. The legislation that underpins statutory apprenticeship in Ireland - the Industrial Training Act 1967 - specifically excluded, until recently, the possibility of statutory apprenticeship in a 'professional occupation' (Ireland. *Industrial Training Act 1967*). Non-statutory apprenticeship-type models of teaching and learning, which include joint provision via both education in a HEI and professional practice in the workplace, continue in areas such as law, medicine (including nursing since 2002 (Fealy, 2006, p. 159)) and primary and secondary teacher training (Walsh, 2018).

Over time, the 'non-university' sector (including the then regional technical colleges, City of Dublin VEC colleges, and colleges of education) saw many changes including the 1998 redesignation of all regional technical colleges as IoTs and the eventual delegation to them of the right to make their own awards, and establishment of national institutes of higher education in Dublin and Limerick. The policy discourse in Ireland on the relative importance of 'liberal' versus 'vocational' education, and on an increased focus on the needs of the labour market, reflected international discourse on these matters and associated developments, and it played a large part in driving these changes in the non-university technology (or technical third level) sector (White, 2001; Clancy, 2015; Coolahan, 2017; Fleming *et al.*, 2017; Thorn, 2018; Walsh, 2018; Walsh, 2022). The role of the European dimension in the formation and development of the non-university sector in Ireland - primarily by means of the European Social Fund and the European Structural Funds - was immense (for example, Garavan *et al.*, 1995; Walsh, 2018), even though European funding was available, in principle, only for 'training', not for 'education' (Thorn, 2018, p. 86; Walsh, 2018, p. 267). This distinction was important, however, because education was considered a domestic matter over which the European Union had no jurisdiction (Thorn, 2018, p. 87).

The establishment of the regional technical colleges in the 1970s was itself largely responsible for a huge change in the 'disciplinary balance' in higher education which saw the rise of the 'practical arts' in higher education and the 'gradual embrace of 'applied studies' by the universities' (Clancy, 2015, pp. 111-214). This disciplinary reorientation was evident in a comparative examination of the distribution of students in higher education in Ireland by field of study, using a methodology utilised in a broader study of global trends, which discovered a huge decline in the study of humanities, from 40% in 1960 to 16% in 2009 (p. 110).

Indeed, it has been argued that the binary distinction between the technological and university sectors in Ireland has been very much blurred over time:

> ….. It may have been possible in the 1970s to draw a distinction
> between short-cycle higher education and the university on the basis of
> the 'utilitarian training' provided in the former and the 'fundamental
> knowledge generation and transmission' which characterised the
> latter.….that distinction has been eroded in Ireland since the early
> 1980s. The Irish universities have been primarily teaching institutions
> with a very strong vocational thrust in most of their activity'. (White,
> 2001, p. 257)

The shift towards a more diversified system therefore not only influenced the new regional technical colleges' provision, but also the pattern of participation by field of study in the universities, with an increase in total enrolments from 8% to 13% in business-related courses in the universities between 1965-1966 and 1980-1981 and a decline over time of the dominance of professional courses (Walsh, 2018, p. 267).

In addition, in a prediction made at the turn of the century that is perhaps proving to have been somewhat prescient, the phenomenon of 'academic drift, Irish style' in Irish higher education was anticipated, with a move by the technological sector from primarily part-time sub-degree level to more full-time degree level provision, along with ambitions towards university norms and practices, similar in some respects to the experience of the British polytechnics (White, 2001, pp. 252-254). Essentially, it was argued, following the passing of the Universities Act 1997 (Section 9) and the Qualifications (Education and Training) Act 1999 (Section 41) relating to the establishment of additional universities, decision makers planned to 'retain the binary system Irish-style by having two types of university, autonomous and non-autonomous' (White, 2001, p. 254), meaning the 'autonomous' universities would operate side by side with others, the latter making awards on the basis of powers delegated to them to do so.

The National Strategy for Higher Education to 2030 argued for the retention of higher education institutional diversity, that is, for the IoTs and the universities to continue to each play 'different and complementary roles to meet the diverse need of students, society and the economy' (DES, 2011, p. 98). This strategy also recommended that the IoT sector commence a process of regional consolidation and, where appropriate, that the relevant amalgamated institutes be re-designated as TUs (p. 23). The TU sector's aim is to, *inter alia*, actively work with employers and industry to meet their need for higher vocational and professional skills in the workforce and to draw and build on the main achievements of the technological sector to do this including in 'their provision of the overwhelming majority of level 6 and 7 programmes in HE; their provision of apprenticeship, part-time, full-time, campus- and work based modes of learning; their role in key STEM disciplines; their

enrolment of a diverse student base; and their close links with industry and other employers' (Technological Universities Research Network, 2019, p. 4). As part of the 2020 national budget the Government announced a three year €90m Technological University Transformation Fund to support the establishment of TUs, and there are currently five established TUs: TU Dublin established in January 2019, followed by Munster TU (January 2021), TU of the Shannon: Midlands Midwest (October 2021), Atlantic TU (April 2022) and South East TU (May 2022).

The current policy framework and initiatives to support strong links between education providers and enterprises in Ireland is not limited to the technological sector in higher education, however. Rather Government policy calls for greater collaboration between all HEIs and the workplace, including, for example, in the National Skill Strategy 2025 target for work placements to be available to all full-time students participating in level 6, level 7, and level 8 programmes in higher education by 2021 (DES, 2016b, p. 117) and DFHERIS' prioritisation in its Statement of Strategy of the development of 'human capital' to ensure that people have the knowledge and skills needed to access quality employment, with responsive provision and greater collaboration between HEIs and industry considered to be important means of achieving this (DFHERIS, 2021c, pp. 9-10). Almost all undergraduate programmes in Ireland now include a work placement (Winberg *et al*., 2022, p. 473). Other State-funded initiatives that aim to support strong links between education providers and enterprises in Ireland include the Springboard programme (now Springboard+, targeted at people in employment and people returning to work, and managed by the HEA) which was introduced in 2011 to provide subsidised places in higher education in specified skills areas linked to current and projected employment opportunities (HEA, 2022a), and Skillnet Ireland, a national support agency of DFHERIS, which aims to support businesses' competitiveness through the development of enterprise-led talent development initiatives (Skillnet Ireland, nd).

The central role of the State in higher education in Ireland has been widely noted and commented on (White, 2001; Clancy, 2015; Coolahan, 2017; Fleming *et al*., 2017; Walsh, 2018; Walsh, 2022), including with respect to its indirect but influential role as arbitrator or controller of the relationship between higher education and 'the market', particularly in the form of bodies such as the Industrial Development Authority, the legislative emphasis on quality assurance, various funding-related mechanisms employed by the HEA, and the payment of student fees by the State (White, 2001, pp. 257-258).

While the national policy framework and supporting initiatives including funding may have helped to ensure that 'work-integrated learning is an important and growing part' of higher education provision in Ireland (Winberg *et al*., 2022, p. 465), previous studies (for example, Sheridan and Linehan, 2011) showed sizeable differences in the mechanisms in place to support the provision and

assessment of such learning. In Winberg *et al.*'*s* own review of six case studies of practices in an IoT, including two in consortium-led apprenticeship programmes, a key finding from the study, based on information from academics involved with the programmes (for example, course leaders and/or learning coordinators) is that the partnership between the HEI and the private or public sector partners is a critical success factor (Winberg *et al*., 2022, p. 473), a finding also reported by Giblin in terms of education-industry collaboration (Giblin, 2020). Notwithstanding this, however, and while all the case studies stressed the criticality of workplace partners, 'it was the academic partners who set the rules' (Winberg *et al*., 2022, p. 476). Although this study is based on a review of a small number of cases, of which only two related to consortium-led apprenticeship, and it is based on input only from the education provider side of the equation - i.e. employers' or students' views were not elicited - this is an important finding in the context of the limited research available that includes HEIs and apprenticeship in Ireland.

The overarching term used throughout this (Winberg *et al*.) study is 'work-integrated learning' - as defined in the journal in which the research is published - and 'work-based learning' is presented as a distinct type of work-integrated learning (Winberg *et al*., 2022, p. 470). Different uses of these terms in different studies and contexts is evident in other literature, including, for example, in research on one HEI's interactions with a large enterprise (Sheridan and Fallon, 2018). This research drew on an earlier categorisation of HEIs' interactions with industries and enterprises (Sheridan *et al*., 2013, p. 69) and presented these under three 'pillars of engagement' (Figure 3.3):

Figure 3.3: Three pillars of HEI-enterprise engagement
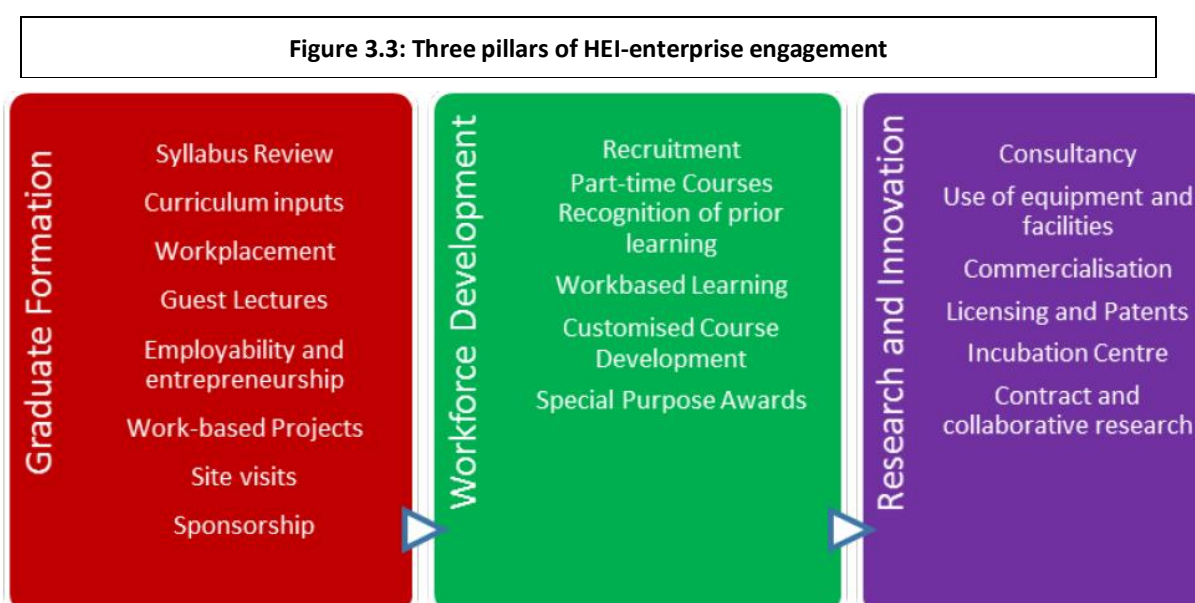
Source: Sheridan and Fallon, 2018

In this categorisation of activities, and in the terminology used to describe them, 'workbased learning' is referred to only in relation to 'workforce development' but not to 'graduate formation',

56

and the term 'work-integrated learning' is not used. The distinction between 'workforce development' and 'graduate formation' may partly reflect the distinction evident in the literature between research on professional learning in the workplace and research on higher education and accredited learning (Doyle, 2014, p. 43). The terms used to describe the component parts of the pillars nonetheless highlight the challenges encountered when comparing or interpreting findings from research on work-based, work-integrated, and other related learning initiatives, if the concepts being examined are defined in different ways or not defined.

This research on education institutions' interactions with industries and enterprises over several years nevertheless indicates that individual HEIs may be involved in a wide range of engagements with industry and enterprise, and that the type and number of engagements at unit level may vary widely across an institution (Sheridan and Fallon, 2018, p. 3). The researchers reported also that despite the wide range of Government policies and entities in place to incentivise engagement between HEIs and industry, 'concrete measures of impact are sorely lacking' and attention at Government and agency level is limited except in activity associated with technology transfer, where even there the measures of impact are relatively few (p. 2). The literature on collaboration between HEIs and industry has also traditionally focused on research collaborations (Giblin, 2020, p. 34).

In the earlier study of work placement in third level programmes in Ireland involving eight HEIs, however, the perceived benefits and concerns of the key stakeholders in the work placement experience - the HEIs, employers and students - were identified (Sheridan and Linehan, 2011). Work placement was defined as 'a work context for intentional learning that is relevant to the aims and intended learning outcomes of a higher education programme or module' (p. 9). The concerns identified by HEI representatives included those related to resourcing of the placement process, organising and monitoring placement learning, the quality and suitability of available placements, the duration of placements, and assessment strategies including assessing learning outcomes associated with learning in the workplace (p. 28). The trend for HEIs to introduce work placements in more programmes and across more disciplines was noted, and all HEI representatives agreed that the placement experience adds significant value and learning within the context of an academic programme (p. 28). This is positive in the context of Irish Government policy which supports and encourages the expansion of work-based learning, including now in the form of apprenticeship throughout higher education in Ireland. Irish Government policy also very much supports and encourages increased access to and participation in higher education in Ireland, and the increase in the total number of enrolments by 13.8% between 2015-2016 and 2021-2022, up from approximately

216,000 to approximately 246,000, is seen by Government as a welcome development in this context (HEA, 2022b).

3.3.3 Conclusion: work-based learning in higher education

Several avenues are open to HEIs to establish work-based learning as an alternative, or an addition, to an institution's more traditional means of education provision (Brennan and Little, 1996). These include, for example, choosing a curriculum framework from among those that differ according to the level of control and power exercised by the main parties - the education institution, the employer, and the individual learner, and in this conceptualisation, the HEI that confers an academic award always retains overall control of the framework (along with a regulatory or professional body when a programme leads to a professional licence to practise as well as an academic award), and the employer and learner control the focus and content of the curriculum to varying degrees (p. 52).

According to Brennan and Little, therefore, before any decisions on planning and implementing work-based learning are made by HEIs, individual HEIs should determine what the need is and whose the need is. According to Yin (2018), the purpose of a literature review is not to get answers about a topic but rather to 'develop sharper and more insightful *questions* about a topic' (p. 13). In this context, these questions posed by Brennan and Little may usefully be adapted to the recent evolution of apprenticeship in Ireland in higher education, and they particularly informed the articulation of the central research question and sub-questions in this research as outlined in Chapter 4 (Methodology) and the questions asked in interviews in this research, as presented at the end of this Literature Review chapter and in the Interview Protocol (Appendix D).

3.4 Apprenticeship in higher education
3.4.1 Introduction of consortium-led apprenticeship in higher education in Ireland

One of the most significant aspects of the recent reforms in apprenticeship in Ireland is that since 2016 all types of organisations - including universities, IoTs, TUs, other HEIs, and other organisations - may now be (and are) involved in the design, development, and delivery of statutory apprenticeship programmes leading to awards up to and including level 10 on the National Framework of Qualifications. This represents a significant change compared with the situation that existed until 2016, where only the IoTs and TUs operated (and continue to operate) on behalf of the further education and training authority (SOLAS) in the provision of craft apprenticeships leading to a QQI award at level 6 on the National Framework of Qualifications. The relatively recent introduction of consortium-led apprenticeships in Ireland means that there has been little research conducted on the design, implementation, or impact of these apprenticeships, either in FET settings

or in the higher education sector. Rather, apprenticeship in Ireland has mostly been studied in relation to craft apprenticeship from the perspective of employers and apprentices (Ó Murchadha, 2022), and, more recently, university students (Ryan *et al*., 2022). The Action Plan for Apprenticeship 2021-2025 does include commitments to undertake regular surveys in the future of employers, apprentices, educational institutions, and consortia members in both craft and new consortium-led apprenticeships. A recent high-level review of the quality assurance, governance arrangements and processes in place in consortium-led apprenticeships at mid-2022 was informed by responses from a range of stakeholders including consortium steering group members, employers of apprentices, apprentices, and programme providers (QQI, 2022a, p. 1), but, for the most part, the findings and recommendations do not differentiate between experiences in the FET and higher education sectors.

Albeit operating in a different historical political and policy context in the UK, however, recent research on the introduction of higher and degree apprenticeships there indicates that there are particular challenges and opportunities associated with the introduction of these apprenticeships, including, for example, those related to programme design, programme delivery, and graduate attributes (Mulkeen *et al*., 2017), 'the potential to disrupt traditional approaches to university degree study' due in part to apprentices' differing perceptions of the apprenticeship due to their differing work contexts (Fabian *et al*., 2021), and 'tensions' related to academic identity and the purpose of higher education, as well as opportunities in terms of curriculum innovations and partnerships (Graham, 2019).

The introduction of these higher and degree apprenticeships in the UK in 2016, and the involvement of the university sector for the first time, represented a new and significant change of policy for the UK (Hughes and Saieva, 2021, p. 246). The introduction of a new degree apprenticeship award in England in 2015 was part of the UK Government's efforts to support the development of a higher education sector that would be more responsive to industry's needs (Powell and Walsh, 2018, p, 93; Fabian *et al*., 2021, p. 1399). This change in policy in the UK followed a fundamental review of apprenticeship (the Richard Review of Apprenticeships (HM Government, 2012)).

This change took place in a timeframe and in a sequence of events broadly similar to those in Ireland, starting with the review of apprenticeship training in 2013, followed by the introduction in 2015 of a new consortium-led model of apprenticeship and expansion of apprenticeship to potentially include the entire higher education sector. Although there are differences between the apprenticeship systems in Ireland and the UK, and indeed between the systems within the UK, there are some similarities. Findings from research on the higher and degree apprenticeships in the UK

may consequently be applicable or at least informative in some respects in terms of the development of apprenticeship in higher education in Ireland.

3.4.2 Higher and degree apprenticeships in the UK

Higher apprenticeships in the UK extend from level 4 to level 7; degree apprenticeships are at levels 6 and 7 and include bachelor's and master's degree programmes (HM Government, nd; Table 3.1).

Table 3.1: Higher and degree apprenticeships in the UK		
Title	Qualification level	Equivalent educational level
Higher	4, 5, 6 and 7	Foundation degree and above
Degree	6 and 7	Bachelor's or master's degree

Source: HM Government (nd)

Both England and Wales offer degree apprenticeships, with England offering the most options; Northern Ireland offers 'higher level apprenticeships' up to master's degree level but most are at foundation degree level or equivalent; in Scotland degree apprenticeships are called 'graduate apprenticeships' and are offered up to master's degree level (UCAS, nd).

As previously noted, and in Figure 3.2, with respect to higher education in the UK, work-based learning is conceptualised as being on a continuum that reflects the extent to which the work and learning are 'integrated', and 'higher education apprenticeships' are positioned at the 'most integrated' end of this work-based learning continuum (QAA, 2018, p. 6).

The defining characteristics of 'apprenticeships that incorporate higher education' in the UK are stipulated in some detail (QAA, 2022, p. 4). It is notable that the reference is to apprenticeships that incorporate higher education, rather than apprenticeships in higher education.

The characteristics include, *inter alia*, that these apprenticeships are 'first and foremost a job' which requires 'work-integrated learning', where integration of on- and off-the-job learning is required, and where 'the workplace becomes a site for the development and generation of knowledge, understanding, skills and professional behaviours rather than just a site for their application'; these apprenticeships involve 'tripartite agreements between employers, apprentices and higher education providers' and 'comprehensive collaboration with employers at all stages' (QAA, 2022, p. 4). In addition, all apprenticeships that incorporate higher education must include and encourage 'dynamic and sustainable collaboration between employers, higher education providers and professional bodies', and the employer is 'the primary decision maker for [apprentice] admissions working closely with the higher education provider' (QAA, 2022, p. 4). In summary, the

employer is intended to be at the heart of the process, and apprenticeships are intended to be driven by industry demand.

These characteristics are broadly similar to the key features of apprenticeship generally in Ireland (Generation apprenticeship, 2024c). They are not all specified in the same detail, however, or specifically for apprenticeships leading to higher education awards, in Ireland.

Like in Ireland, apprenticeships in the UK may include professional recognition and/or a licence to practise in a defined occupation. One of the key differences between apprenticeships in the UK that incorporate higher education and apprenticeships generally in Ireland, however, is that in the UK these apprenticeships may - but are not necessarily required to - include a qualification, and where there is no qualification, the apprenticeship is assigned a higher education level (QAA, 2022, p. 5).

All apprenticeships in Scotland, Wales, and Northern Ireland include a qualification, but this is not the case in England, where, for example, professional recognition, though not a qualification, may be part of an apprenticeship. Degree apprenticeships in England and Wales must provide a degree award however (QAA, 2022, p. 1). In England, a higher education provider may subcontract the provision of higher education in apprenticeships to another provider, including, for example, a further education college, a training provider, or an employer, and in Wales the provision of higher education in apprenticeships may be delivered by specified organisations on behalf of the higher education provider. In all cases, however, the higher education provider is responsible for the quality and standards of its awards (QAA, 2022, p. 2), as is the case in apprenticeship in Ireland.

3.4.3 Research on experiences of apprenticeships that incorporate higher education in the UK

Much of the research on higher and degree apprenticeships in the UK involves studies of one programme or one provider organisation, case studies, small sample surveys, or documentary analyses (for example, Rowe, 2018; Hughes and Saieva, 2019, 2021; Minton and Lowe, 2019; Welbourn *et al*., 2019; Lester and Bravenboer, 2020; Lillis and Bravenboer, 2020; Fabian *et al*., 2021). In these studies, the focus is primarily on the benefits to, or perceptions of apprentices and employers, with fewer studies referring specifically to off-the-job providers.

Among the latter, Hughes and Saieva (2021) make a distinction between the 'macro benefits' of apprenticeship - such as improved social mobility and gender equality - and the 'perceived benefits' for the apprentice, employer, and provider of higher degree apprenticeships (p. 251) as well as challenges for providers such as those related to curriculum design, programme delivery, and partnership working (p. 254).

In earlier research, challenges for providers had also been identified, including those related to curriculum design, internal infrastructure, and support systems (Hughes and Saieva, 2019, pp. 225-226). These were reported to be connected specifically to the employer-led and work-integrated nature of apprenticeship programmes, including dealing with employers' and apprentices' concerns and needs, assuring academic standards, and meeting legal obligations aligned with national apprenticeship policies and, where appropriate, professional, statutory, and regulatory bodies' standards (p. 229). These researchers concluded that further research is needed to consider the complexity of higher degree apprenticeships within 'traditional' higher education and to understand how to improve the apprenticeship experience for all stakeholders (Hughes and Saieva, 2021, p. 263), as well as further research specifically on the pedagogic practices that best support apprentices (Hughes and Saieva, 2019, pp. 225). In an earlier review of literature to inform the development of work-integrated higher education, particularly degree apprenticeships, and which identified a distinct pedagogy for work-integrated learning, Lester *et al*. (2016) reported a clear shift from 'parallel' or 'dual' models of learning to more integrated models that operated on a continuum and that sought to integrate practical and theoretical learning, drawing on the workplace as the main source of learning (p. 30). They noted also, however, the limited literature in some areas of the review, and they recommended further research to examine potential differences in different sectors, occupations, professions, and types and sizes of work organisations. Key stakeholders' experiences in designing and delivering higher and degree apprenticeships were also examined in an exploratory qualitative study that included interviews with eight programme leaders in universities that were either then delivering these apprenticeships (5) or seeking to deliver these (3) (Mulkeen *et al*., 2017). Challenges and opportunities identified by the universities included those related to university administrative systems in the context of the need to meet apprenticeship requirements, student-centred issues related to apprentices' engagement and sense of belonging in the university compared with other students, and the need for specific teaching, learning and assessment strategies compared with other programmes.

Higher education institutions are used to designing and delivering programmes that aim to meet industry and individuals' professional development needs, and they are used to working with employers, employers' representatives, and professional, statutory, and regulatory bodies for this purpose (Anderson *et al*., 2012, p. 240), but programmes that incorporate work-based learning are different in many respects to traditional campus-based degree and other programmes (Welbourne *et al*., 2019). With the introduction of work-based learning, the focus that was traditionally on the transfer of knowledge from within the HEI and including some work-based activities (Minton and Lowe, 2019, p. 200) changed to one where the workplace itself became a site of learning, and

changes associated with the introduction of higher education apprenticeships in the UK, particularly

degree apprenticeships, have been described as representing 'a major departure' from the

traditional model dominated by academic disciplines and professional bodies to one that has

> allocated a major stakeholder role to employers, who have previously
> mostly consumed Higher Education outputs but have had little
> involvement in inputs, and often none in the design of degree
> programmes (Powell and Walsh, 2018, p. 98)

The role of professional bodies in this respect has also been noted (Hordern, 2015).

Changes to the apprenticeship model in Ireland similarly aim to place the workplace, and

employers and their representatives ever more at the centre of the apprenticeship process,

including in curriculum design and programme delivery. Notwithstanding the opportunity for HEIs

and employers to collaborate more closely in these respects, however, this 'transfer of power over

the curriculum' nonetheless reduces HEIs' influence in the apprenticeship (Powell and Walsh, 2018,

p. 91). Among the related issues highlighted in this documentary research on degree apprenticeships

were the extent to which employers really *want* the level of influence and engagement envisaged, as

well as the nature of the relationship between the 'student' and the HEI in the apprenticeship when

the apprentice's primary relationship is with the employer but a central aspect of the apprenticeship

programme is assessment of performance in both the workplace and the higher education

institution. In addition, this research highlighted that the extent to which HEIs can influence the

participation of underrepresented and other priority target groups is limited given that the employer

is the primary recruiter of apprentices, and some employers may not see the 'widening participation'

agenda as part of their role (p. 102).

3.4.4 Conclusion: apprenticeship in higher education

Although the exact role that employers play in co-creation may not be fully defined

(Konstantinou and Miller, 2020, p. 770), the need for stakeholders to work closely to co-create

curricula, and the need for strong working relationships between employers and the education

institution involved, is a recurring theme identified in the research (Dalrymple *et al*., 2012;

Bravenboer, 2016; Rowe *et al*., 2016; Irons, 2017; Rowe and Moss, 2017; Rowe, 2018; Quew-Jones,

2023; Taylor-Smith *et al*., 2023; Parkinson and Dziallas, 2024). The need for resources to support this

collaboration in apprenticeships, and the need for more longitudinal studies and larger sample sizes

across a range of disciplines, sectors, industries and pedagogies have also been identified (Rowe and

Moss, 2017; Rowe, 2018), and, as already noted, while the results of the first systematic and peer-

reviewed synthesis of the impact of degree apprenticeships indicate that they are meeting the UK

Government's high-level productivity and social mobility goals, the analysis also highlights a

deficiency in terms of robust and peer-reviewed evidence on the impact of these apprenticeships (Nawaz *et al.*, 2022).

3.5 Irish apprenticeship in an international context

3.5.1 Comparison with apprenticeship in other countries

Research specifically comparing apprenticeship in Ireland with apprenticeship in other countries is rare (for example, Ryan, 2000; Thoma, 2016; Vossiek, 2019). Publications that include an element of international comparison with Ireland are largely limited to those published by the Irish Government - including, for example, a Background Issues Paper to inform the 2013 review of apprenticeship training in Ireland (DES, 2013b) as well as the review report itself (DES, 2013a) - and those published by international organisations such as Cedefop (2018a, 2018b, 2019a, 2019b, 2020, 2021a, 2021b, 2021c). The Cedefop European database on apprenticeship schemes in EU Member States, for example, facilitates comparison at country level and at scheme level (Cedefop, 2019a).

A fundamental challenge encountered in comparing one apprenticeship system or 'scheme' (Cedefop, 2019b, p. 8) with another however is the question of what an apprenticeship is, how it is defined in the different systems, and what differentiates it from other forms of education and training in those systems. 'Unequal quantity and quality of data' has been identified as a particularly significant challenge, deemed to be due in part to differing definitions and reporting measures used for apprenticeships and vocational education and training (Chankseliani *et al.*, 2017, p. 18). The more restricted availability and reliability of data for apprenticeship internationally compared with that for primary, secondary and tertiary ('academic') education has also been reported, leading to difficulties in assessing which data are comparable across different systems as well as challenges associated with different definitions used when referring to VET routes and apprenticeship (pp. 16-18). In a specifically European context, for example, and while comparing apprenticeship in Austria, Denmark, Germany, Ireland, the Netherlands, and the UK (England and Wales) in 2000, a less than clear distinction between apprenticeship and full-time vocational programmes in second level in continental Europe was reported, due partly to work placement often also being a feature of those vocational programmes (Ryan, 2000, p. 44). This is still the situation, in that different definitions of apprenticeship still pertain across different national education and training systems (Cedefop, 2021a). A comparative study of apprenticeship across eight national contexts - Australia, Denmark, Egypt, England, Finland, Germany, India and South Africa - reported that different definitions used in different international organisations examining those systems, and the absence of a specific category for apprenticeship in collecting or reporting of data (Chankseliani *et al.*, 2017, p. 16, p. 18) add to the challenges.

Cedefop's analysis of 27 apprenticeship schemes operating in 19 EU Member States and Iceland - 'all mainstream and underpinned by regulatory frameworks' - highlights the importance of ensuring a clear identity for apprenticeship within national contexts *vis à vis* other relevant provision, to ensure the quality of apprenticeships and to measure their effectiveness (Cedefop, 2021a, p. 9). Its report on apprenticeship participation, which is based on data from national sources, highlights the challenges encountered in estimating apprentice participation in EU Member States however:

> The data are often not available or, when available, are not suitable for cross-national comparison. The term 'apprenticeship' is understood differently across countries and sometimes even within countries in the EU..... Variation is high, ranging from cases where it involves a structured apprenticeship programme, to cases where it is highly unstructured, and works as a complement to the school-VET track..... (Cedefop, 2021b, p. 8)

The fundamental challenge lies therefore in assessing the comparability or otherwise of data across different apprenticeship systems. Notwithstanding the significance of this challenge, however, some key elements of commonality and difference between apprenticeship in Ireland and other apprenticeship systems have been identified. These are presented and discussed below to give an indication of where Irish apprenticeship currently sits in an international context.

3.5.2 Commonalities, differences and issues arising

The Background Issues Paper for the 2013 review of apprenticeship was tasked with, *inter alia*, providing a description of the standards-based model of apprenticeship in Ireland and identifying its strengths and weaknesses (DES, 2013b). The paper included a simple comparison with international models of work-based learning in the form of an outline of the structure of apprenticeship systems in Switzerland and three European countries - Germany, Finland, and Norway - across five headings: level, duration and format of training, funding provision, and apprentice payment rates. The comparison showed many commonalities and differences, with a key difference also identified as being the 'level of training' positioned at school level (vocational or upper secondary) in all cases except Ireland (pp. 34-37). This is based in no small part on the historical foundations on which the education system in Ireland developed, including the development of a separate path to, and a widely perceived relatively lower status of, vocational education in this, as outlined in Chapter 2.

Data on outcomes from training for craft apprentices registered in Ireland between 1993 and 2011 and who had attended at least some off-the-job training (had progressed to at least the second of seven phases of craft apprenticeship training) were also provided, though data on those

registered during this time who did *not* proceed past the first phase of training were not. The data showed however that at end December 2011, 61% of those who had proceeded to Phase 2 completed the apprenticeship (received the level 6 Craft Certificate), 16% were still participating in the apprenticeship - the duration participants spent on these apprenticeships was not specified - and 23% had either 'not achieved the required standard or left the trade' (DES, 2013b, p. 14). Some 72% of apprentices registered by employers in 2011 were aged between 16 and 20, and 73% had a Leaving Certificate level qualification on entry to the apprenticeship (pp. 15-16).

The estimated cost per apprentice to the State in 2008 was €12,290 and at a particular point in 2011 it was €11,715 (DES, 2013b, p. 22). In comparison with data included on State costs in 2008 that had been calculated by the OECD for Ireland (subsequently amended by the Irish authorities) and other named countries - Austria, Denmark, the Netherlands, Norway, and Switzerland - the cost of apprenticeship to the State per participant over the course of their training was 'very high when compared to equivalent costs in most other EU countries and beyond' (p. 23). Some of the challenges associated with interpreting the data and ensuring comparability of data across the different countries were outlined in the paper, including issues related to calculation of whole-time equivalents and different levels of resources needed for different types of apprenticeships. The paper also confirmed that the value of the off-the-job training allowance paid by the State to (craft) apprentices in Ireland was greater than that in the comparator countries, partly due to the manner in which it was (and still is, for craft apprenticeship) calculated, that is, at a national level and with reference to wage norms in the trade sector (pp. 23-24). In addition, costs to employers and the State with respect to provision of apprenticeship training were reported to be high also when compared with other education and training provision in Ireland (p. 26). The OECD made several recommendations in relation to apprenticeship training in Ireland, including those to improve efficiency, cost effectiveness, accountability, and quality (OECD, 2010).

An earlier comparative study had also previously highlighted the relatively high level of public subsidies by means of the State provision of off-the-job training on behalf of employers in these apprenticeships, as well as an emphasis in the off-the-job training on practical or technical as opposed to general education (Ryan, 2000, pp. 58-59). Also noted was Ireland's application of methods of statutory regulation - which included formal integration into the national education system and regulation of the workplace component - that were more aligned with those of continental Europe and reflected a more interventionist approach underpinned by social partnership, compared with the more voluntarist approach of the UK (p. 60). More recently, curtailment of trade unions' power in Britain and the 'marketisation' of training, compared with greater engagement of trade unions in Ireland to influence training content and delivery for craft

apprenticeship, have also been pinpointed as key differences between the Irish and British apprenticeship systems (Vossiek, 2019).

The success or otherwise of a national apprenticeship system may also be calculated with reference to metrics such as participation in, completion of, and outcomes from apprenticeship. As noted, however, challenges exist in terms of collecting, reporting and comparing apprenticeship data, both at national and international levels. In its work on comparing systems in different EU Member States and beyond, Cedefop reported that much of the progress made at EU and Member State levels in the past decade in terms of apprenticeship policies has been done in the absence of reliable estimates of participation in apprenticeship and that:

> When it comes to evaluating publicly funded programmes and to designing new policies to increase the attractiveness of, and participation in, apprenticeship, this is a critical gap. From a statistical and policy perspective, the number of apprentices should ideally be complemented by data on apprenticeship graduates and on labour market outcomes after successful completion. (Cedefop, 2021b, p. 8)

The evaluation of the success or otherwise of national apprenticeship systems including Ireland has been measured using an indicator based on participation called 'scale of operation' (Ryan, 2000, p. 46). Using data from 1997 and 1998 this was calculated with reference to 'annual apprenticeship starts as a share of the youth population cohort', 'apprenticeship stocks in relation to total employment' and 'apprentices as share of 18-year-olds' in each of the countries studied - Austria, Denmark, Germany, Ireland, the Netherlands, and the UK (England and Wales). Numerous caveats were provided in the study however about comparability of the data between countries, particularly with that in the UK. These included that at the time almost any employee in the UK, or their employer, was legally entitled to call the person an apprentice (p. 46), any training programme could be called an apprenticeship once it was deemed to be eligible for public funding under the Modern Apprenticeship initiative, the criteria for which were considered to be potentially less than robust (p. 44), and more generally, for the purpose of calculating 'apprentices as share of 18-year-olds' for comparative purposes in all countries in the study, apprentice was defined as a person undertaking 'any form of apprenticeship' (p. 47).

In a recent comparative study that included Ireland, Cedefop compared apprenticeship in different countries at what it called the framework, system, and implementation levels (Cedefop, 2021c). While this study specifically examined enablers and disablers of cross-border mobility of apprentices in Austria, Denmark, France, Hungary, Ireland, and the Netherlands, in doing so it necessarily detailed the key characteristics of apprenticeship in each of the countries, what they had in common and how they differed in these respects, and whether and to what extent they might

support or potentially undermine achievement of a particular policy objective. In this regard, an earlier cross-national analysis also by Cedefop proposed that apprenticeship schemes have differing strategic functions and purposes that apprenticeship policies aim to fulfil and that what these are influences how apprenticeship is defined and where it is positioned in countries' national education and training systems (Cedefop, 2018a). According to this analysis, apprenticeship is either a part of the education and training system distinct from a school-based VET system, or it is a form of delivery in the formal VET system, or a hybrid of both (p. 12). Most of the apprenticeship schemes studied at the time were reported to be a form of VET delivery in the formal VET system, but trends showed that schemes were moving towards being a more formal and specific part of the national education system. Apprenticeship in Ireland, along with that in other EU Member States including Germany, Austria, and Denmark, was presented as an example of apprenticeship as a distinct system in the national education and training system, aimed at providing full competence in a specified occupation, and leading to a distinct qualification on completion of the apprenticeship (p. 44).

3.5.3 Current availability of data on apprenticeship in Ireland

In a more recent review of participation and costs of craft and consortium-led apprenticeships, the Department of Public Expenditure and Reform set out to examine available data to determine trends in participation, age and gender profile, retention rates and costs in apprenticeships in Ireland (Department of Public Expenditure and Reform, 2019, p. 5). Some international comparisons were made, including with elements of Australian and UK apprenticeship systems, but differences in definitions made the comparisons unsatisfactory (p. 10). The review did present very basic statistics on annual apprentice registrations and population, and some data on age and gender, between 1996 and 2018 as well as very limited data on non-completion rates.

Despite significant expenditure by the Exchequer and the NTF on apprenticeships across FET and higher education, the reviewers concluded that the difficulties they encountered in assessing the cost of apprenticeships, partly due to inadequacies and inconsistencies in the collection of data, meant that a meaningful analysis of costs, including the contributing factors to the reported relatively high average cost of the new consortium-led apprenticeships, could not be undertaken. Recommendations included implementation of a consistent approach to data collection, annual publication of specified data, and a formal evaluation of new apprenticeships to include an examination of value for money and cost effectiveness (Department of Public Expenditure and Reform, 2019, pp. 24-25).

Some basic information on developments and participation in statutory apprenticeship is reported in SOLAS's annual report. In 2020, for example, this includes reference to the number of

new apprentice registrations, the apprentice population, and new programmes (SOLAS, 2021a, pp. 16-17). Basic information relating to funding for apprenticeships in FET is also provided (for example, p. 68, pp. 73-74). In addition, SOLAS's 2021-2023 corporate plan refers to the number of 'new apprenticeship registrations and apprenticeship programmes in operation' (SOLAS, 2021b, p. 25). SOLAS's reported data on SOLAS-funded FET activity (SOLAS, 2020b) do not include apprenticeship, however. Some work has been reported on outcomes for qualified craft apprentices two years after they graduated, that is, those who received the level 6 advanced certificate on completion of their craft apprenticeship, between 2010 and 2016 (CSO, 2021). This work forms part of a collaboration agreed between SOLAS and the Central Statistics Office in 2019 to report on outcomes for learners exiting SOLAS-funded programmes in the FET sector, including apprenticeships in that sector, the majority of which are craft apprenticeships. Some basic information on apprenticeships in higher education, primarily relating to funding, is reported by the HEA in its annual report (HEA, 2020). Other publicly available data from the HEA relating to HEA-funded activity generally do not specifically refer to apprenticeship. The Apprenticeship Council did not publish annual or other public reports on apprenticeship, or notes of its meetings, since its establishment in 2015 to the end of its term of office in December 2021. Notes of meetings held by the National Apprenticeship Alliance since its establishment are published (Generation apprenticeship, 2024f), and an annual progress report for both 2022 and 2023 has been published by the National Apprenticeship Office (NAO, 2023, 2024).

3.5.4 Conclusion: Irish apprenticeship in an international context

Commitments in the 2021-2025 apprenticeship action plan include establishment of a performance framework and annual publication of performance data, establishment of a standardised cost collection method and value for money review, and annual publication of data including apprentice retention rates and graduate tracking (DFHERIS, 2021a, p. 45).

At present, however, there are significant inadequacies in terms of the collection, reporting, and availability of data on apprenticeship in Ireland. There is no formal, public forum in which comprehensive, coordinated, timely data on apprenticeship in Ireland are provided or readily available. Basic data on participation are available publicly but little or no data are available, for craft and consortium-led apprenticeships, in relation to important factors such as completions and non-completions of apprenticeships, reasons for non-completion or 'pausing' of apprenticeships, and progression to employment - whether in the apprenticeship occupation and with the apprenticeship employer - or further education. Ideally this would be available, at a minimum, by year,

apprenticeship model, occupation, gender, age/age cohort, and education level/qualifications on entry and exit.

This means there is very little reliable data on which to assess the success or otherwise of apprenticeship in Ireland, either with reference to Irish policy objectives, in comparison with other Irish initiatives, with reference to international policies, or in comparison with apprenticeship in other countries.

It also means that comparisons with other systems must remain for the moment primarily at levels that include, *inter alia,* context, structure, process, and stated purpose of apprenticeship as well as its attractiveness to potential employers and apprentices. The main mechanism of relevance for having done this to date has been at EU level, including with initiatives such as the publication of the European Commission's guiding principles for high-performance apprenticeships and work-based learning (European Commission, 2016), the Council of the European Union's framework for quality and effective apprenticeships and the Commission's associated progress report (European Commission, 2020), as well as Cedefop's recent and ongoing work on comparative databases and studies on various aspects of apprenticeship.

3.6 Conclusion

This chapter presents the results of an examination of academic and other literature on the topics of apprenticeship and work-based (and work-integrated) learning in higher education. The review highlights a relative dearth of research on work-based learning and apprenticeship in Ireland. It also highlights issues related to different uses of terms and availability of data, both in Ireland and internationally, that make it difficult to compare research on apprenticeship. The review also shows however that despite differences in many respects between the systems in operation in Ireland and the UK and its constituent parts, and an acknowledged need for more longitudinal studies and larger sample sizes across a range of disciplines, sectors, industries, and pedagogies, research relating to the introduction of higher and degree apprenticeships in England, in a timeframe similar to the introduction of the recent reforms in apprenticeship in Ireland, may particularly inform this research.

There is no study to date that has examined recent reform of apprenticeship in higher education in Ireland, and none that has examined it specifically from the perspective of higher education stakeholders' experiences. This literature review therefore confirms the relevance and potential value of this study, and it highlights questions about work-based learning that could usefully be adapted to consider in this research. A summary of the links between this secondary research and the questions asked during interviews in this research, as stated fully in the Interview Protocol (Appendix D), is presented in Table 3.2.

Table 3.2: How the literature review informed articulation of primary data questions		
Primary data questions / areas for discussion during semi-structured interviews	**Link to secondary research / literature**	**Implications for primary research study**
Q1 Role in organisation in relation to apprenticeship since 2016?	Graham (2019) drew on Saunders' 'policy implementation staircase' to identify levels (macro, meso, and micro) and key apprenticeship stakeholders in higher and degree apprenticeships in England. Using an adapted version of this categorisation in this research will provide a pragmatic basis for identifying key stakeholder groups and ensuring that the voices of all specified supply-side stakeholders can be represented in the research.	This question will also allow for each participant's role and context to be established.
Q2 Understanding of the Government's high-level policy on apprenticeship involving a new 'consortium-led' model of apprenticeship since 2016 - e.g. Its purpose? / What is it for? Who is it for? Why? Why now?	Research has revealed different uses and some confusion with respect to terms and concepts associated with work-based learning/work-integrated learning and apprenticeship (e.g. Fenwick, 2006; Linehan, 2008; Chankseliani *et al*., 2017; Mulder, 2017; Olsen and Tikkanen, 2018).	This question will help participants to articulate their understanding of the purpose of the reforms in apprenticeship and of the reasons for HEIs' involvement or non-involvement with these, thereby helping the research to determine reported reasons why the policy has or has not been implemented in certain respects in HEIs in Ireland.
Q3 Understanding of what this policy means for higher education in Ireland*?	These questions will provide an opportunity for participants to articulate their understanding of the terms and concepts associated with apprenticeship in Ireland.	This question will help participants to articulate their understanding of the associated requirements from HEIs in Ireland, thereby helping the research to determine perceived implications of the reforms for higher education in Ireland.
Q4 How the policy and associated apprenticeship reforms have been implemented in higher education in Ireland* since 2016 and how new apprenticeship compares with other existing work-based learning initiatives and practices in higher education*?	Critical deficiencies have been identified worldwide with respect to research, data, and information on apprenticeship, including that relating to participation in, impact of, and outcomes from apprenticeship (e.g. CEDEFOP 2018a, 2019b; Perusso and Wagennar, 2021; Nawaz *et al*., 2022). In addition, and albeit operating in different historical, cultural, political, and economic contexts, much of the research that does exist indicates that there are particular challenges and opportunities associated with the introduction of apprenticeships at higher levels and in higher education systems (e.g. Mulkeen *et al.,* 2017; Graham, 2019; Minton and Lowe, 2019; Lillis and Bravenboer, 2020; Fabian *et al.,* 2021; Hughes and Saieva, 2021; Mordhorst and Jenert, 2022; Quew-Jones 2023). The limited research on work-based learning in third level programmes in Ireland (e.g. Sheridan and Linehan, 2011) indicates that HEI representatives do experience challenges and opportunities including with respect to assessment strategies and assessing learning outcomes associated with learning in the workplace, for example. Together these questions will help to identify supply-side stakeholders' reported experiences of challenges and opportunities, and impact and outcomes, associated with the introduction of new apprenticeships leading to higher education awards in an Irish context, thereby helping to address the gap in the research somewhat.	This question will allow participants to discuss experiences with work-based learning in higher education and how these compare with new apprenticeship, thereby helping the research to determine the perceived comparative advantages and disadvantages of both, and the perceived reasons for the demand, or lack thereof, for new apprenticeship in certain respects in higher education.
Q5 Challenges, difficulties or problems experienced/observed/aware of in relation to apprenticeship reforms in higher education in Ireland* since 2016 and how they were dealt with?		This question will allow participants to discuss experiences of *challenges* associated with new apprenticeship, thereby helping the research to determine the impact of these on the demand for and future of new apprenticeship in certain respects in higher education.
Q6 Things working well, opportunities or possibilities experienced/observed/aware of in relation to apprenticeship reforms in higher education in Ireland* since 2016?		This question will allow participants to discuss experiences of *opportunities* associated with new apprenticeship, thereby helping the research to determine the impact of these on the demand for and future of new apprenticeship in certain respects in higher education.
Q7 Implications to date of the decisions made (Q4) and the challenges and opportunities encountered (Q5 & Q6) in relation to apprenticeship reforms, for higher education in Ireland*?		These two questions will allow participants to articulate their own appraisal of the factors affecting the demand for and the success of new apprenticeship in higher education to date and for the future, thereby allowing this research to report these.
Q8 View regarding the future development of apprenticeship in higher education in Ireland*?		

Q9 Any other issues you wish to raise/comment on? / any questions you wish to raise?	It is considered good practice in undertaking semi-structured interviews to allow flexibility in the process, including with respect to participants' input and any questions or concerns they may have (e.g. Clark *et al.*, 2021).	This question acknowledges that there may be important issues that have not been covered in the interview, and it will allow participants the opportunity to articulate these if they believe this to be the case, as well as any concerns or questions they may have about the interview just undertaken.
Q10 In summary: - What is the value of / what and whose needs are being met by apprenticeship in higher education in Ireland? - What is the value of / what and whose needs are being met by higher education in apprenticeship in Ireland?	Research has identified the need for higher education institutions to ask fundamental questions about what and whose needs will be best met when considering establishing an alternative or addition to a more traditional means of education provision (e.g. Brennan and Little, 1996).	These questions will allow the interview to conclude with a purposeful focus on participants' summary perspectives on the value and impact of the recent reforms in apprenticeship to date.

* and/or interviewee's higher education institution specifically, where relevant

The next chapter provides the rationale and justification for the approach adopted to attempt to answer these interview questions and the primary research questions in this study.

Chapter 4 Methodology

4.1 Introduction

The aim of this chapter is to provide the rationale and justification for the approach adopted in undertaking this research.

To meet this aim, the chapter commences with a presentation of the **research problem**, **research focus**, and **research aim**, followed by a statement of the **research questions** and consideration of **the researcher's positioning** in answering these. The chapter is further developed by presenting the **research methodology**, including the **researcher's philosophical worldview** and the **research design** and **research methods** adopted in this context. The **sampling strategy** for gathering primary data from 17 semi-structured interviews is then presented, as is the **rationale for choosing reflexive thematic analysis** as the analytical strategy for analysing the dataset, and details of **the analytic process and results from this**. The chapter concludes with an outline of the **theoretical lens that guided the researcher's consideration of the findings**, followed by consideration of **ethics**, **reliability and validity** of the research, and **limitations of the research**.

4.2 The research problem

The underlying 'problem' on which the research is based is that research on apprenticeship in Ireland is scarce and the story of the recent expansion of statutory apprenticeship in Ireland between 2016 and 2023 - representing a period of significant change in the history of apprenticeship in Ireland involving the introduction of a new model of apprenticeship in 2015 - has not yet been told. The purpose of the research is to tell part of that story, focusing on the developments in that period particularly as they relate to understanding and experiences in the higher education sector.

4.3 Research focus and aim

The focus of the research is on the reforms in statutory apprenticeship in higher education in Ireland since 2016, primarily with respect to the introduction of a new consortium-led model of apprenticeship from the perspective of specified stakeholders involved in the supply of apprenticeship at various levels in apprenticeship policy and practice in higher education.

The aim of the research is to examine understanding and experiences of recent reforms in statutory apprenticeship in Ireland since 2016, primarily with respect to the new consortium-led model of apprenticeship in the higher education sector, from the perspective of supply-side stakeholders involved at three levels in apprenticeship policy and practice in higher education.

The stakeholders in question are *'individuals holding a role related to [apprenticeship] policy production',* and *'participants working in higher education responsible for delivering the policy'* at

different levels in the higher education system (Graham, 2019). In this research this means personnel working in the relevant government department and its relevant agencies operating at the macro level in apprenticeship policy and practice, and personnel working in the higher education sector at meso and micro levels in the design and delivery of apprenticeships that lead to higher education awards on the National Framework of Qualifications. The emphasis in this respect is on the coordinating provider (i.e. not collaborating) role in apprenticeship policy and practice.

This research did not seek to examine other key stakeholders' understanding and experiences, including, for example, those of employers or apprentices.

4.4 Research questions

Sevral avenues are open to HEIs to establish work-based learning as an alternative, or an addition, to an institution's more traditional means of education provision (Brennan and Little, 1996). Some of the ways in which work-based learning can be embedded in initiatives in higher education in Ireland include work placement as a mandatory and credit-earning part of an undergraduate or postgraduate programme; professional or clinical practice as mandatory and credit-earning part of a programme, including in programmes that may also involve professional, statutory, and regulatory bodies and lead to a professional licence to practise as well as an academic award; and the planned acquisition of specified learning through work as part of a professional development or upskilling programme for employees (Winberg *et al.*, 2022). Non-statutory apprenticeship-type models of learning, which include education provision by a HEI and professional practice in the workplace - and which usually lead to a professional licence to practise as well as an academic award - are prevalent in professions such as law, medicine, and primary and secondary school teaching.

According to Brennan and Little, however, before any decisions on planning and implementing work-based learning are made by HEIs:

> ….. a prior decision for higher education institutions is whether they should get involved in work based learning at all. What are the needs for work based learning in higher education, and the needs for higher education in work based learning? To what extent are they alternative ways of achieving the same goals, or are there needs that can only be provided (or can be better provided) by one, rather than the other? How can the needs of individuals and the needs of organisations be effectively and efficiently reconciled? Those planning work based learning will need to be clear about such distinctions before they consider more detailed questions of implementation. (Brennan and Little, 1996, p. 111)

Although the questions posed by Brennan and Little were proffered at a time when work-based learning in its many forms was less prevalent in higher education than it is today, and although much

progress has been made, in accordance with Government policy and associated targets for the number of new apprenticeship programmes and new apprentice registrations in Ireland since the implementation of the first of the new apprenticeships in 2016 (NAO, 2024), the questions are still pertinent and they may also be adapted to the recent evolution of apprenticeship in Ireland in higher education: why new consortium-led apprenticeship in higher education?, why now? - both at a national policy and higher education sector/HEI level - and what and whose needs are being met by new apprenticeship in higher education, and by higher education in new apprenticeship in Ireland?

In this regard, the motivation for this research is the researcher's interest in exploring how this national apprenticeship reform initiative is experienced by supply-side stakeholders in higher education. These stakeholders are people who have played and continue to play a key role at three levels in the higher education system in apprenticeships that lead to higher education awards.

The central question in this research is:
- What are supply-side stakeholders' experiences of recent reforms in apprenticeship in the higher education sector in Ireland?

The following sub-questions were considered in this context:
- What has been the experience of higher education institutions (HEIs) in the implementation of this national apprenticeship reform initiative?
- What are stakeholders' perspectives on this initiative now and for the future?

4.5 The researcher

The researcher has worked in the areas of education and training for almost three decades, including as an evaluator of national and European programmes, an owner-manager of an education and training consultancy business, and, most recently, a member of a management team in the organisation that is the statutory and regulatory authority for apprenticeship in Ireland, working on the development of the new consortium-led apprenticeship model and new apprenticeships both in FET and higher education.

In this latter role key responsibilities included supporting the development of good practice, quality assurance, and good governance in the national apprenticeship system and in new apprenticeships. The role involved engagement with a range of stakeholders in creating new processes, procedures, and legislation to support the ongoing development of the overarching national apprenticeship 'architecture' and the design and delivery of individual apprenticeships. During the period of the planning, field research, data analysis, and writing up of this research, however, this researcher was and is working on a jointly-funded secondment basis in an organisation

in higher education not involved in apprenticeship in Ireland. Further consideration of the researcher's positioning in relation to insider research are presented in the section on reliability and validity of the research at the end of this chapter.

4.6 Methodology

An exploratory qualitative case study research approach was adopted for this research. The basis for choosing this approach - or 'methodology' or 'framework for the research' (Creswell and Creswell, 2023, pp. 3-6) - is outlined in this section, starting with a consideration of the main components that underpin this approach (pp. 3-22, and Figure 4.1) including the researcher's **philosophical worldview**, the **research design** and the **research methods**, followed by consideration of ethics and limitations of the research.

Figure 4.1: Three major components of a research approach or methodology (Creswell and Creswell, 2023)
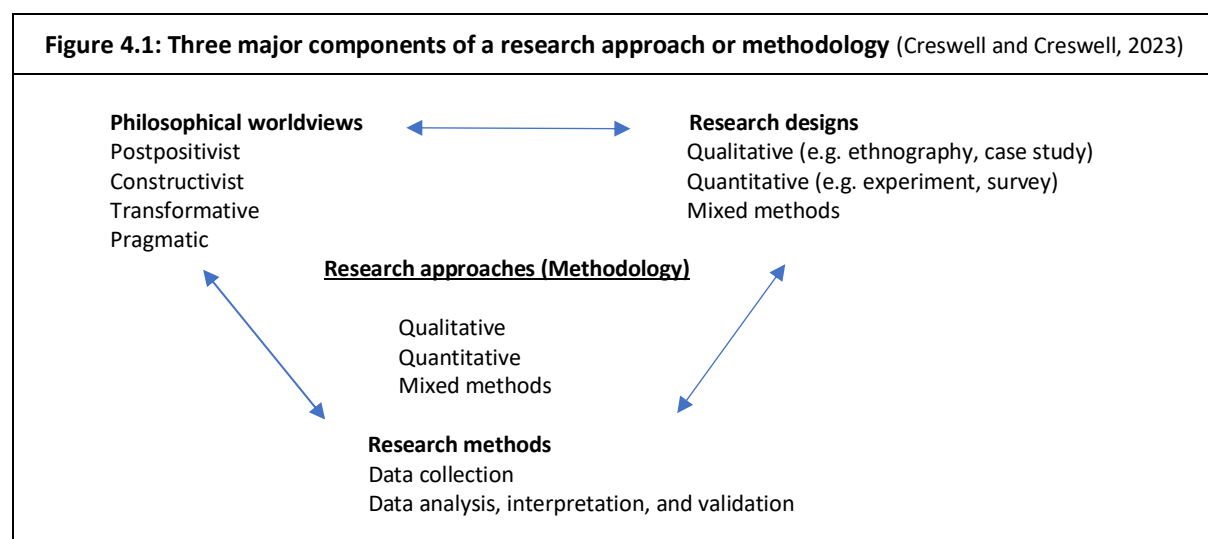
The terms 'quantitative' and 'qualitative', as applied to education research, are taken in this research to refer to concepts that encapsulate philosophical worldviews, research designs, and research methods associated with a quantitative or qualitative approach to research, as presented by Creswell and Creswell (for example, 2023) and discussed further below.

4.6.1 Philosophical worldviews and assumptions related to educational research

In the mid-1980s, and drawing initially on concepts from the philosophy of knowledge, Lincoln and Guba (1985) introduced a scheme for comparing research paradigms in the social sciences. Together, these comprise the philosophical concepts or assumptions that characterise a particular research paradigm, including those relating to, *inter alia*, the nature of reality, truth,

research phenomena (ontology), and the relationship between that reality and the researcher or how best to find out about that reality (epistemology) (Sefotho, 2015).

In the Positivist paradigm, it is believed that there is one absolute reality or truth which is independent of the researcher and can be objectively studied, and that once discovered it can help to identify and explain causal relationships between sets of variables and to predict behaviour or events (for example, Burke Johnson, 2014). In terms of how to discover that truth or reality, the best way of doing so is considered to be with reference to empirical testing, using the scientific method, and studying behaviour and events under controlled conditions to confirm hypotheses and theories, to identify universal scientific laws, and to generalise findings from a sample to a population (pp. 33-38). Three levels of quantitative research have been identified: descriptive, correlational, and causal (Parahoo, 1997), the latter involving experiment as a research design (Walker, 2005, p. 572) and considered by many to be the best possible means of gaining reliable information on the effect of interventions, for example in healthcare, with the randomised controlled trial considered by many to be the 'gold standard' (p. 574).

Creswell and Creswell (2023) draw on Guba's view that the term 'worldview' means 'a basic set of beliefs that guide action' (p. 7, quoting Guba, 1990). They further acknowledge that while others also use terms such as 'paradigm' or 'epistemologies' and 'ontologies', their preference is to use the term 'worldview' to signify a researcher's philosophical orientation about the world and the nature of research that the researcher brings to a research study. They acknowledge also that there are ongoing debates about what these different terms mean, and, in this context, they focus on four worldviews or sets of beliefs and values that are 'widely discussed in the literature' (p. 7): the *Postpositivist*, *Constructivist*, *Transformative*, and *Pragmatic*.

The *Postpositivist* worldview is less definitive than Positivism in terms of the extent to which it claims it is possible to know or understand the truth about human behaviour, but it continues to assert the need for as much researcher objectivity as possible; the *Constructivist* or *Social Constructivist* worldview - 'often combined with Interpretivism' (Creswell and Creswell, 2023, p. 9) - allows for greater exploration and understanding of research participants' experiences and the meaning they attribute to those experiences, as well as the researcher's interpretation of these, to generate or develop a theory or 'pattern of meaning'; the *Transformative* worldview incorporates a commitment to action - to reform - as part of the research process or on foot of the results; and the *Pragmatic* worldview focuses on 'what works', drawing on all approaches as deemed appropriate to solve the research problem and forming the underpinning basis for mixed methods studies (pp. 7-12).

It is important to note at this point also that the notion that particular research methods are 'owned' by particular research paradigms is not universally accepted (Biesta, 2010; Teddlie and Tashakkori, 2012). Teddlie and Tashakkori, for example, firmly reject the concept of any particular research method having a 'natural home' - as suggested by Denzin and Lincoln (2005, p.9) - and they argue instead that 'multiple paradigms can be associated with any given method' and that researchers' decisions on which method(s) to use should be 'based on their research questions, not some link between epistemology and methods' (Teddlie and Tashakkori, 2012, pp. 779-780). While debates about 'incompatibility' or 'incommensurability' between and across paradigms are ongoing (for example, Burke Johnson *et al*., 2007; Creswell, 2007, 2011, 2013; Denzin, 2008; Burke Johnson, 2014; Creswell and Plano Clark, 2017; Lincoln *et al*., 2018) it may nonetheless be said that on the continuum from quantitative to qualitative approaches to research, quantitative research methods - or adopting a quantitative approach to undertaking research - fits most comfortably in the Positivist category of research paradigm, and qualitative research methods are in turn more aligned with the Constructivist/Interpretivist category (Burke Johnson, 2014, pp. 32-33; Creswell and Creswell, 2018, p. xvii).

This researcher's underlying assumptions in terms of the extent to which it is possible to know or understand the truth about human behaviour are less definitive than those encompassed in the Positivist or Postpositivist paradigms and are more aligned with the Constructivist/Interpretivist worldview. This researcher does not believe, for example, that it is generally possible in educational research to identify or control all the relevant variables that a quantitative experimental design would require, and, even if it were, it may be inappropriate to do so due to ethical and other more practical considerations. In addition, 'all data must be interpreted' otherwise they merely represent 'a person with an opinion' (Baird *et al*., 2017, p. 133).

There are advantages and disadvantages to using quantitative, qualitative or a mix of both methods in educational research, and, even within the use of a specific method - such as a survey or interview - there are advantages and disadvantages, strengths and weaknesses, benefits and limitations. Creswell and Creswell's logic that the nature of the research problem, the audience for the resultant research findings, and the researcher's own experience [should] also affect a researcher's choice of approach (Creswell and Creswell, 2018, pp. 19-20) is accepted as reasonable by this author, as is Moss and Haertel's (2016) belief in the value of 'encouraging problem-focused research, of making decisions about fruitful methodologies and structures for programs of research in light of particular problems and contexts at hand' (p. 234).

On this basis, and with reference to this researcher's experiences that inform her beliefs, values, and preferred approach to inquiry, the approach to inquiry is qualitative, the research is

positioned in accordance with the Constructivist worldview, the research design is a qualitative case study, the research methods include semi-structured interviews as the primary method of data collection, and reflexive thematic analysis (Braun and Clarke, 2022a) as the analytic approach adopted (Figure 4.2).

Figure 4.2: Components of the methodology in this research

Philosophical worldview
Constructivist

Research approach to inquiry
Qualitative

Research design
Qualitative case study (exploratory)

Research methods
Data collection semi-structured interviews
Data analysis reflexive thematic analysis
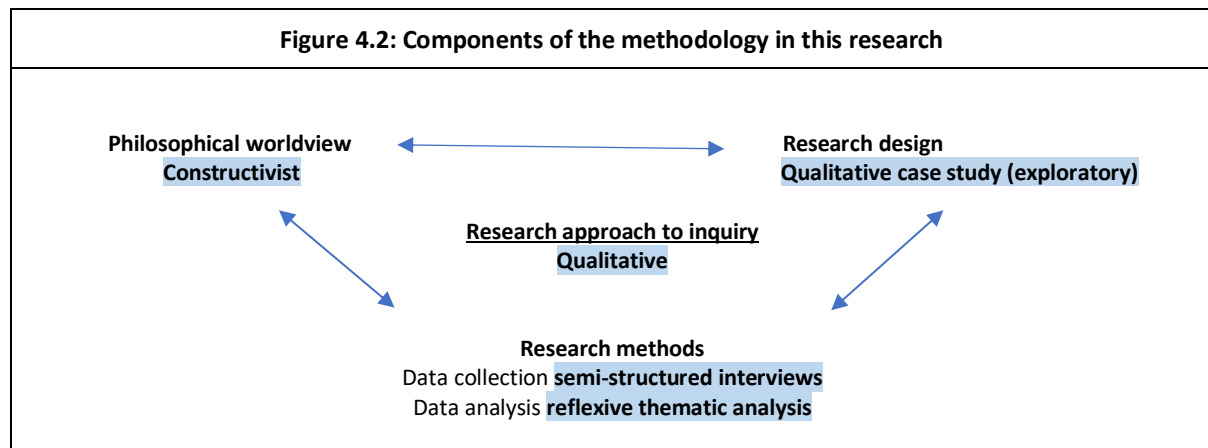
4.6.2 Research design

'Qualitative research is a situated activity that locates the observer in the world…..qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them' (Denzin and Lincoln, 2011, p.3).

There are many approaches to qualitative research, and many classifications of those approaches, but five in particular appear consistently over time and most frequently in the literature on social, behavioural, and health science that have systematic procedures for inquiry including those for data collection and data analysis (Creswell and Poth, 2018, p.8). These are *narrative research* (Riessman, 2008), *phenomenological research* (Giorgi, 2009), *grounded theory research* (Charmaz, 2006; Corbin and Strauss, 2007, 2015), *ethnographic research* (Hammersley and Atkinson, 2019), and *case study research* (Stake, 1995; Yin, 2018).

According to Yin, however, although the implication in Creswell and Poth's categorisation is that 'doing a case study might be considered one of the acceptable variants of doing qualitative research' (Yin, 2018), case study research 'may be separate from qualitative research' and the issue deserves further examination (pp. xxiii-xxiv).

Notwithstanding methodological issues relating to terminology and the place of case study research *vis à vis* qualitative research that may warrant further examination, the research design adopted for this study is a case study. The 'case' is recent reform in apprenticeship in higher education in Ireland.

The case study approach was deemed most appropriate for this research due to its focus on providing an in-depth description, analysis, and understanding of a case or cases with the unit of analysis being the study of an event, programme, or activity, as opposed to exploring the life of an individual(s) or telling their individual stories (narrative research), understanding and describing 'the essence' or common meaning of several individuals' lived experience of a phenomenon (phenomenological research), setting out to generate or discover a theory from the data (grounded theory research), or describing and interpreting the culture of a group (ethnographic research) (Creswell and Poth, 2018, pp. 67-106).

With reference to three categories of case study identified by Yin (1984, pp. 22-24) - descriptive, exploratory, explanatory - this case study is exploratory. This means that the study does not seek to simply describe events or phenomena nor to necessarily seek to explore causal links between phenomena, but rather primarily to pose research questions that give rise to further examination of the phenomena.

4.6.3 Research methods

This research involves examination of stakeholders' stated views on aspects of apprenticeship in Ireland, particularly their understanding and experiences of the reforms in apprenticeship in higher education since 2016.

The primary research involved semi-structured interviews with a sample of 17 stakeholders involved in apprenticeship in Ireland, and thematic analysis of the data gathered during those interviews. A research diary and reflexive journal were also kept throughout the research process.

A review of the literature (Chapter 3) and an examination of publicly available material relating to apprenticeship also informed the design and undertaking of the primary research.

4.6.3.1 Examination of publicly available material relating to apprenticeship

Examination of publicly available material relating to apprenticeship included, *inter alia*, examination of written submissions to a national public apprenticeship consultation process, two apprenticeship action plans and associated documentation, the national apprenticeship.ie website, and responses to parliamentary questions, Ministers' speeches and announcements in press releases relating to apprenticeship.

Some 62 written submissions were received in response to a consultation paper published by DFHERIS in 2020, which was designed to inform the creation of a 2021-2025 national apprenticeship action plan. The consultation paper included 29 open-ended questions under seven headings: definition of apprenticeship; legislation; governance structures; development and delivery

of apprenticeships; funding of apprenticeship; support for employers; and increasing participation (DFHERIS, 2020a).

All 62 publicly available written submissions were read as part of this research, to get a general overview of stakeholders' views on these specified aspects of apprenticeship in 2020 (DFHERIS, 2020a). Some of the written submissions provided answers to the specific questions posed in the consultation paper, while some did not.

Some 10 of the submissions were examined further, to get an indication of specified stakeholders' views. This sample included submissions from eight organisations whose remit relates specifically or mainly to statutory apprenticeship in higher education, including the (four) submissions received from HEIs - Griffith College, National College of Ireland, Technological University Dublin, and University of Limerick - all of which had varying degrees of engagement with the new consortium-led model of apprenticeship and were at different points in the apprenticeship development process at that time, and the (four) submissions received from organisations whose primary remit involves or includes direct engagement in the higher education sector - the Irish Universities Association, the Technological Higher Education Association, the National Forum for Teaching and Learning in Higher Education, and Quality and Qualifications Ireland. The main submission from Ibec, and ICTU's submission, were also included, to get a sense of employers' and employees'/apprentices' perspectives, respectively, particularly in relation to apprenticeship in higher education.

The data in the submissions to the 2020 apprenticeship consultation process were not specifically gathered for this research, but rather in response to the defined questions that were posed as part of a separate and defined national consultation process. It is not clear how or why these specific questions were decided upon, or the specific headings under which they were posed. The primary value of the submissions to this research however was to provide an indication of stakeholders' views on particular aspects of apprenticeship at a particular point in time, including on the reforms that had been introduced in 2015, and to help to inform the design and conduct of semi-structured interviews.

All 62 submissions were firstly read, and items of interest were noted. A basic content analysis process was subsequently undertaken with the 10 specified submissions, using an inductive approach (Clark *et al.*, 2021, p. 271), a process similar to the first of the six phases in reflexive thematic analysis - i.e. familiarisation with the data (Braun and Clarke, 2006, 2022a).

4.6.3.2 Semi-structured interviews

The research instrument

An interview is where 'knowledge is constructed in the interaction between the interviewer and the interviewee' (Brinkmann and Kvale, 2015. p. 4), and a qualitative research interview involves attempting 'to understand the world from the subjects' point of view' (p. 3). Qualitative interviews involve face-to-face, telephone, or online interaction between the interviewer and one or more research participants, and the two main types are structured interviews and semi-structured interviews (Clark *et al.*, 2021, p. 466). In semi-structured interviews the researcher will usually have an interview guide which includes a list of questions or specific topics to be covered, and, while the interviewer generally asks all questions and uses similar wording with all interviewees, there is flexibility in how the interview is conducted to allow interviewees' points of view to be expressed (p. 468), including, for example, changing the order of questions in an interview (p. 429). For this reason - an element of flexibility in the process - the semi-structured interview was deemed to be the most appropriate research method for gathering primary data in this research.

The content of the research instrument in this study - i.e. the schedule of interview questions for the semi-structured interviews - was informed primarily by findings from the literature review including Graham (2019) and examination of publicly available material including submissions to the national apprenticeship consultation process, as outlined above.

The schedule of interview questions for the semi-structured interviews - the 'outline of areas for discussion during interview' - which was sent in advance to interviewees once a date for interview had been agreed, is in the Interview Protocol in Appendix D.

Interview protocol

According to Creswell and Poth (2018), an interview protocol or plan should be used as a guide to ask questions and record answers in qualitative interviews, and it should contain components such as basic information about the interview (for example, where the interview took place, names of interviewer and interviewee), an introduction to provide the interviewer with 'instructions' as to what s/he should do at the start of the interview (for example, outline the purpose of the research, get or confirm informed consent from participant), the schedule of approximately five to 10 interview questions with probes (for example, request for more information or further explanation from interviewee), and closing instructions (pp. 190-191).

The initial email request from the researcher to potential participants indicated a preference on the researcher's part for an in-person interview which would be audio recorded, and commitments and details regarding the audio recording and the subsequent transcription and storage of data were

given in the Plain Language Statement that was attached. In addition, participants were advised that an online interview could be facilitated if preferred by the participant. Responses from some participants indicated that they would prefer an online interview, and in these instances this preference was facilitated with additional commitments, details and options given regarding the recording of the interview and the subsequent transcription and storage of the data gathered. The interview protocol used in this research is included in Appendix D. The Plain Language Statement is in Appendix E, and the Informed Consent Form is in Appendix F.

Piloting of interview protocol

While pilot studies are frequently used in quantitative health-related disciplines, generally in the form of feasibility studies ('smaller versions of studies') or pre-testing of a research instrument such as a questionnaire or interview schedule (van Teijlingen and Hundley, 2001, 2002), there is a scarcity of research and limited guidance on pilot studies in qualitative research, particularly regarding how to conduct pilot studies and on methodological issues, including in case study research involving semi-structured qualitative interviews (Malmqvist *et al.*, 2019). There is also some debate about using the data from a pilot study in the data analysis, including with respect to the fear of 'contamination' when data from the pilot are included in the main results, but this is considered less of a concern and is a more common practice in qualitative research than in quantitative research (van Teijlingen and Hundley, 2002).

A draft interview protocol was piloted with an individual working at a national and international level in education and training in Ireland, but not directly involved in apprenticeship. Following a post-interview discussion on the entire process, some minor amendments were made to ensure clarity in the process and questions.

4.6.3.3 Research diary and reflexive journal

The analytical approach adopted for this qualitative study is reflexive thematic analysis (RTA) as espoused by Braun and Clarke (2006, 2019, 2020, 2021, 2022a, 2022b, 2022c). One of the core assumptions on which RTA is based is that researcher reflexivity is an important tool in the analytic process, and keeping a reflective or reflexive journal is considered an essential practice in this (Braun and Clarke, 2022a, p. 18). Reflexivity - defined as researchers' practice of critical reflection on their role as researcher, and their research practice and process (p. 8) - is not the preserve of RTA, however, and there is evidence of its growing use more broadly in social research, involving researchers being reflective about their values, methods, decisions, about the contexts within which they live and work, and about how these may have implications for the research they engage in and

the knowledge they generate (Bryman, 2016, p. 367). Reflexivity is the term most widely used 'to capture both the researcher's generative role in research, and their insight into, and articulation around, this role' (Braun and Clarke, 2022a, pp. 12-13).

In this research a research diary also served as a tool to log practical issues and decisions associated with the research - for example, identification of potential interviewees and decisions made about which ones to invite to participate in the research. The reflexive journal served as a tool to log reflections on these issues and decisions, for example on *why* the researcher believed certain people should or would be invited to participate, and on what issues might arise in that regard and how the researcher would deal with those - for example, with respect to interviewing people in positions of power and how to obtain their engagement with and confidence in the researcher (Robson and McCartan, 2016, p. 2). Sample entries to the reflexive journal are included in Appendix G.

4.7 Population and sampling

Primary data were gathered in semi-structured interviews with a sample of key stakeholders involved in the supply of apprenticeship in higher education in Ireland. The sample was drawn from among those involved in the design, development, and delivery of recent Irish national apprenticeship policy since implementation of the consortium-led model of apprenticeship in 2016.

A purposive sample was drawn of interviewees who played and continued to play a key role in the recent development of apprenticeship in higher education in Ireland. Judgement, or purposeful, sampling involves selecting individuals or groups who are particularly knowledgeable about the topic of interest to participate in the research effort (Creswell and Plano Clark, 2017); it is widely used in qualitative research for the identification and selection of information-rich cases (Palinkas *et al.*, 2015, p. 534, quoting Patton, 2002).

Interviewees were drawn from among 'individuals holding a role related to [apprenticeship] policy production' ('policy informants') and from among 'participants working in higher education responsible for delivering the policy' (Graham, 2019).

The sample of 'policy informants' was drawn from among those involved in the design, development, and delivery of recent Irish national apprenticeship policy including since implementation of the new model of apprenticeship in 2016. The sample of participants responsible for delivering the policy was drawn from among those involved in apprenticeship in HEIs since implementation of the new model in 2016. All interviewees were identified and contacted using publicly available information regarding their roles and contact details.

The sampling strategy also drew on Saunders' 'policy implementation staircase' (Reynolds and Saunders, 1987; Saunders, 2006; Saunders and Sin, 2015) which 'provides an illustration of the systemic positions held by particular 'layers' within higher education systems' in Scotland (Saunders and Sin, 2015, p. 139) and adapted by Graham to identify levels (macro, meso and micro) and key apprenticeship stakeholders within apprenticeships in higher education in England (Graham, 2019, p. 110). In the context of statutory apprenticeship in higher education in Ireland, the equivalent key stakeholder groups from which the initial purposeful sample of interviewees for this research was drawn are presented in Table 4.1. This included five people at each of the three layers or levels of the system. Interviewees are referred to as macro-level, meso-level, or micro-level interviewees, as and where appropriate in this research.

Table 4.1: Initial purposeful sampling strategy for semi-structured interviews		
Policy Implementation Staircase levels and stakeholders within the higher education system (Saunders and Sin (2015), adapted by Graham (2019))	**Applied to statutory apprenticeship in higher education in Ireland**	**Sample for this research** Semi-structured interviews with 15 stakeholders
Macro Government	Minister, Government department(s), funding agencies	Government department and agency of Government department	5 'policy informants' working at this level in apprenticeship in Ireland
Meso Senior management in higher education institutions	Executive/senior management in higher education institutions	Executive/senior management in universities, technological universities, institutes of technology, and other higher education institutions	5 Executive/senior managers working at this level in apprenticeship in higher education institutions in Ireland
Micro Teams and individual members of staff in higher education institutions	Academic departments and central business units / Individuals (academics / professional support staff)	Individual academic and professional support staff in faculties, schools, departments, and business units in universities, technological universities, institutes of technology, and other higher education institutions	5 Academic and professional staff working at this level in apprenticeship in higher education institutions in Ireland

At the time arrangements were being finalised for interviews for this research (March-May 2023), eight HEIs were engaged as coordinating ('ultimately responsible' (QQI, 2016, p. 1)) providers in the design, development, and delivery of new consortium-led apprenticeships in Ireland (Table 4.2).

Table 4.2: HEI coordinating providers of new apprenticeships — May 2023								
HEI Provider name	**TU Dublin**	**South East TU**	**TU of the Shannon: Midlands Midwest**	**Munster TU**	**Atlantic TU**	**University of Limerick**	**National College of Ireland**	**Griffith College**
Type of HEI	Technological university (TU)					**University**	'Independent' (not-for-profit) College	'Independent' (private) College
'HEA designated'	Yes					Yes	No	No
Designated awarding Body	Yes					Yes (and own statutory degree awarding powers)	No	No
Previous experience of (craft) apprenticeship	Yes					No	No	No
Other ('collaborating') providers involved in this apprenticeship programme(s)	Yes	No	Yes	Yes	Yes	No	No	No
This HEI also involved as 'collaborating' provider in other HEI-led apprenticeship programme(s)	Yes	Yes	Yes	Yes	Yes	No	No	No
New consortium-led apprenticeships at May 2023 (NFQ level and name)	Gra. — L8 CGI Tech; Aun. — L6 Log.; Tall. — L6 Tel., L6 Lab. Tec., L7 Lab. Alys.	Carlow campus — L6 Geo Driller	Limerick Campus — L7 Industrial Electrical Engineer; Athlone Campus — L7 Polymer Proc. Tech.	Cork campus — L7 Eng. Services Mgt.; Kerry Campus — L7 Chef de Partie, L8 Sous Chef	Galway campus — L6 Man. Tech., L7 Man. Engineer; Sligo Campus — L6 Transport Ops., L8 Insurance Practitioner	L6 Supply Chain Assoc. L8 Supply Chain Spec. L9 Supply Chain Mgr. L8 Cybersecurity L9 Eq. Systems Eng. L9 Lean Sigma Mgr. L10 Principal Engineer	L6 IFS Associate L8 IFS Specialist L9 Recruitment Exec.	L6 Adv. Healthcare Ass. Practitioner L7 Bar Manager
No. of new (HEI-led) apprenticeships at May 2023	5	1	2	3	4	7	3	2
	15							
	27							

The full population of eight HEIs was invited to participate in the research.

The invitation was accepted by seven (88%), including four of the five TUs involved in new apprenticeship in higher education, as well as the only university and the only two independent HEIs involved.

Some of these HEIs operated as a coordinating provider in only one apprenticeship and some in more than one. In addition, some had previous and current experience of statutory apprenticeship in the form of craft apprenticeship, and some did not.

Although part of the coordinating provider role in consortium-led apprenticeship may also involve working with others involved as collaborating providers in individual apprenticeship programmes - and a coordinating provider in one apprenticeship may also be a collaborating provider in another apprenticeship(s) - at present only some apprenticeships, in the TUs, involve collaborating providers, also in the technological universities. In most current apprenticeships in higher education, and in all apprenticeships outside the TU sector in higher education, therefore, there is only one provider, the coordinating provider, involved in the delivery of the apprenticeship. It is in this context - one provider - that understanding and experiences were examined, and this aspect of the coordinating provider role focused on, in this research.

Primary data were gathered in semi-structured interviews with a sample of key stakeholders involved in the supply of apprenticeship in higher education in Ireland. The final sample was drawn

from among those involved in the design, development, and delivery of recent Irish national apprenticeship policy since implementation of the consortium-led model of apprenticeship in 2016.

The final sample was a purposive sample of 17 people as follows:

- five at macro level (in Government department and four agencies of this department)
- seven at meso level (executive/senior managers in five higher education institutions, and in two representative bodies)
- five at micro level (academic and professional staff in five higher education institutions)

4.8 Data gathering

4.8.1 Recruitment of interviewees - macro, meso and micro levels

A total of 17 semi-structured interviews were undertaken for this research. These included five interviews with executive/senior management personnel working in the Government department with responsibility for statutory apprenticeship in Ireland and in four national agencies with responsibility for various aspects of apprenticeship - including elements of apprenticeship in higher education - that report to that department. These five organisations and interviewees are considered in this research to be operating at the 'macro' level in the higher education system.

The research also included five interviews with executive/senior management personnel in five HEIs operating as coordinating providers - 'ultimately responsible' providers - in at least one new apprenticeship in higher education. These interviewees are considered in this research to be operating at the 'meso' level in the higher education system. It also included interviews with two executive/senior personnel in two representative bodies whose remit is to influence policy and advocate at national level for their member HEIs, who were also assigned in this research to the 'meso' level within the higher education system.

Interviews were also held with five academic and professional support personnel in five HEIs operating as coordinating providers in new apprenticeships in higher education. These interviewees are considered in this research to be operating at the 'micro' level in the higher education system (Table 4.3).

Table 4.3: Final sample - interviews with 17 stakeholders at three levels in the higher education system		
Level	**No.**	**Interviewees**
Macro	5	Executive/senior management personnel in Government department with responsibility for statutory apprenticeship in Ireland and in four national agencies that report to that department
Meso	7	Executive/senior management personnel in five HEIs operating as coordinating providers - 'ultimately responsible' providers - in new apprenticeships in HE, and Executive/senior personnel in two HEI representative bodies
Micro	5	Academic and professional support personnel in five HEIs operating as coordinating providers in new apprenticeships in HE

All 10 HEI interviewees (five meso-level and five micro-level) were employed in these roles in their respective HEIs at the time of interview. Most HEI interviewees had been involved in new apprenticeship since the beginning of the new apprenticeship development process in that HEI, which for most was several years. Only one interviewee had first become involved in the new apprenticeship development process immediately *after* initial approval for the development of specific apprenticeships had been received by the higher education institution.

Quotations from data gathered in interviews are included in the thematic analysis of that data (Chapter 5) to help 'convey the key patterned meaning evident from [the researcher's] engagement with that data, related to the research question' (Braun and Clarke, 2022a, p. 107) and to provide illustrative examples or comments on these.

Quotations are pseudo-anonymised, and care has been taken to ensure that their inclusion is done without compromising confidentiality or inadvertently identifying the individual interviewee's organisation or position therein. Rather, where quotations are included, reference is made only to the level at which the interviewee works in the higher education system - macro, meso or micro - and to a number assigned by the researcher.

As noted, the research included interviews with (two) senior personnel in two representative bodies whose remit is to influence policy and advocate at national level for their member higher education institutions. These representative organisations were not initially included in the interview sample as originally defined, as it was deemed likely that they sit somewhere in-between what are considered in this research to be the meso and the macro levels of the higher education system in Ireland. Following further consideration of their remit with respect to the majority of HEIs in Ireland, however, as well as their indirect but close involvement in these HEIs and consequently the potential value of their perspective on understanding and experiences of the reforms in apprenticeship in the higher education system in Ireland generally, these two organisations and interviewees were subsequently included in the sample and they were assigned in this research to the meso level within the higher education system.

It is acknowledged that unlike the executive/senior management personnel operating at the meso level in individual HEIs, these interviewees are not employed in executive/senior management (or any) roles in individual HEIs, and their responses to interview questions will have come from this 'external' but nonetheless close engagement with their member HEIs, therefore their positions and perspectives will be related and relevant but different to those expressed by those employed at this level in higher education institutions. Due to the commitments given to interviewees relating to confidentiality and taking every care in the research not to identify individual interviewees or their organisations or positions therein, however, a distinction is not made in reporting meso-level

findings between the five interviewees employed in HEIs at this level and the two representative bodies except where it is noted that the findings relate specifically to HEI employees' own stated experiences. Rather, decisions on the use of quotations from meso-level interviewees have been made with these commitments to the fore, while also taking account of the context in which the quotes were given.

Some meso-level interviewees operated at the highest level in their organisations and were responsible for and had been directly involved in making and implementing the initial decision for the HEI to take on a coordinating provider role in at least one new apprenticeship. Others, at both meso and micro levels, were influential in or party to the initial decision, while a minority, at micro level, were not involved in that decision-making process but may have been involved in subsequent decisions such as whether to get involved as coordinating provider in other apprenticeships, in other occupations, or at other qualification levels. All interviewees were directly involved in and responsible for implementation of aspects of their HEI's role as a coordinating provider for new apprenticeship. Meso-level interviewees were more likely to have had a more strategic, and less operational, involvement in individual apprenticeships, however, and in some instances meso-level interviewees specifically stated that they were not best placed to comment on the more operational aspects of apprenticeship, such as, for example, in relation to teaching or assessment practices.

4.8.2 HEIs' non-involvement in new apprenticeship

As noted, this research included interviews with 10 interviewees operating at meso and micro levels in seven HEIs that have taken a coordinating provider role in at least one new apprenticeship, as well interviews with personnel in two HEI representative bodies, in the Government department with responsibility for statutory apprenticeship, and in four relevant national agencies reporting to that department.

It did not involve any HEIs who at the time of the research were *not* engaged, either as a coordinating or collaborating provider, in any current new apprenticeship - 'current' meaning an apprenticeship that is deemed by the statutory and regulatory authority for all apprenticeship in Ireland, SOLAS, to be open for approval by SOLAS of employers and registrations of apprentices to participate in that apprenticeship. It is important to note however that although these HEIs were not involved as a provider at this point in time, some of these HEIs may have previously either submitted or have been party to a proposal(s) for at least one new apprenticeship that was subsequently not approved for further development, they may have been approved to further develop a new apprenticeship but decided not to proceed with it, or they may have been involved, at the time of

the research, as a proposed coordinating provider in a new apprenticeship that was 'in development', that is, was at a relatively early stage of development.

4.9 Data analysis approaches

The analytical approach adopted for this qualitative study is reflexive thematic analysis (RTA) as espoused by Braun and Clarke (for example, 2022a).

A summary of the main features of approaches commonly used in qualitative data analysis, and the main reasons they were considered inappropriate for this research, is presented in the next section, followed by an outline of Braun and Clarke's approach to RTA and the reasons why it was considered most appropriate for this research.

4.9.1 Qualitative data analysis

The most frequently cited approaches to the analysis of qualitative data that have an established set of principles and practices to guide data analysis are analytic induction, grounded theory, narrative analysis, and thematic analysis (Clark *et al*., 2021, p. 524). Analytic induction is not commonly used today in qualitative analysis due to 'objectivist' assumptions (p. 525). Other common qualitative data analysis methods include discourse analysis, interpretative phenomenological analysis (IPA), and content analysis. These qualitative data analysis methods were initially considered potentially appropriate for this research, and they were critiqued in this context. A summary description and critique for each is provided in Table 4.4, as well the rationale for discounting or accepting the method.

Table 4.4: Data analysis methods considered for this research			
Data analysis method	Description	Critique	Reason for discounting or accepting for this research
Grounded theory	Iterative approach; based on work of Glaser and Strauss (1967), aims to discover theory through the analysis of data; different approaches have developed over time (for example. Strauss and Corbin, 1998; Corbin and Strauss, 2015; Bryant and Charmaz, 2019)	Many different understandings and uses of the term 'grounded theory'; 'continuing reinventions of grounded theory constrain and distort qualitative inquiry' (Thomas and James, 2006)	Discounted: No widely accepted method that researchers can follow, making choice difficult; in addition, this research study does not have an *a priori* aim to develop theory and so the method is discounted for this research
Narrative analysis	Iterative approach; focuses on 'the stories that people tell to explain events' (Clark *et al*., 2021, p. 542); uses life experience and artefacts such as stories, conversations, letters, and journals as units of analysis to understand how people create meaning in their lives (Clandinin and Connelly, 2000)	A range of approaches, often varying across social science disciplines; narrative analysts focus on contingency - 'the temporal and sequential linking of events, actions, and actors' - where data are considered as a whole text (whether written visual or other form) and unlike thematic analysis, data are not 'parsed into different meaning units' (McAllum *et al*., 2019, p. 366)	Discounted: No widely accepted method that researchers can follow, making choice difficult; in addition, this research study is exploring participants' experiences related to apprenticeship in higher education, and is more focused on the story told than on the telling of the story (QDA Training 2013a, 2013b) and so the method is discounted for this research

Discourse analysis	An approach to social research that treats language as the focus of the research and analysis, whether written, vocal, sign, or other semiotic event (Cheek, 2004); formal discourse analytic methods derive from the study of linguistic signs and symbols (semiotics) and how these convey meaning (Bazeley, 2021, p. 319)	Covers a range of increasingly diverse range of subspecialities; methods can broadly be divided into two: those that focus on the language with little or no reference to context and those that do explore contextual issues such as power and control (Bazeley, 2021, p. 319)	Discounted: This research study is exploring participants' experiences related to apprenticeship in higher education and is more focused on the story told than on the language used to tell the story and so the method is discounted for this research
Interpretative phenomenological analysis	Interpretative phenomenological analysis (IPA) is both a theory and an approach to qualitative research that aims to explore in detail the 'lived experiences' of research participants and allows researchers the means of exploring participants' 'innermost deliberation' of those experiences (Alase, 2017, p. 9)	Is a participant-oriented approach that 'privileges the individual' to give an in-depth account of his or her experiences, involving a two-stage interpretation process (Pringle *et al.*, 2011, p. 20)	Discounted: While IPA may potentially be used to examine any experience, it is particularly suited to examining 'people phenomena' (McLeod, 2001), or an experience that is of 'existential import to the participant' including, for example, an experience of illness (Smith, 2011, p. 9); this research study is not seeking to explore participants' detailed lived experiences of a particular phenomenon and so the method is discounted for this research
Content analysis	In the social sciences content analysis refers to strategies for text analysis, usually involving large amounts of text (words and/or images, written or spoken) and counts of words or phrases (Bazeley, 2021, p. 224)	Many similarities between content and thematic analysis, including searching for patterns and themes; main difference is possibility of quantification of data in content analysis, by measuring the frequency of different categories and themes, sometimes taken as a proxy for significance (Vaismoradi *et al.*, 2013, p. 404)	Discounted: Rooted in quantitative research strategy, aims to give quantitative accounts of data in terms of categories specified in 'rules' in advance, and objectivity of the researcher in terms of applying the rules is a core requirement (Bryman, 2016, p. 284); this research study seeks to go beyond counting of words or phrases and so the method is discounted for this research
Thematic analysis	Approach to analysis that involves search for patterns and themes (Vaismoradi *et al.*, 2013, p. 404)	No distinctive heritage, not an identifiable approach or distinctive cluster of techniques, and search for themes is part of many approaches to qualitative analysis including grounded theory and narrative analysis; much confusion and lack of consistency in use of terms such as code or 'theme' but improvements over time in terms of procedures and specifications, for example, Braun and Clarke, 2006 (Bryman, 2016, pp. 584-585); growing evidence of researcher reflexivity - or taking a reflective stance - as a criterion of quality in social science research, but different understandings and uses of the term, making reflexivity a 'notoriously slippery concept' (p. 388)	Accepted: Improvements over time in terms of thematic analysis procedures and specifications (for example, Braun and Clarke, 2006 and beyond), and more recent work on the reflexive thematic analysis process espoused by Braun and Clarke, helps to make the process more accessible; reflexive thematic analysis is accepted as the most appropriate data analysis process and method for this research study

4.9.2 Reflexive thematic analysis

Braun and Clarke (2022a, p. 9) posit that RTA 'offers a particular orientation to and form of' thematic analysis and that the analytic and interpretative tools it provides offer flexibility in the range of analyses that can be undertaken, from 'relatively straightforward descriptive accounts' to 'more complex, theoretically-embedded ones'.

This approach to thematic analysis espoused by Braun and Clarke involves a six-phase process, starting with data familiarisation, followed by a rigorous and systematic coding process,

then exploring, developing, reviewing and refining themes, and ending with producing a written analytic report (Braun and Clarke, 2006, 2022a), as follows (Table 4.5):

Table 4.5: Six phases of reflexive thematic analysis (Braun and Clarke, 2022a)
Phase 1: Data familiarisation Becoming familiar with the dataset (reading and/or listening) and noting analytic ideas or insights the researcher has related to each data item [for example, individual interviews] and the dataset as a whole [for example, all interviews]
Phase 2: Coding Identifying 'segments of data that appear potentially interesting, relevant or meaningful' for the research question, and applying 'pithy, analytically-meaningful descriptions (code labels) to them'; coding is aimed at 'single meanings or concepts' and can be at a range of levels including from the 'explicit or surface meaning' (semantic) to the more 'conceptual or implicit meaning' (latent); coding involves more than summarising content but rather involves bringing an analytic approach to the process, resulting in a series of code labels with segments of data for each
Phase 3: Generating initial themes Beginning to identify 'shared patterned meaning across the dataset', compiling 'clusters of codes that seem to share a core idea or concept and which might provide a meaningful 'answer' to the research question'; the researcher is actively involved in the process of potential or 'candidate' theme development and brings his or her knowledge and insights to the process
Phase 4: Developing and reviewing themes Checking to see if themes 'make sense' - or 'tell a story' - in relation to both the coded extracts for each theme and the full dataset, as well as looking for connections between the themes, the wider research literature, and the research study
Phase 5: Refining, defining and naming themes Ensuring that each theme is distinctive, is 'built around a strong core concept or essence', and 'tells a story' that fits into the overall story the data is telling
Phase 6: Writing analytical report Bringing together the 'overall analytic narrative and compelling vivid data extracts' to tell the 'story about the dataset' that addresses the research question

Although there are variations within RTA, including, for example, the extent to which analysis is located within and driven by the data (inductive orientation to data) or shaped by existing theoretical constructs (deductive orientation), the RTA process is nonetheless based on a series of values, assumptions, and practices which together constitute the RTA method (Braun and Clarke, 2022a, pp. 8-9).

One of the core assumptions on which RTA is based is that researcher reflexivity is an important tool in the analytic process, meaning that 'the possibility of unbiased or objective knowledge generation' does not form part of the analytical framework, and researcher subjectivity is not seen as a problem but rather as a valued resource to be acknowledged; in this context therefore, researcher reflexivity and subjectivity is central to the data analysis process once it is 'situated within a framework of rigour' associated with the RTA process and method (Braun and Clarke, 2022a, p. 8).

This approach to research is in alignment with this researcher's philosophical worldview and the associated assumptions, beliefs, and values upon which the research has been designed and conducted. In addition, this researcher's experiences that inform her own beliefs, values, and preferred approach to inquiry, the nature of the particular research 'problem' in question, and the resources available to this researcher to understand and find the solution to that problem at this point in time, form the basis for the decision that the data analytic approach to thematic analysis as

espoused by Braun and Clarke is the most appropriate for this research. This approach was therefore duly adopted, as summarised in Table 4.6.

Table 4.6: Analysis of data gathered in semi-structured interviews			
Activity	**Purpose**	**Sampling strategy**	**Analytical strategy and rationale for this**
Analysis of semi-structured interviews with sample of key stakeholders involved in apprenticeship in Ireland	To identify these stakeholders' understanding and experiences of the reforms in apprenticeship in higher education	Semi-structured interviews with purposeful sample of 17 people who played a key role in the recent development of apprenticeship in higher education in Ireland, including, *inter alia*, from: - organisations operating at the macro level - HEIs involved in the design, development, and delivery of individual statutory apprenticeships, operating at the meso and micro levels - HEI representative organisations, assigned to the meso level	Reflexive thematic analysis Phases 1 to 6: data gathered in interviews constitute the primary data gathered for this study

4.10 The data analysis process

Apart from clearly outlining the assumptions, beliefs, and values upon which any research is designed and conducted, the decisions made and procedures followed should be made explicit in all research (Bazeley and Jackson, 2013; Bazeley, 2021). On this basis, details of application of RTA to this research, including the decisions made at particular points in the process, and the results of the process are outlined in this section.

The six phases of RTA were applied to the primary data gathered in semi-structured interviews. NVivo software was utilised to facilitate the analysis in the earlier stages (Phases 1-3) of the process.

4.10.1 Phase 1: data familiarisation

All audio recordings were listened to and subsequently transcribed by the researcher, and items of interest relating to individual interviews and the overall dataset were noted.

This 'familiarisation' activity - listening, transcribing, reading, and creating familiarisation notes - involves taking a critical, questioning, and reflective approach to the data and is considered an important part of preparation before coding:

> The point of overall dataset familiarisation note-making is to take the time to reflect on your responses and the dataset as whole, rather than just individual date items, so you can head into coding with an already-engaged, critically questioning mindset. (Braun and Clarke, 2022a, p. 47)

The decision for this researcher to do the transcribing of the recordings was based on a variety of factors including concerns regarding confidentiality, data protection, quality control, cost, and as a means of becoming very familiar with the data. The transcription process was time-consuming and tedious in some respects, but it served its purpose in terms of facilitating engagement and familiarity with the data. Excerpts from familiarisation notes from four different interviews in this research are presented in Table 4.7.

Table 4.7: Excerpts from familiarisation notes	
Transcription of interviews	**Phase 1 familiarisation notes**
So, there's something that is fundamental to apprenticeship, that the universities don't get at all, but the FE sector does, that apprenticeship has a very, very, very strong learner representation through trade unions, it's *particularly* strong in the existing apprenticeships, it's particularly strong in the craft and construction sector…..	Is it really? Is it actually the learner voice? (see reference to this in Meso1 interview also)
But part of that is very challenging because you're back to the question of what is a student?	*Interesting question* - What *is* a student, particularly in terms of apprenticeship where the student is an employee as well? How is this different for the HEI, compared with its other students, some of whom may also be employed (but not as apprentices)?
The demand for people with Master's degrees or people with doctorates in roles is increasing; the traditional system can't produce them…..you have to have flexible methods to do that	Reference to 'traditional system' (deficiencies in, less/not flexible)
And apprenticeship generally was seen to be a critical part of that, that building of skills base for Ireland, right across the levels; the more current Plan takes that further, it takes it on much, much further, and it's actually very, very ambitious as you know on the numbers there	Was it seen as a 'critical part of building of a skills base for Ireland'? - When? By whom? Why? Is the interviewee implying that 'the numbers' (apprentice registration targets) are too ambitious?
I can give you from my perspective, and my perspective is just one perspective, so you'll triangulate this presumably with others	Interviewee acknowledging that there are different perspectives

4.10.2 Phase 2: coding

Braun and Clarke suggest that while 'familiarisation is engaged-but-not systematic, coding is engaged-*and*-systematic', and

> The coding *process* involves reading each data item closely, and tagging all segments of the text where you notice any meaning that is potentially relevant to your research question with an appropriate code label. (Braun and Clarke, 2022a, p. 53)

Braun and Clarke do not advocate line-by-line coding but rather suggest that the researcher should code only what s/he considers relevant to the research question 'broadly framed'; this means that some segments of data will not be tagged with a code, some segments may be tagged with many different codes if different meanings are attributed to a particular segment of data, but each code has its own meaning, that is, individual codes 'should not capture multiple meanings' because 'coding is a process for parsing out diversity of meaning' (Braun and Clarke, 2022a, p. 53).

Richards (2015) proposed that there are three questions researchers should ask when coding any passage of text in data being analysed: what's interesting?, why is it interesting?, and why am I interested in it? (Richards, 2015). According to Bazeley (2021), of the three questions identified by Richards, the latter - 'why am I interested in that?' - is 'the most useful question one can ever ask while coding' (p. 174), and it is one that should be regularly asked (p. 226). The first question, she suggests, helps the researcher to identify a section in the data on which to focus, the second helps to identify a descriptive or topic code, and the third helps to support the researcher's thinking and coding at a more conceptual level (p. 174).

In this research, these considerations and questions guided the familiarisation with and initial coding analysis of the individual data items. In terms of initial coding, I adopted Braun and Clarke's advice to 'start reading and stop when you think you have spotted something relevant to addressing your research question, even if it's only *potentially* relevant', as well as their recommendation to tag anything 'interesting or potentially relevant' with a code label and to use codes as '*working tools*' to 'parse meaning' that the researcher notices (Braun and Clarke, 2022a, pp. 60-62).

I made the decision at the start not to code line-by-line because this would have constituted an unending task, with perhaps relatively little to show for it compared with the amount of time and thought involved. The first round of coding reflected this approach well - that is, while some of the items of text that were coded to an individual code contained a sentence or part thereof, much of items of text that were coded to an individual code contained a number of sentences together, or, in some cases, a paragraph (or more). I believe that without the context that this grouping of sentences and/or paragraphs provided, the level of detail in the coding and code labels would otherwise have been unworkable in terms of my aim to tell a story from the data and their analysis.

In the first round of coding, all codes were purposefully created as singular, non-hierarchical codes (i.e. 'child codes' were not created). Although this resulted in some codes appearing to be quite similar - for example, 'Apprenticeship is different - how you assess', 'Apprenticeship is different - how you teach', etc. - I was satisfied that this approach was appropriate for the first round of coding. The reason for taking this approach is that it allowed me to generate codes without necessarily having to decide at this point whether or at what 'level' each one belonged (parent or child), but it did result in a large number of initial codes (220) at the end of the first round of coding.

The decision was made to code the micro-level interviewee transcripts first in the first round of coding, followed by the meso- and then the macro-level. This could have been done any number of ways - by date of interview, for example. The implications in terms of coding and analysis are unknown. In order to ensure that the coding process was thorough, consistent, and rigorous, however, additional rounds of initial (open) coding were undertaken (Braun and Clarke, 2022a, p. 70), and each subsequent

round of coding was undertaken in a different order, as recommended. The second round therefore started with transcripts of interviews with macro-level interviewees followed by micro- and then meso-level, and in the third round, interview transcripts were chosen at random. Key points from each interview were highlighted with notes attached where appropriate throughout each round of coding, both manually and electronically.

I found the process of manually writing notes particularly useful, sometimes more useful than electronically, at certain points in the analytic process. I was conscious of my inherent reluctance to use qualitative data analysis software (NVivo in this case) partly due to a concern on my part that I might 'get lost in the technology' or might feel somewhat 'distant' from the data. I therefore used NVivo in a fairly basic way - for example, I did not use the 'Memos' option - but rather continued to revisit my initial 'Familiarisation' notes and add to these both manually and electronically throughout the RTA process.

As the coding progressed in the second and third rounds, some existing code labels were amended, merged, or deleted, and some new code labels were added. For example, a new code label relating to data availability was added, new code labels relating to competition and hierarchy in higher education were added, and some previously coded text was re-coded to these and other amended or new code labels. The overall number of codes reduced as the coding progressed.

I aimed at all times to draw on guidelines for good practice in qualitative and thematic analysis, especially as presented by Braun and Clarke. In this regard I was cognisant of Braun and Clarke's assertions as follows:

> '….. we view [reflexive thematic] analysis as a process of meaning-making rather than truth-seeking or discovery….. The coding achieved through this open, organic process can be stronger or weaker, depending on the depth or the rigour of the engagement. But it cannot be understood simply as right or wrong. This is because of the subjective and situated nature of the analytic process in reflexive TA, which means that different coders will notice **and** make sense of data in different ways…..' (Braun and Clarke, 2022a, p. 55)

Although coding is never really completed - 'because meaning is never final' and coding can be revisited again at later phases in the RTA process (Braun and Clarke, 2022a, p. 71) - this phase of the process was deemed to be completed once I was satisfied that the final list of code labels provided a good summary of the 'diversity, richness and contradictions of meanings' in the entire dataset and an indication of my 'analytic take on things', that is, an indication of why I may have been interested in and chosen those particular code labels (pp. 71-72). At the end of the third round of coding, a total of 174 initial codes had been generated.

At this point - and bearing in mind Braun and Clarke's assertion that 'Once you have a sound understanding of the conceptual foundations of the process of reflexive TA, you will have more

confidence to bend or break what feel like 'rules' for good practice' (Braun and Clarke, 2022a, p. 81) - an additional step in the process was added, between coding and initial theme generation, so that codes were subsumed into a series of broader concepts. For example, 14 individual 'Apprenticeship is different because…..' codes were merged under a broader 'Apprenticeship is different' heading. While this may seem similar to a process of generating initial themes, and it was in some respects - though not purposely so - I actively aimed to resist generating candidate themes *per se* at this stage of the process. Rather the intention at this stage was to reduce the number of individual codes to a more manageable number, some of which had the potential to be candidate themes.

At the end of Phase 2 (i.e. after three rounds of coding and an additional step undertaken before formal initial theme generation) 20 'overarching' codes had been generated, as outlined in Appendix H.

4.10.3 Phase 3: generating initial themes

In light of the need to ensure that the themes I generated from the data were based around the research question, I chose to let the generation of candidate themes across the entire dataset be guided by the extent to which I believed the codes would be more or less likely to help to answer the research question. In other words, my aim was to firstly focus on interviewees' stated *understanding and experiences* of apprenticeship as reflected in the codes across the entire dataset, and to cluster and re-cluster these codes into candidate - or tentative - themes and sub-themes, using various iterations of a mapping exercise to help in this process (Braun and Clarke, 2022a, p. 92).

I constantly and consciously reminded myself during this initial theme and sub-theme generation process that the tentative themes I generated were exactly that, that is, tentative, that each candidate theme would require 'further exploration before it can be considered a settled theme' (Braun and Clarke, 2022a, p. 79) and that themes are generally underpinned by a 'central organising concept', that is, by an idea or meaning 'that unites a theme' (p. 78).

My initial theme generation process was also informed by Braun and Clarke's statement that 'A critical thing to realise here is that your task is both to generate themes/interpret patterned meaning *and* to tell the reader *how* it addresses your research question - and what the implications of it are. The themes you develop provide the reader with the 'evidence' for your 'answer' to the research question' (Braun and Clarke, 2022a, p. 90).

I was and am acutely aware of the immense responsibility that I carry to 'do justice' to interviewees' significant input to this research - their time, thoughts, trust, their stated understanding and experiences - around which this research is built. I was therefore acutely aware of the need to approach *my* analysis of *their* data with the utmost integrity, professionalism, and

ethical sensibility. While every aspect of the research process is important in these respects, from the very first articulation of a research proposal through to publication - in any form, of any aspect of the research - I was deeply aware of the critical importance of this stage of the process, of ensuring that the building blocks on which the entire analysis and findings rest are solid.

While I was reassured by the recursive nature of RTA - i.e. that moving back and forth is a feature of the process - I did know also that this does not mean that 'anything goes'. Rather the onus was on me to ensure that I brought a systematic and rigorous approach to the process and that I was aware of, reflected on, documented, and justified the choices I made along the way. I was aware in this respect that choices *did* need to be made. I could not, and did not want to, try to cover everything. As noted by Braun and Clarke, 'Your initial (and indeed final) themes do not have to capture *everything* in the dataset, or indeed all the codes that you have developed.…. Your job in analysing the data, and reporting them, is to tell a *particular* story about the data that addresses your research question. It isn't to represent everything that was said in the data - that would be a *different* analytic process' (Braun and Clarke, 2022a, pp. 88-89).

After this phase, I chose to start a process of increasingly reducing active use of NVivo in the analysis to develop the themes further, rather I drew on what had already been coded and analysed using NVivo and continued using word processing software. The reason for this is that I was beginning to experience the NVivo interface as increasingly distracting or unhelpful in terms of my sense of closeness to the data, and in terms of how easily or otherwise I could engage with and present the data and my analysis of them.

4.10.4 Phases 4 and 5: developing and reviewing themes, and refining, defining and naming themes

The codes were subsequently reviewed, refined, and named using several iterations of a mapping exercise to produce four themes and nine sub-themes. These, and the associated story they tell, are summarised in the final thematic map in Appendix I.

The four themes and associated central organising concepts - 'the 'essence' of what the theme is about and through that whether or not any particular code fits within it' (Braun and Clarke, 2022a, p. 89) - are presented in Table 4.8, along with the nine sub-themes in Table 4.9.

Table 4.8: Themes and central organising concepts	
Themes	**Centralising organising concept** 'The 'essence' of what the theme is about and through that whether or not any particular code fits within it' - 'what is it that holds this theme together?' (Braun and Clarke, 2022a, p. 89)
1 **''Apprenticeisation' of higher education'** Demand for new apprenticeship in higher education	Understanding and experiences in higher education of the demand for new apprenticeship in higher education
2 **''Apprenticisation' of occupations'** ('Professionalisation' of apprenticeship) Demand for and sustainability of new apprenticeship in specific occupations	Understanding and experiences in higher education of the demand for and sustainability of new apprenticeship in specific occupations
3 **'Apprenticeship is different'** How apprenticeship is experienced by higher education compared with other provision in higher education	Experiences in higher education of how apprenticeship is different to other forms of higher education provision; experiences of how and why it involves particular and additional considerations and resources
4 **'Are we (getting) there yet?'** 'Success' of apprenticeship in higher education	Understanding and experiences in higher education of whether the problem(s) apprenticeship in higher education is perceived to be trying to address, are being addressed

Table 4.9: Themes and sub-themes: a story of apprenticeship reform in higher education in Ireland 2016-2023
1 **''Apprenticeisation' of higher education'** - demand for new apprenticeship in higher education 1 Purpose of reforms in apprenticeship in high education 2 HEIs' involvement in new apprenticeship 3 HEIs' non-involvement in new apprenticeship
2 **''Apprenticeisation' of occupations'** ('Professionalisation' of apprenticeship) - demand for and sustainability of new apprenticeship in specific occupations 4 Industry demand for and sustainability of new apprenticeship in specific occupations 5 Higher education demand for and sustainability of new apprenticeship in specific occupations
3 **'Apprenticeship is different'** - how new apprenticeship is experienced in higher education compared with other provision in higher education 6 The HEI as consortium member in the development and consortium-level management of an apprenticeship 7 The HEI as coordinating provider in the delivery and HEI-level management of an apprenticeship
4 **'Are we (getting) there yet?'** - 'success' of new apprenticeship in higher education 8 The current status of apprenticeship in higher education: metrics of success 9 The future of apprenticeship in higher education: key considerations

These themes and sub-themes capture the story generated by the data and my analysis of them using RTA as the method for doing so.

4.10.5 Phase 6: writing analytical report

Phase 6 involved bringing together the 'overall analytic narrative and compelling vivid data extracts' to tell the 'story about the dataset' that addresses the research question (Braun and Clarke, 2022a, p. 81). This story is based on my interpretation of the relevance of data items to the research question and their ability to help to answer that question, and it is presented in Chapter 5 (Findings). Consideration of those findings is presented in Chapter 6 and in Chapter 7.

4.11 Theoretical lens for consideration of findings

The review of the literature helped to inform the framing of the research questions and the schedule of interview questions in this research.

The discussion of the findings is also presented with reference to the literature reviewed. As the thematic analysis process proceeded in the research, two sets of research papers emerged as having particular resonance for parts of the discussion: one relating to research on work-integrated learning in the context of degree apprenticeships in the UK (including Lester *et al.*, 2016; Lester, 2020; Lester and Bravenboer, 2020; Lillis and Bravenboer, 2020; Quew-Jones, 2023) and also including Graham (2019), and one relating to the concept of stakeholders' relative levels of 'control' or 'power' in work-based learning in higher education (including Brennan and Little, 1996, 2006) and degree apprenticeships in the UK (Powell and Walsh, 2018).

The first set of papers presented a framework for considering different approaches to combining off-the-job and on-the-job learning, and assessment of that learning, in apprenticeship programmes. The second presented a framework for considering stakeholders' - particularly employers' and HEIs' - levels of input and engagement in apprenticeship at various levels including system, programme, and individual enterprise levels, and including also with respect to combining off-the-job and on-the-job learning, and assessment of that learning.

Together they provided a lens through which some of the findings could usefully be considered. It is acknowledged that these research papers relate to a different system of higher education and apprenticeship shaped by economic, social, political, and cultural matters within its own national and other contexts (Perusso and Wagennar, 2021), and the discussion is cognisant of this.

4.12 Ethics

This research is focused on apprenticeship in Ireland. An tSeirbhísí Oideachais Leanúnaigh agus Scileanna (SOLAS) has specific responsibility for apprenticeship as set out in the 1967 Industrial Training Act and is the statutory and regulatory authority for apprenticeship in Ireland. This researcher is currently employed by SOLAS but has been working for some time on a secondment basis, including during the period of the planning, field research, data analysis, and writing up of this research, in an organisation in higher education in Ireland not involved in apprenticeship.

This situation nonetheless potentially introduces challenges related to 'insider research' (Brannick and Coghlan, 2007; Robson and McCartan, 2016) and so particular attention was given to insider issues related to being both a professional and a researcher in the planning and conduct of the research. This included, for example, considering the 'dynamics of insider research under the headings

of access, preunderstanding, role duality and managing organizational politics' (Brannick and Coghlan, 2007, p. 59) and keeping a research diary and a reflexive journal highlighting anticipated or actual issues arising and how these were dealt with (Robson and McCartan, 2016, p. 2). Further details relating to keeping a research diary and reflexive journal (also a core element of RTA) are in Section 4.6.3.3, and sample entries to the reflexive journal are in Appendix G. Further consideration of potential bias in this context is also presented in the section on reliability and validity of the research, below.

All interviewees were identified and contacted using publicly available information regarding their roles and contact details with respect to apprenticeship, and, apart from data gathered during interviews, only publicly available data were requested, accessed, and used in the study. Procedures were followed, and commitments given regarding terms of involvement in the research, at all relevant stages of the research process, in accordance with requirements expected in academic research generally, as required in DCU including Research Ethics Committee approval, and as outlined in Section 4.6.3 (Research Methods) and in appendices D, E, F and J with reference to the Interview Protocol, Plain Language Statement, Informed Consent Form, and DCU Research Ethics Committee approval, respectively.

Participants and other relevant parties will be furnished with summary findings, with an invitation to discuss further, as and where appropriate. The research thesis will be publicly available on DORAS, DCU's online research repository.

4.13 Reliability, validity, and insider research

The concept of bias in research - commonly understood to mean any influence that provides a distortion in the results of a study and therefore affects its reliability or validity (Polit and Beck, 2014) - is a term drawn from the quantitative research paradigm (Galdas, 2017). The extent to which the concept is recognised as being compatible with the philosophical underpinnings of qualitative inquiry has been the subject of much debate (for example, Lincoln and Guba, 1985; Morse, 1997; Morse *et al*., 2002; Thorne *et al*., 2016; Galdas, 2017).

Galdas (2017), for example, asks how much of a researcher's own values and opinions need to be reflected in qualitative research questions, data collection methods, or findings, for it to constitute bias, and he concludes that the question itself is erroneous on the basis that those carrying out qualitative research are an integral part of the process and the final product, and that separation from this is neither possible nor desirable (pp. 1-2). Thus, he argues, most qualitative researchers generally agree that concepts such as rigour and trustworthiness are more appropriate to the reflexive, subjective nature of qualitative research and that the concern instead should be

whether the researcher has been transparent and critically self-reflective about their own preconceptions, relationship dynamics, and analytic focus with respect to formulation of research questions and to the collection, analysis and presentation of data. Braun and Clarke (2022a) agree with this perspective as it pertains to qualitative research incorporating reflexive thematic analysis. Guba and Lincoln (1981) contend that the criteria to reach the goal of rigour in the 'rationalistic' paradigm are internal validity, external validity, reliability, and objectivity and that the associated criteria in the qualitative paradigm to ensure 'trustworthiness' are credibility, transferability, dependability, and confirmability (Lincoln and Guba, 1985). Morse *et al*. (2002) - in one of the most read and cited papers published in the *International Journal of Qualitative Methods* (Galdas, 2017, p. 1) - argue however that reliability and validity remain appropriate concepts for attaining rigour in qualitative research, and they propose several verification strategies for this including, for example, sampling adequacy (p. 15). When these strategies are used appropriately, they argue, they force the researcher to correct both the direction of the analysis and the development of the study as necessary, thus ensuring reliability and validity of the completed project (p. 17).

How these concepts of reliability and validity were considered in this research study, and how some of the associated challenges associated with insider research were addressed, are presented below.

4.13.1 Reliability

Reliability is premised on the notion that there is some sense of uniformity or standardisation in what is being measured, and that methods consistently capture what is being explored; reliability in this context is the extent to which a measure, procedure, or instrument provides the same result on repeated trials (O'Leary, 2004, p.59). In quantitative research, reliability refers to exact replicability of processes and results. In qualitative research with diverse paradigms, however, such a definition of reliability may be considered challenging and epistemologically counter-intuitive, and it is argued that the essence of reliability for qualitative research lies in consistency (Leung, 2015, p. 326).

Reliability was facilitated throughout the research process in this study with respect to:

The interview protocol, semi-structured interview process, and interview questions
- The manner in which the research was conducted was such as to ensure that research participants were fully informed in an open and transparent manner about the research purpose and activity.

- An outline of the questions to be asked - the areas for discussion - during interviews - was circulated to participants in advance. The questions were chosen and constructed, and the semi-structured interview process chosen, to ensure that participants were not given the impression that they were going to be 'tested' in terms of their understanding and experiences, rather that they would be assured that the purpose was for the researcher to hear and gain an understanding of those.

A transparent analytical approach:
- A research diary and reflexive journal were kept throughout the research, and a detailed description of the research context and process is included in the research report, thereby helping to maximise research rigour.

Extensive use of verbatims in thesis write up
- Interviews provided data for potential use as direct quotations, and care was taken to ensure that these were chosen to give a fair and accurate representation of participants' input to the research. Care was also taken to safeguard non-traceability to individuals in the presentation of the data gathered and to ensure that the research data and findings were not misrepresented in any way. Direct quotations from participants - the participants' voices, their story - form a central part of this research, and they represent approximately 10 per cent of total word count in the research thesis.

Underpinning professional principles and values:
- The researcher's core values of integrity and professionalism underpinned each stage of the research. These values are in accordance with professional and ethical principles and requirements associated with academic research, including, for example, those related to concepts such as [no] harm to participants, informed consent, confidentiality, anonymity, honesty and transparency, and representation (for example, Bell and Bryman, 2007, p. 71).

4.13.2 Validity

Validity is premised on the assumption that what is being studied can be measured or captured and seeks to confirm the truth and accuracy of that measurement, as well as the truth and accuracy of any findings or conclusions drawn from the data (O'Leary, 2004, p.61). In qualitative research validity means 'appropriateness' of the tools, processes, and data, that is, the extent to which the research question is valid for the desired outcome, the choice of methodology is

appropriate for answering the research question, the sampling and data analysis are appropriate, and the results and conclusions valid for the sample and context (Leung, 2015, p. 325). In addition, in qualitative research, triangulation refers to the use of multiple methods or data sources to develop a comprehensive understanding of phenomena and to test validity through the convergence of information from different sources (Patton, 1999, pp. 1192-1193).

In quantitative research an emphasis is also placed on generalisability of findings to ensure that the knowledge gained is representative of the population from which the sample was drawn, while qualitative research emphasises saturation to obtain a comprehensive understanding by continuing to sample until no new substantive information is acquired (Miles and Huberman, 1994) as well as the use of purposeful sampling, a technique widely used in qualitative research for the identification and selection of information-rich cases (Palinkas *et al*., 2015, p. 534, quoting Patton, 2002).

Validity was facilitated throughout the research process in this study with respect to:

The research methodology
- The qualitative, exploratory case study design, the semi-structured interviews, and the reflexive thematic analysis approach were chosen because they were deemed to be the most philosophically aligned and useful to answer the research questions.
- The research questions fit with the research aim and justification for the research.
- The choice of research design - an exploratory case study - is appropriate for the range of relevant stakeholders in the Irish higher education sector.
- The choice of RTA (Braun and Clarke, 2022a) sits within the researcher's understanding of how best to allow the primary data to be analysed and form the basis for the findings.

Purposeful sampling (based on Graham, 2019) **and consideration of a range of relevant factors in choosing the sample and participant triangulation**
- The participant sample was chosen using purposeful sampling. An iterative approach was also used so that if a specified potential participant was not available, which happened in only a small minority of cases, attempts were made to recruit an alternative interviewee. A range of factors were considered to ensure that the sample was as representative as possible in this context, including, for example, stakeholders' level of involvement in apprenticeship (to facilitate participant triangulation at the macro, meso, and micro levels in higher education), the type of HEI, and the type of apprenticeship(s) it was involved in,

including, for example, the primary target group, industry and sector, length in operation, and level on the National Framework of Qualifications.

Interviews

- The interview protocol was piloted, and minor amendments were subsequently made, thereby helping to facilitate clarity about the interview process and the questions asked.
- Interviews were recorded and subsequently transcribed, word-for-word, by the researcher. This helped to ensure that commitments made regarding confidentiality were upheld at this stage of the process, while continued access to the recordings allowed the researcher's consideration of inflection and punctuation that might be lost in a transcription.

The choice of purposeful sampling means that the findings do not generalise to the full population, but they may be transferable in terms of there being a context and description of the research process, including direct participant quotations, to allow others to determine how relevant the research may be to other contexts.

4.13.3 Addressing the challenges of insider research

Considerations related to bias, and associated threats to reliability and validity throughout the research process are particularly pertinent in 'insider research', which may be defined as 'research by complete members of organizational systems in and on their own organizations' (Brannick and Coghlan, 2007, p. 59), or research in which the researcher has a direct involvement in or connection with the research setting (DCU, 2017).

Insider research presents particular advantages and disadvantages to researchers, and it poses particular challenges with respect to potential bias and threats to reliability and validity, including, for example, 'freer access, stronger rapport and a deeper, more readily-available frame of shared reference with which to interpret the data they collect' on the one hand and having to 'contend with their own pre-conceptions and those their informants have formed about them as a result of their shared history' on the other (Mercer, 2007, p. 13).

As an insider in this research, my approach was to address the challenges by making good use of the advantages and to try to overcome the disadvantages by taking a preventative approach wherever possible. An outline of how some of these advantages and disadvantages were dealt with throughout the research process is presented below.

The aim of the research and research questions

- The focus in the research on new apprenticeship specifically in higher education was chosen due to the potential significance and impact of reform in that sector, and because it is under-researched. Having worked in the area of new apprenticeship for several years, I had some awareness and impressions of stakeholders' experiences, but I approached the research with genuine openness and curiosity to gain an understanding of these. As a researcher, I wanted to hear and understand stakeholders' perspectives and stated experiences, not to judge them or appraise them in relation to my own. The research questions and interview protocol, including the interview questions, reflect this aim.

Collection and analysis of data

- I potentially had greater access to data and information than an 'outsider' might have. Apart from interviews with participants, however, I chose to use only publicly available data and information.

- I believe my work and visibility as an employee in new apprenticeship, and my employing organisation's support in principle for me to undertake research in this area, were factors that helped me in acquiring access to and engagement of participants in the research. I had worked directly with some stakeholders, and I knew of some others. I did not hold any power or authority over any stakeholders in relation to that work, however. I believe my adherence to observed canons of the academic research profession in terms of ethical procedures was also a key factor with respect to access to and participation of stakeholders.

- Commitments were given to potential and actual participants regarding the motivation for and conduct of the research, including with respect to confidentiality and the use and attribution of quotations, for example. I believe these commitments helped enormously to secure a high level of participation in advance of interviews and engagement during interviews.

- The timing of the research is also relevant in terms of reducing bias and enhancing rigour, reliability, and validity in the collection and analysis of data. During the period of planning, field research, data analysis, and writing up of this research I was working on a jointly-funded secondment basis in an organisation in higher education not involved in apprenticeship in Ireland. Although I could still be considered an insider with respect to my previous work in apprenticeship, I was one step removed from this in terms of my day-to-day employment.

- In the context of my use only of publicly available data and information, my knowledge of the apprenticeship system was nonetheless an asset in considering factors to inform the sampling process.

- I believe my knowledge of the apprenticeship system was also an asset at the data familiarisation stage of the research process, including in taking familiarisation notes.

4.14 Research parameters and limitations

This research was undertaken within particular parameters, and it involved some limitations which the researcher aimed to anticipate and deal with as appropriate and wherever possible throughout the study.

Firstly, the literature accessed was all in the English language, thereby limiting the extent to which literature written in other languages, including that relating to countries that have a strong tradition of apprenticeship, was not included.

Secondly, due to the relatively small number of new apprenticeships in higher education in Ireland, the relatively small number of organisations involved, and the variety of ways in which these organisations and apprenticeships can be characterised (for example, the organisation's remit at a national level or the type of HEI involved in apprenticeships in particular occupations at particular levels on the NFQ), the researcher's commitments to participants regarding confidentiality assumed critical importance both in terms of gaining potential participants' agreement to engage in the research and subsequently honouring those commitments when using participant quotes in the research thesis. Care was taken to ensure that inclusion of quotes was done without compromising confidentiality or inadvertently identifying an individual interviewee's organisation or position therein. This meant however that some quotes that the researcher considered to be particularly insightful or illustrative of an important point could not be used.

Thirdly, most of these current apprenticeships were developed at a time before TUs had been established and when individual IoTs were responsible for apprenticeship proposals and development of the apprenticeships in question. At the time of the research, however, most of the IoTs had consolidated to form five technological universities. Although four of the five TUs participated in the research, only one interviewee from each TU was involved and not all antecedent IoTs could be equally represented. Care was taken however to ensure that the sample was as representative as possible of the organisations involved and of the ways in which they and the apprenticeships for which they had responsibility could be characterised.

Fourthly, part of the coordinating provider role in consortium-led apprenticeship may also involve working with others involved as collaborating providers in individual apprenticeship programmes, and a coordinating provider in one apprenticeship may also be a collaborating provider in another apprenticeship(s). This research is focused on HEIs' experiences in the coordinating provider role. The collaborating provider role is an important feature in the new apprenticeship

model, however. It is reportedly an issue that needs further consideration, particularly in the context of apprenticeships being 'national' programmes and the future of apprenticeship in Ireland, and it is an area that further research may usefully incorporate.

Fifthly, due to limitations in terms of data availability nationally and internationally, and of availability and comparability of existing research, much of the research cited in the literature review is based on experiences of higher and degree apprenticeships in the UK (particularly England), despite the different national context and limitations of that research (for example, small sample size case studies and need for longitudinal studies). Given that this research study is an exploratory case study, however, and given the dearth of research on apprenticeship in Ireland, this approach is considered appropriate, and the results of this study provide a comprehensive 'baseline' on which future research can build.

The study is an exploratory case study, situated within a period of significant change in the history of apprenticeship in Ireland. It presents a particular story relating to participants' understanding and experiences at a particular point in time. It provides a baseline of information in terms of reported experiences, and it has the potential to inform further development of the apprenticeship system in higher education and beyond.

4.15 Conclusion

This chapter provides the rationale and justification for the approach adopted in undertaking this research.

The next chapter presents findings from the research with reference to the themes and sub-themes developed from the reflexive thematic analysis of the data gathered in semi-structured interviews.

Chapter 5 Findings

5.1 Introduction

The aim of this chapter is to present the **findings from the thematic analysis** of the data gathered in 17 semi-structured interviews with supply-side stakeholders operating at the macro, meso, and micro levels in apprenticeship policy and practice in Ireland.

To meet this aim, the findings from the analysis are presented with reference to the **four themes** and **nine sub-themes** developed from the **reflexive thematic analysis of the dataset** (Table 5.1, and thematic map in Appendix I).

Table 5.1: A story of apprenticeship reform in higher education in Ireland 2016-2023	
1	**''Apprenticeisation' of higher education'** *Demand for new apprenticeship in higher education* - Purpose of reforms in apprenticeship in higher education - HEIs' involvement in new apprenticeship - HEIs' non-involvement in new apprenticeship
2	**''Apprenticeisation' of occupations'** ('Professionalisation' of apprenticeship) *Demand for and sustainability of new apprenticeship in specific occupations* - Industry demand for and sustainability of new apprenticeship in specific occupations - Higher education demand for and sustainability of new apprenticeship in specific occupations
3	**'Apprenticeship is different'** *How new apprenticeship is experienced in higher education compared with other provision in higher education* - The HEI as consortium member in the development and consortium-level management of an apprenticeship - The HEI as coordinating provider in the delivery and HEI-level management of an apprenticeship
4	**'Are we (getting) there yet?'** *'Success' of new apprenticeship in higher education* - The current status of apprenticeship in higher education: metrics of success - The future of apprenticeship in higher education: key considerations

Quotations from the data gathered are included in the presentation to help to 'convey the key patterned meaning evident from [the researcher's] engagement with that data, related to the research question' (Braun and Clarke, 2022a, p. 107). The level at which the source of the quote is operating in apprenticeship in higher education in Ireland is identified as macro, meso, or micro. The findings are presented in the form of a story of supply-side stakeholders' understanding and experiences of recent reforms in apprenticeship in higher education in Ireland.

The chapter concludes with a **summary of the key findings** from the thematic analysis**.** This summary is also presented in a concise table format in Appendix C, including a comment on what each key finding means, why it matters.

Both the terms apprenticeship 'reform' and apprenticeship 'reforms' are used interchangeably in this thesis, as deemed appropriate to the context in which they are used. The seven universities listed in the Universities Act, 1997 are referred to as 'universities', as and where appropriate, to distinguish them from the more recently established technological universities. These universities are also sometimes referred to as 'traditional' universities by interviewees, and the model of apprenticeship introduced in 2015 and first implemented in 2016 is variously referred to as consortium-led apprenticeship or new apprenticeship.

5.2 Theme 1: ''apprenticeisation' of higher education'
Demand for new apprenticeship in higher education

5.2.1 Introduction: demand for new apprenticeship in higher education

In this section, stakeholders' understanding and experiences relating to the problems that the recent apprenticeship reform in higher education is perceived to be trying to fix, or the issues it is perceived to be aiming to address, along with the stated reasons for HEIs' involvement in the new consortium-led model of apprenticeship and the perceived reasons for other HEIs' non-involvement, are presented.

5.2.2 Purpose of reforms in apprenticeship in higher education

Interviewees' stated understanding of why the new policy on apprenticeship was introduced and what the associated reforms in higher education are intended to do was frequently framed in the context of perceived deficiencies or shortcomings in the existing craft model of apprenticeship or in aspects of the existing 'conventional' model of higher education.

Among the former were references to the desire to move from the 'traditional' remit of craft apprenticeship to include other 'high skill industry areas where graduates are required', and a move away from the perceived 'siloed' or 'separate' nature of the craft model to a model that would allow greater involvement, flexibility, and agility in terms of identifying and meeting stakeholders' current and future work-related needs.

Among the latter were references to the need for greater equity, access and progression options for a wider cohort of learners in an 'optimal tertiary education system' (Macro1) - one that is not overly reliant on Leaving Certificate points and incorporates work-based learning as advocated at Ministerial and [Government] departmental level - as well the need for a greater sense of 'ownership' among HEIs in the apprenticeship process, greater joint work between higher education and other stakeholders including industry, and an acknowledgement of the value of work-based learning.

5.2.2.1 Understanding of the purpose of reforms in apprenticeship in higher education

Some examples that are illustrative of interviewees' stated understanding relating to the issues apprenticeship reform in higher education is perceived to be aiming to address are outlined below.

New industries, new occupations, new qualifications, and new award levels

The perception of craft apprenticeship as separate or siloed and the consequent desire or need to expand it out to a broader range of industries and occupations, leading to a wider range of higher-level qualifications to address higher level work-related needs, was widely articulated by interviewees at all levels (macro, meso, and micro). Many interviewees framed this perception with reference to the 'traditional' aspects of craft apprenticeship:

> 'My understanding of the policy was to expand and broaden provision, beyond its traditional remit in those traditional craft areas…..my understanding is that it was driven by that demand, or that desire, to increase provision across a range of sectors and a range of levels of the academic National Framework of Qualifications framework, levels 5 to 10, probably a sense of seeing apprenticeship education as just another form of education as opposed to just being siloed….in training….in traditional crafts.' (Micro1)

Some were more critical in their assessment of the extent to which a change was needed:

> 'They're going to have to give up a lot of the ways they used to do business in the pre-2016 [craft apprenticeship] tradition…..in terms of lack of innovation, lack of adaptation, excessive rigidity in programme design and delivery…..involving a very minimal engagement with a small number of societal stakeholders, the same ones all the time as opposed to bringing in new voices, and a very carved-out separated space…..with walls between it and the rest of the education and training system.' (Meso2)

The need for the expansion of apprenticeship into higher level qualifications to meet higher level skills needs, now and in the future, also featured strongly in interviewees' stated understanding of the reasons, the drivers, for apprenticeship reforms in higher education:

> 'I suppose there was a really big push over the last number of years, started around 2016, to try and revive apprenticeship and have it go beyond the crafts and have it come into other high skill industry areas where graduates are required.' (Macro5)

The issue of there being 'a different perception around apprenticeship' in this context, and how this might be addressed by expanding apprenticeship to higher levels was also highlighted by some interviewees:

'If you look at the skills needs of the country as a whole, [qualification] levels is very important in this, apprenticeship is no longer confined to what would be seen as just post-secondary, or level 6 and possibly touching on level 7, it can now go all the way to level 10….. At the moment we're in effectively full employment, but we do know down the road that we are likely to have to pivot again, and there will be further needs….. We know there are skills shortages, so therefore there is a need for the country to be able to supply those skills at the various levels that they are required. But, with a different perception around apprenticeship, and that's where being able to go right across the levels helps on this.' (Meso1)

Flexibility and industry-led

Comparisons were also made with craft apprenticeship specifically in terms of the need for new apprenticeship to be more flexible and agile in meeting changing industry needs:

'It was really about having a model that was more flexible, more adaptable, more readily able to change to the changing needs of industry, and indeed then to give Ireland Inc. the flexibility to develop the skills it needed in a more flexible and a more industry-led way'. (Macro4)

Specific references to employers - as well as or instead of 'industry' or 'enterprise' - were also made by many, also in the context of the perceived need to ensure that apprenticeship is more capable of addressing work-related needs:

'I think the main purpose [of the policy move to the consortium-led model of apprenticeship] is to ensure the programme is employer led….. In other words that you're creating people for roles, for real roles out in an industry, you're creating the type of person that the industry needs.' (Micro4)

A particular and continuing need for a stronger employer input at all levels in apprenticeship - and in education generally - was highlighted as a key driver for apprenticeship reform by some interviewees:

'Because our *consistent challenge* in tertiary education is bringing the employer voice in.' (Macro1)

The need to give employers a stronger role in apprenticeship not only with a view to ensuring that apprentices are equipped for the world of work they're currently in but also for the world of work they will find themselves in the future, was also emphasised, and the belief that consideration of employers' expressed needs is important but not the only issue to be considered, is implicit in this viewpoint:

'So, not to adopt tunnel vision around the 'it's all about skills and employability', but the alignment of what people get out of higher education and how it *positions* them, you know, in a world of work that's going to be very challenging over the next couple of decades, it's too important an issue…..to be dismissed.' (Macro1)

'Equity', access, and progression

The aim to ensure greater access to educational opportunities and progression pathways within the education system to a wider range of participants is considered by macro- and meso-level interviewees in particular to be a key and continuing driver of reform in apprenticeship, both at a national and individual HEI level:

'Apprenticeship is a core priority of the Minister and of his Department, because it is seen to be a kind of an education and training model that has the opportunity to broaden the landscape in terms of options, education and training options, for young people and not so young people.' (Macro1)

The previously raised issue of 'a different perception around apprenticeship' was highlighted again by some interviewees in the context of this aim for apprenticeship to be seen as an 'equal' - or an equally acceptable and accessible - option for potential participants:

'Because apprenticeship brings a gender implication, it brings a status implication, and it brings a domain implication into it, and you want to have a system with lifelong learning and with equity of treatment for all, and with young people coming through our second level looking at possibilities and seeing those all as equal.' (Meso1)

Higher education and HEIs more involved, lead, take ownership

With respect to HEIs specifically, and again with reference to the need to expand beyond the perceived limitations of craft apprenticeship, including extending apprenticeship to lead to higher level qualifications, the potential for a greater sense of ownership in HEIs and consequently greater engagement both with industry and apprenticeship was referenced as a key driver of reform in apprenticeship:

'In terms of the development of the new consortia-led apprenticeships, the big thing for higher education was that it went beyond the level 6 and 7. So it allowed HEIs to get a lot more involved in apprenticeship, whereas when it was just craft apprenticeship, it was just parts that they were involved in, but this allowed them to kind of lead out industry and take ownership of an apprenticeship….. So they're involved right in the inception of the, of whatever the apprenticeship might be. So, there's also that added incentive, that if you're an institution that develops a new apprenticeship then you're the 'owner' of the apprenticeship, even though it might go national, you know, it all kind of comes back to you.' (Macro5)

With respect also to the education system generally and to the future development of

higher education specifically, the importance of HEIs' involvement in and close engagement with other key stakeholders in the apprenticeship process, and its importance as an exemplar for the education system generally was emphasised:

> 'What we're always trying to achieve and what apprenticeship is a signature example of - the infamous 'triple helix' where you have the education provider, you have enterprise and you have Government working in partnership to deliver more optimal education, to deliver a more optimal tertiary education system….. The [potential] benefit of bringing the design, development, and delivery of the programme much closer to the key stakeholders, to the education providers and the employers than might play out in the more traditional ones. So obviously you want to train apprentices to be able to do the technical work that is part and parcel of their curricula, but by the same token you want to give them an experience of education, or ensure that through education they obtain and they develop the same broader kind of transversal skillset that anybody going through higher education will need….. So that's just a kind of a long-winded way of saying, I suppose, that I don't see apprenticeship in some sense as kind of *anomalous* within the way that higher education needs to develop anyway in the future.' (Macro1)

Earn and learn - a different way of learning

The value of specifically incorporating a work-based learning approach to learning, a key feature in apprenticeship, was also highlighted by interviewees at all levels in the context of apprenticeship reform and in education generally:

> 'Outside the sort of established conventional models that are there, all the research is pointing so strongly to work-based learning being a really core, a really significant element of the way all education, all kind of tertiary education should be moving towards and embracing, and kind of accommodating or absorbing within their models.' (Macro1)

The potential suitability of this type of approach for particular learners in higher education - 'a hands-on approach' as it was called in some cases - was considered important by some interviewees:

> 'Because those professions - I mean the traditional craft professions and the new professions do need a - you could call it a work-based learning approach, a very hands-on approach, and personally I feel that a lot of students in various parts of higher education would do better with more hands-on learning - it's a good way to learn.' (Meso2)

5.2.2.2 Understanding of the purpose of reforms - similarities and differences

There is a high level of agreement overall in terms of interviewees' stated understanding of the various drivers for or reasons why a new model of apprenticeship was introduced and the issues the associated reforms in higher education is intended to address. Most of these reasons relate to the perceived desire to broaden the definition and scope of apprenticeship - in terms of occupations,

qualifications, and stakeholders, including potential participants - to address a number of issues including to meet actual and anticipated work-related educational needs, and to put in place a new more flexible way of doing things to facilitate this. Where there was some divergence in stated understanding, it related to the perceived target groups for new apprenticeship in higher education, in particular the perceived appropriateness of apprenticeship for a particular type of learner and the associated perceived reasons why that type of learner would want to - or 'should' - participate in an apprenticeship rather than 'go to university' via the national CAO applications process.

This difference is somewhat reflected, for example, in some interviewees' belief that the purpose of the reforms in apprenticeship is to ensure that apprenticeship is 'just another form of education' (Micro1) or to 'attract students to a different *way* of getting a higher education qualification other than going through the CAO process' (Macro5). This is as opposed to others' stated belief that apprenticeship *is* different in specific ways that may be attractive to a particular type of learner, including, for example, 'those who potentially didn't get the points to do that 4-year honours degree' or those for whom 'the traditional mode of delivery didn't interest them, because they might be more about application. They might be more about earn and learn. You know, practice and theory mixed.' (Micro2)

5.2.3 HEIs' involvement (as coordinating provider) in new apprenticeship

This section (5.2.3) focuses on interviewees' stated understanding and experiences of the reasons their employing HEI engaged as a coordinating provider in at least one of the new apprenticeships leading to higher education awards. Quotations are therefore taken only from interviews with HEI personnel operating at both meso and micro levels in the seven respondent HEIs involved as coordinating providers in the design, development, and delivery of new apprenticeships in Ireland at the time of the field research of this study (mid-2023). Some examples that are illustrative of perceived reasons for a HEI having taken on a coordinating provider role in new apprenticeship are outlined below.

5.2.3.1 Reasons for HEIs' involvement in new apprenticeship

Aligned with the HEI's mission, the right thing to do, an opportunity

The perceived extent to which new apprenticeship was deemed to align with and potentially help the HEI to achieve its own ambitions was reportedly an important consideration for many higher education institutions. This related particularly to the stated focus of the HEI's provision and the opportunity to meet the needs of its stakeholders including enterprises and some key participant target groups:

'In the summer of 2016, I sat down some of my colleagues and I said everything I know about this organisation's mission and values sits perfectly in this space - it is *absolutely* aligned with what we were trying to do about enterprise-led higher education and I felt, and still feel that this is an enormous opportunity - it's a hugely interesting model that opens up a higher education qualification to people who might not otherwise consider it because of the pressure of wanting a job, because of the pressure of needing a wage, or because of discomfort with the traditional third level learning experience.' (Meso3)

'[We] looked at new apprenticeship as an opportunity for new programme development and for new ways of engaging with industry and with students who just need to learn or want to learn in a different way.' (Meso6)

At individual HEI level, involvement in new apprenticeship is also reportedly considered by some HEIs as an opportunity to further their own ambitions with respect to specific national-level aims, including widening participation, developing new partnerships, and creating programmes and qualifications in new areas:

'We have our own objectives in the university, we want to change the way we deliver some of our education, we don't want to be recruiting all our students through the CAO….So the opportunity to broaden our access routes is really, really important to us; we recognise the challenge that exists around students having to compete for [Leaving Certificate] points and then compete for places, and the pressures that brings on young people….. The other part then obviously is to seek out opportunities for the university in terms of the development of apprenticeship, and that's not just in terms of new partnership opportunities but also looking at how we can use it as a vehicle to increase access pathways and develop progression pathways for apprentices, and doing that in support of schools in the university.' (Meso6)

In addition, the occupational basis for apprenticeship - as opposed to a broader disciplinary emphasis in some other provision - was stated as an explicit and key consideration in one HEI:

'We looked at it [the call for proposals for new apprenticeships], we saw it's based on occupations, we looked at what kind of things we were doing with professional education, and we said, well, most of, all of our students [that] come from industry, we are developing them in specific key skills - the apprenticeship is a natural fit….. It's very definitely around the role and the skills need…..we're not trying to replace existing programmes or existing routes, it's to expand access [via a different route].' (Meso5)

Won't threaten the status quo

In this context also the need to distinguish apprenticeship from existing provision - including not to negatively impact this provision - was further emphasised:

'It's not going to threaten our existing market, that was a big part of it - is this going to threaten our CAO entrants? - and you explain [to colleagues]: none of our own undergraduate degrees train for a specific job role, they train for job roles in a sector, and

then people go off and they get different types of jobs….. *The apprenticeships train for a nominally single job role*, the occupational profile is a set of outcomes and skills that would be narrowly defined, and you can find equivalents in job ads. and that sort of thing, so that was an issue as well.' (Meso5)

This concern as to how new apprenticeship - or 'professional apprenticeship' as it was purposely referred to by at least one interviewee - might fit with or affect the HEI's existing activity, aims or perceived status - was reportedly a key consideration in some other HEIs' decisions also:

'The apprenticeship piece didn't particularly land comfortably internally with the kind of drive towards excellence in academia, excellence in research, you know, that kind of traditional academic environment….. And so it took some kind of real consideration of what this meant within the organisation.' (Meso3)

Area of strength, reputation

The HEI's areas of strength, and the desire to protect its reputation in those areas, was also a key consideration that informed some HEIs in their choice of proposals for new apprenticeships to submit for further development:

'We brought a group of people into a room, and said, this call [for proposals] is out, we are interested in putting in proposals, these are our strengths, this is where we think we could put something forward.' (Meso5)

Apart from areas of strength, however, there was also a competitive sense of the need to protect the HEI's provision from other existing or prospective providers that informed these choices:

'But there was an issue there, to kind of protect our own activity, you know we'd a very strong reputation in the area. There was a consideration that we had a very strong programme [in a named area] and if we didn't come forward to put in an apprenticeship with industry, then someone else would do that.' (Meso5)

In addition, and as well as the opportunity to attract additional students, consideration of the HEI's reputation among its stakeholders, including with respect to engagement with Government priorities and the potential impact on relevant professional relationships, also partly informed some HEIs' decisions to engage:

'It does give another opportunity to grow student numbers for the organisation, so that is one thing. I think it does create a good reputation for us, there's a reputational aspect to that.….. And I think also a relationship acts back then with the Department and that's important as well to us, to be seen to be involved in these initiatives, and we're very conscious of this, being involved in Government initiatives that we can take part in.' (Micro3)

Elements of funding

For some HEIs, interest in new apprenticeship was partly buoyed by the perceived advantages that elements of the funding model offered to stakeholders, including the HEI and potential apprentice employers:

> 'I'll be crass first and say it was a funding opportunity - you know, the easiest way to sell a programme of education in Ireland is to say there's funding for it.' (Meso5)

> 'Apprenticeship models are apprenticeship models and they're good….. And this just happens to be a statutory model, but the advantages, the big advantage I suppose is it's funded, which is a big, that's a big plus, all the training is funded.' (Micro4)

It's national policy, be part of it, influence it

There were other strategic considerations also for some HEIs, however, particularly with respect to the extent to which they could influence, innovate, and learn from the new apprenticeship initiative:

> 'The other side then was this is the future, so we should be involved at the beginning rather than late, that's where you get an opportunity to kind of shape it in some way or know, learn about it, and it was an opportunity, an opportunity for something new….. There is a huge push here - we are…..an institution trying to develop, deepen our role in society, it's the sea change, it was coming, apprenticeships they're not going to go away, they may morph into something, but they're not going to go away.' (Meso5)

5.2.3.2 Involvement in the apprenticeship model and involvement in an apprenticeship occupation

It is notable that some of the reasons given by interviewees for their HEIs getting involved in the new *model* of apprenticeship, such as the opportunity to innovate, as outlined above, are distinguishable (though not entirely separate) from the stated reasons for getting involved to develop an apprenticeship in a particular *occupation*, such as to widen access in disciplinary or subject areas in which the HEI has particular expertise. As an example of the former, in one HEI that did not have previous experience of education provision related to the occupation in question but had experience of an innovative delivery mechanism that could potentially be applied to it, an individual in that HEI was inspired to champion the HEI's involvement in the development of a new apprenticeship in that occupation because of its perceived potential to meet relevant industry needs:

> 'The CEO [of an industry representative body] said to me at the time that the future leaders of the industry are going to come out of this [proposed apprenticeship] programme, and the minute he said that to me I knew we had to be part of it, we had to be part of it because really they saw ambition for the apprenticeship programme - and I very much knew the value of it.' (Meso4)

Some HEIs also acknowledged however that while in some cases the decision for the HEI to take responsibility as a coordinating provider in a new apprenticeship in a particular occupation may have been driven in the first instance by an individual's probably well-intentioned interest and expertise in the discipline, the decision for the HEI to get involved may also have been based on an inadequate understanding of the requirements associated with the new model of apprenticeship, including the need for strong industry input relevant to that occupation. As also outlined above, there were therefore a variety of reasons given for HEIs' stated involvement as a coordinating provider in new apprenticeship, and in some cases some of these reasons were reported to be more considered within a HEI or based on a greater understanding of the requirements associated with the consortium-led model of apprenticeship than others.

HEI interviewees also reported a variety of arrangements and locations in which different consortium-led apprenticeships are managed, depending to some extent on the number of apprenticeships and in which occupations the HEI is the coordinating provider for, as well as whether the HEI has experience of craft apprenticeship. These arrangements and locations include, for example, overall management of all consortium-led apprenticeships located in a professional development unit within a particular School, or in a HEI-wide Centre of Continuing Education and Lifelong Learning, or responsibility for management of a HEI's one consortium-led apprenticeship in a department within a particular faculty that has responsibility for some craft apprenticeships.

5.2.4 HEIs' non-involvement (as coordinating or collaborating provider) in new apprenticeship

This section (5.2.4) focuses on interviewees' stated perceptions as to why more (other) HEIs had not engaged either as a coordinating or collaborating provider in any or more current new apprenticeships. All quotations in this section are taken from interviews with personnel in both the HEIs and other organisations involved in this research. This is in contrast to the previous section (5.2.3) where quotations are only from HEI personnel and based on their stated understanding and experience of apprenticeship in their own employing higher education institution.

5.2.4.1 Perceived reasons for HEIs' non-involvement in new apprenticeship

Institutions' history, mission, and status *vis à vis* statutory apprenticeship

A clear distinction was made by most interviewees between what was variously termed as the primarily 'academic' and the primarily 'vocational' (or 'skills', 'applied', or 'hands-on') nature of the mission and associated provision in different types of higher education institution. The former was generally attributed to 'traditional' universities and the latter to technological universities:

''Traditional' universities are academic- and research-based. That's what they live for. They have an academic bent, and they're very much involved in research increasingly, and that spans nationally and globally. Research becomes a focus for a number of reasons. For the research itself. And there are all sorts of tangential benefits from being a research-focused university. So, if you marry that with the idea that they will be doing more vocational type training, a lot of them probably don't see it as their space.' (Macro3)

An associated connotation that could be considered less than positive with respect to terms such as 'skills' and 'vocational' in the context of HEIs' non-involvement in new apprenticeship was also referred to by other interviewees:

'I can't speak for the ['traditional'] universities but I expect - my personal view would be - that apprenticeship just wouldn't be seen to be consistent with their ethos and how they present themselves and how they represent themselves….. That might seem a bit harsh, but, you know, [named institution] doing apprenticeships?! - not to single them out - but, you can well imagine that within the institution it's just anathema to them, because they just wouldn't see, they would see that as a sort of 'skills', and skills being a word…..a *dirty* word.' (Macro1)

The technological universities' (TUs') involvement, on the other hand, was widely viewed as being partly, if not largely, due to their previous experience - formerly as regional technical colleges and more recently as institutes of technology (IoTs) - in craft apprenticeship, as well as their perceived remit with respect to enterprise and their regions:

'I'd have a sense that apprenticeships are happening in the TUs given their IoT legacy and heritage, they were close to apprenticeships in a previous life so, they were, they saw apprenticeships as an opportunity to expand their brief and their role in education provision.' (Macro4)

'The technological universities are a little bit different because they're used to it. They've been embedded in the craft apprenticeship. Also, their role is to work with industry much more than it would be for the universities, even though everybody needs to work with enterprise. But certainly, the technological universities would be much more about their region, the industry in their region, and working with the industry in their region, and I suppose they also see it as an added revenue for them. So, they've been much more inclined to get involved in it.' (Macro5)

Even within the category of 'traditional' university, however, a further distinction was made by some interviewees between those universities that are perceived to be more enterprise-focused and others:

'UL and DCU were always different - were they the first technological universities so to speak? They always had a reputation for being enterprise-focused, very close to industry, vocationally oriented - if you're allowed use that word!' (Macro1)

'For example, DCU is as close to a technological university as a technological university can get, because that's what it does…..you'd say the very same of UL - but DCU and UL are far closer to [named] technological universities than they are to [named 'traditional' university], for example, and there's all these overlapping circles and there were always these overlapping circles.' (Meso1)

Within the category of TU also a further distinction was made by some between those that may be considered - perhaps largely or only by the institution - as a university rather than a TU:

'Some personnel in [a named technological university] think it's a university, not a technological university, and have aspirations for it to be an *actual* university.' (Macro5)

A perceived hierarchy within the higher education sector and within the main categories of HEI within that sector is therefore perceived by many interviewees as a key factor in some HEIs' current non-involvement in the new, or in some cases any, model of apprenticeship. Notwithstanding this, and while acknowledging the legislative basis for some of the distinctions, some interviewees questioned the validity or value of focusing on these distinctions:

'Now there certainly is a distinction, which is written into the Technological Universities Act, that builds upon a traditional distinction that we see about manners of pedagogy and focus, and you can certainly see it in some domains that are the preserve of particular areas that you can still see. But in truth we should glory, glory in our diversity of the system, but at the same time understand its complexity.' (Meso1)

The new apprenticeship model

Some interviewees reported that other HEIs' non-involvement in new apprenticeship is also related to concerns about the new apprenticeship model itself, including that apprenticeship programmes are required to be 'national' programmes. A perceived lack of clarity regarding the exact meaning of what a national programme is, or of what it involves, particularly for a coordinating provider, was identified as a potentially explanatory factor in some HEIs' - particularly 'traditional' universities' - decision, not to engage in new apprenticeship:

'One of the reasons is apprenticeship programmes are national programmes, and universities don't do national programmes. They do TCD programmes, DCU programmes….. They're probably not used to it….. So, it's a difficult space. It's not their natural terrain, they would argue, and I think probably reasonably.' (Macro3)

'There's a bit of unease with the universities around the fact that, *what does that mean?* - If UL develop an apprenticeship, and it's a national apprenticeship, what does that mean for DCU, if they run that apprenticeship?' (Macro5)

In addition, other factors reported by interviewees to potentially explain some HEIs' decision not to engage in new apprenticeship include concerns about respective roles and responsibilities, particularly with respect to governance of apprenticeship at a national level and ownership and control at HEI level, particularly for 'traditional' universities:

> 'First are the reputation and the regulations involved in getting involved…..and to a certain extent the risk…..because you'd be getting into bed with a new, a different agency [interviewee clarified that this reference is to the statutory and regulatory authority for apprenticeship] that has a very different way of doing business…..and different legislation, different funding schemes….. To a certain extent, it could be seen as removing very important aspects of university autonomy in terms of the ability to do their own quality assurance, make your own awards, decide your own programme content….. These are the sorts of things that, if I'm saying them, you can imagine a professor of engineering is going to say 'I am going nowhere near an engineering apprenticeship!' (Meso2)

It is notable that these reported concerns - concerns with respect to involvement of other providers, about 'ownership' and 'control' - were perceived to be greater for universities than for other types of HEI, that is, TUs, IoTs and 'independent' (not-for-profit or private) higher education institutions.

Relative newness of the model…..'wait and see'

There is a view also that the relative newness of the consortium-led apprenticeship model partly explains some HEIs' non-involvement to date, that there may be an element of 'wait and see' among some HEIs or some sub-sectors in the higher education sector, and that things are changing:

> 'But, interestingly, in the discussions around the migration process now [of craft apprenticeship] to the consortium-type model and the development of a single integrated apprenticeship system, the Irish Universities Association are at the table. That's the first time that has happened, you know. So, there may be a shift that's happened that we haven't seen develop and grow yet, but my sense is there's a keen interest from some of the universities in apprenticeship now. The other thing about it is it's very early days. The first programmes launched in 2016, and they [other HEIs] have probably been looking at it and going 'let's see how this works'.' (Macro3)

> 'Maybe they're just waiting to see what happens…...' (Micro5)

5.2.5 Conclusion: Theme 1

In this section (5.2), stakeholders' understanding and experiences relating to the problems that apprenticeship reform in higher education is perceived to be trying to address were presented. In particular, the views of interviewees operating at all levels in the higher education system - macro, meso, and micro - relating to the purpose of the reforms in apprenticeship in higher education, and

the reasons for HEIs' involvement and non-involvement were presented. These give an indication of 'demand' for new apprenticeship from the higher education sector, and they show a high level of agreement overall in terms of interviewees' stated understanding of the various reasons why a new model of apprenticeship was introduced in Ireland and the issues the associated reforms in higher education are intended to address at a national level. Most of these reasons related to the perceived desire to broaden the definition and scope of apprenticeship - in terms of occupations, qualifications, and stakeholders, including potential participants - to address issues including to meet actual and anticipated work-related educational needs and to put in place a new and more flexible way of doing things to facilitate this.

The reasons given for HEIs' decisions to take responsibility as a coordinating provider in at least one new apprenticeship were varied, and, in most cases interviewees were of the view that there was more than one reason. The reasons given for individual HEIs' decisions to take on a coordinating provider role in new apprenticeship were largely framed in the context of a stated desire to have a positive impact at different levels while also operating in a competitive higher education environment. The reasons include those that involve what might be termed 'pull' factors, such as that the HEI's involvement in new apprenticeship was considered to be in alignment with its mission and strengths and therefore the 'right thing to do', as well as what might be termed 'push' factors such as a fear that if this HEI didn't take on the coordinating provider role in an apprenticeship in a particular area of perceived strength some other HEI would do so and potentially affect its existing provision in that area. In many cases, the reasons given involve a mix of both, including, for example, a desire to be involved in and influence the new apprenticeship initiative at a national level from the start as well as at the same time a fear of not being 'left behind' or being perceived in a negative light by important stakeholders, such as the relevant Minister or Government department. In some cases, some of the stated reasons for a HEI's involvement in new apprenticeship were reportedly more considered within the HEI or based on a greater understanding of the requirements associated with the consortium-led model of apprenticeship, than others.

Interviewees' stated perceived reasons as to why some HEIs were not involved in any current new apprenticeships, either as coordinating or collaborating providers, were frequently framed in the context of a perceived distinction between the 'traditional' universities and other institutions, particularly the more recently created technological universities. Reasons given were related to perceptions of a distinct history, mission, and status *vis à vis* statutory apprenticeship and the place of 'vocational' and 'academic' provision in these, as well as perceived concerns about the new apprenticeship model itself, and the relative newness of the model.

5.3 Theme 2: ''apprenticeisation' of occupations'
Demand for and sustainability of new apprenticeship in specific occupations

5.3.1 Introduction: demand for new apprenticeship in specific occupations

The previous section of this chapter (5.2), which focused primarily on stakeholders' understanding and experiences relating to the issues they believed apprenticeship reform in higher education was designed to address and the stated reasons for HEIs' involvement and non-involvement in the new consortium-led model of apprenticeship, gives an indication of demand for new apprenticeship from the higher education sector. This section (5.3) examines stakeholders' understanding and experiences relating to the demand for and sustainability of new apprenticeship in particular industries and occupations. This section therefore presents the findings in relation to the development of new apprenticeships in the higher education sector in some industries and occupations and not in others.

5.3.2 Industry demand for and sustainability of new apprenticeship in specific occupations

5.3.2.1 Aspects of the industry or sector

Some new apprenticeships have been operational for a longer period than others, and therefore have had the potential to become more embedded in the industry, the sector, the occupation, the education system, and the relevant education provider organisation than others. By interviewees' own admissions, however, some new apprenticeships have been more successful than others - that is, 'some have worked better than others' (Meso5), including with respect to the numbers of apprentices registered - for a variety of reasons. Among the reasons given by interviewees, most relate to specific aspects of the industry or sector in which the apprenticeship is situated. These include, for example, the nature, capacity, and associated involvement of the body claiming to represent that industry or occupation in the development of an apprenticeship, the culture or norms within the industry or sector of industry with respect to the development of its existing or potential workforce, including with reference to external regulation of the occupation, as well as the associated demand for an apprenticeship in the occupation and consequent commitment or otherwise from employers to employ apprentices for the period of an apprenticeship and once the apprenticeship is successfully completed.

Nature, capacity, and involvement of industry representation in apprenticeship consortium

In one HEI, for example, the successful development of one of its apprenticeships was deemed to have been underpinned by a particularly strong industry representative body:

'It started from a very strong dialogue with the [named industry body]…..the absolute drive from the industry itself….. They [the industry representative body] have huge engagement, they've been much more across the whole sector…..that has helped enormously with that apprenticeship.' (Meso3).

On the other hand, however, a perceived lack of industry engagement posed challenges in another HEI in terms of the sustainability of a new apprenticeship:

'It [the apprenticeship] probably developed originally maybe out of something that was suggested to [named HEI] because we had substantial involvement in this particular area, but then, when the stakeholders came on board - even though we got it validated and through internally - there wasn't an adequate impetus behind driving it forward….. Getting consortium agreement and making sure that you have viability…..there's been a challenge around that.' (Meso6)

This perceived lack of appropriate industry engagement in an apprenticeship, leading potentially to a lack of viability or sustainability, may be explained by several factors including the basis on which the demand for the apprenticeship is identified:

'In hindsight I would say it's kind of a niche area, and that's part of the problem…..the sustainability….. If it's any way niche, if the demand in the long term is in any way questionable, then it's very difficult to get that strong industry support to drive it onwards….. Based on my experience, what I'd be watchful for, if you were considering taking on another apprenticeship, would be to really ensure that there's really a strong commitment from the industry partners to the apprenticeship, and the need for the apprenticeship.' (Micro1)

Culture and norms with respect to the development of existing or potential workforce

Another HEI reported similar challenges, in particular 'low take-up', that it attributed instead to the specific nature of the industry in which the apprenticeship was operating:

'I would think that's because there's a lack of staff in that whole area, that allows employers, it's slow for them to actually release people [for the off-the-job element of the apprenticeship], they just feel that they just can't afford to lose them….. The one thing that has to be there is the industry engagement, strong industry engagement, and not even just the engagement, but *the belief*, the industry belief in this [apprenticeship], and the requirement for it.' (Micro2)

Others were of the view that the situation with respect to external regulation - in areas such as medicine or law, for example - is a key factor in the determination, either by the employer side or the employee side - of the suitability or otherwise of an occupation for statutory apprenticeship:

'One of the consequences of the 1967 Industrial Training Act's exclusion of 'any activity of a professional occupation' from statutory apprenticeship was that [craft] apprenticeship

became a form of regulation for occupations that were otherwise likely unregulated, like mechanics or whatever….. But if there's already professional regulation - precisely *because* they have professional regulation, a professionally accredited programme, like nursing - then it doesn't need it [statutory apprenticeship], it already has this other regulatory system….. And in fact there would be a challenge of a double jeopardy in terms of having two sets of regulatory tools applying to it, having the [SOLAS] Authorised Officers come and check on whether the hospital was an appropriate employer, it's hard to see how that would be in anybody's interest.' (Macro2)

Furthermore, and while limitations in the apprenticeship legislation relating to 'professional occupation' have only recently been removed, occupations in these areas - including many that currently already operate according to a non-statutory apprenticeship-type model of education - are unlikely at present to move to or incorporate a statutory apprenticeship model, because, according to some interviewees, there appears to be insufficient 'industry' demand, where the Government is the employer, for this:

'There was some discussion around nursing, certainly bringing nursing into [statutory] apprenticeship. But there doesn't seem to be an appetite there on the Government side around moving some of these things like nursing or medicine, or teaching, into an apprenticeship-type model.' (Macro5)

According to interviewees, therefore, apprenticeships in some occupations are likely to be more suitable - and therefore more successful and sustainable - than in others, for a variety of reasons including those related to the nature of the industry or industry sector, the associated industry demand for an apprenticeship in the occupation in which it is being developed, including the cost associated with paying apprentices throughout the entire apprenticeship, and the consequent commitment or otherwise to the process from industry stakeholders.

5.3.3 Higher education demand for and sustainability of new apprenticeship in specific occupations

Apart from demand from industry with respect to the perceived potential suitability of statutory apprenticeship for specific occupations, there is also 'demand' from the higher education sector generally with respect to the perceived potential suitability and sustainability of statutory apprenticeship for specific occupations as well as individual HEIs' decisions to take responsibility as a coordinating provider with a view to meeting that perceived demand.

5.3.3.1 Potential impact on existing provision and reputation

As noted previously, for some HEIs an important consideration in determining the appropriateness or otherwise of involvement in developing and delivering apprenticeship in a

specific occupation as coordinating provider, was whether it was in an area considered to be an area of strength - either in the subject area or mode of delivery - for the higher education institution. In addition, the perception that apprenticeship *is* focused on a specific occupation - a specific job role as opposed to a broader disciplinary area - was also noted as having been an important factor in one HEI:

> 'Now we did have a lot of challenges internally, but the strong focus is that apprenticeship is a job role - it's fine they're getting an award, but *they're getting an award for developing skills for a job role* - so the programme has to be quite specific to a job role, which you need for [named apprenticeships for which the HEI is coordinating provider]..… Apprenticeship wouldn't have been made in other areas here because the degrees are too wide.….. There will always be a role for the discipline degree, because you will have someone who is interested in engineering or sciences or arts who doesn't know exactly what they want when they're leaving school.' (Meso5)

A perceived distinction between degrees gained via an apprenticeship route, for specific job roles, and degrees gained via a 'wider' degree route for those with an interest in a broader discipline, was therefore the basis for one HEI's case being made internally for its involvement in new apprenticeship for the first time, in specific occupations, that was not expected to impact on its existing provision via these other routes.

5.3.3.2 'A trade', a 'profession', or in a 'professional' area

A distinction was also made by many interviewees between what they perceived to be the 'professional' nature of occupations in the new consortium-led model of apprenticeship and those in the existing craft model of apprenticeship. For some interviewees the word 'professional' is considered particularly important:

> 'I tend to use, and *always* tended to use the phrase '*professional* apprenticeships'.… It shouldn't have to be said, but unfortunately when you say the word 'apprenticeship' the next thing that comes to mind in most people's minds is electrician, plumber, you know, carpenter, welder….. If you were listening to a radio chat show and someone mentioned apprenticeship, the audience would *instantly* think of a trade….. I think there's a bit of snobbery around that, building sites or the ESB [electricity supplier], but it's not for an *international global professional company!*' (Meso3)

The question of occupations and areas of educational provision that apprenticeship is deemed to be suitable for, or not, and how this relates to existing provision and the 'professional' nature of occupations, or 'the professions', was specifically referred to by some interviewees in the context of a suite of four new apprenticeships in Civil Engineering being led by a technological university and designed to lead to awards at levels 6, 7, 8, and 9 on the National Framework of

Qualifications. Two of these apprenticeships, announced by the Minister in November 2023, are now operational: 'Civil Engineering Technician' leading to a level 6 Higher Certificate in Civil Engineering, and 'Civil Engineering' leading to a level 7 Bachelor of Engineering in Civil Engineering. The other two, both currently called 'Civil Engineering' and expected to lead to level 8 and 9 awards, are in development. The proposed and eventual development of apprenticeships in this specific area is reported to have caused some concern among some stakeholders in higher education however:

> 'There's an apprenticeship in Civil Engineering [due to be announced] that has caused a lot of, a lot of kind of angst amongst the universities, because they're saying, 'why are we getting a Civil Engineering apprenticeship? - we have *tons* of civil engineering courses around the country, like *degrees*, and how is this going to impact on the intake into our degrees?', and so on.' (Macro5)

This angst was perceived to be a particular concern not only in the universities - and not only in relation to their provision - but also in the technological universities and in relation to the distinction between the two types of university:

> '……That caused a huge amount of kerfuffle, around the HE system….. A TU brought it forward and there was *real* concern around the other TUs and…..in the universities through the IUA [representative body]….. This was the first time that we had an apprenticeship in - we already had the Industrial Electrical Engineer one, but the word 'industrial' in it probably kind of, well, this was now a degree in Civil Engineering and this was now going into - these are my words - the '*holy of holies*' in terms of the long established tradition, particularly of the old NUI colleges….. My sense is that the Civil Engineering one caused a few ripples around the place, and people were kind of saying 'my God, Civil Engineering coming out of a TU, who do they think they are?' (Macro4)

Apart from individual HEIs' own reasons for their involvement as coordinating provider in specific apprenticeships, therefore, some apprenticeships, in some areas of activity, are reported to be considered to be more suitable for, and more readily accepted by some stakeholders, in the higher education sector and in some parts of the higher education sector, than others. Some of these reasons include those related to whether the occupation is considered to be a 'trade', or a 'profession' or in a 'professional' area, and to the perceived potential impact of an apprenticeship in a particular occupation on existing provision and reputations, in individual HEIs, in the higher education sector generally, and in defined parts of that sector.

5.3.4 Conclusion: Theme 2

In this section, findings were presented relating to interviewees' experiences and perspectives with respect to the perceived suitability and sustainability of new apprenticeships in some industries and occupations but not others. The findings show that statutory apprenticeships

are perceived to be likely to be more successful and sustainable in some occupations than in others, for a variety of reasons such as those related to the nature of the industry and demand for an apprenticeship including with respect to norms associated with the development of an existing and potential workforce, and to existing higher education provision and reputations at HEI, higher education sector, and HEI sub-sector levels.

5.4 Theme 3: 'apprenticeship is different'
How new apprenticeship is experienced in higher education compared with other provision in higher education

5.4.1 Introduction: experiences in higher education of new apprenticeship compared with other provision

A HEI's participation in an individual apprenticeship as coordinating provider can be said to potentially include two distinct but related roles. One role is as a consortium member for that apprenticeship, invited by other members to work with them as the coordinating provider in the design, development, and management of the apprenticeship, at consortium level. Another key role as the coordinating provider for that apprenticeship is *as* the coordinating provider, working internally with HEI personnel and with individual employers and apprentices in the initial and ongoing delivery and management of the apprenticeship programme.

In this section (5.4), interviewees' reported understanding and experiences relating to the consortium aspect of the new model of apprenticeship in higher education are firstly presented, followed by their reported understanding and experiences relating to their coordinating provider role in new apprenticeship in their own higher education institution.

5.4.2 The HEI as consortium member in the development and consortium-level management of an apprenticeship

5.4.2.1 Different experiences in different apprenticeships

In all cases where a HEI is the coordinating provider for more than one apprenticeship, HEI interviewees reported diverse experiences in the HEI at consortium level in the different apprenticeships. Many of the differences were reported to relate to the membership and associated functioning of the different consortia involved, including those related to the nature of the industry, the sector or the occupation involved, and to the associated industry or enterprise representation on the consortium. In one HEI, for example, an interviewee reported a substantially different experience in the HEI's dealings with the consortia in two apprenticeships in two different industries:

'I have two complete opposites! In the [named apprenticeship] Consortium Steering Group, I have great difficulty getting them to 'get' the engagement - I mean greater engagement from them to try and get people on the course, because they have a lot of power and influence to do that - and they're very much saying 'you're the Coordinating Provider, you get on and you do it'….. So I've been pushing them to expand the Consortium Steering Group. The idea is that you have your Consortium Steering Group who are your guiding hand, and they're meant to be feeding back in all the employer pieces [to us] and saying 'look guys you need to change this, you need to add that, you should look at doing this', or 'there are pieces in the programme that actually are a waste of time because they're not relevant to the workplace'….. So that's one end of the scale. But that's great because they leave you alone, but it's not necessarily what you want….. In the other [named] apprenticeship, they're a very active Consortium Steering Group, they're very articulate and they want to be involved in everything.' (Micro4)

This interviewee stressed that the differences the HEI experienced in the two apprenticeships in this instance may or may not necessarily have been due at all, largely, or partly, to the fact that the two apprenticeships were in two different industries, and that even apprenticeships in the same industry or sector could potentially have two different consortia that operate significantly differently due to other factors such as the personnel involved.

5.4.2.2 Roles and responsibilities: understanding and expectations vs reality, 'theory' vs 'practice'

A lack of what was perceived to be appropriate industry engagement at consortium level was also reported by other interviewees. In one instance, the HEI interviewee was more critical of the lack of industry engagement at consortium level, and ultimately, at apprentice employer level, because of the implications this had for the HEI's actual role in the apprenticeship as opposed to what the HEI expected its role to be. This new role, which involved recruiting employers to the programme, was reportedly not adopted by the HEI because of any active decision on the HEI's part:

'In hindsight, I think, it's quite an extensive process to engage in to create an apprenticeship, a new form of apprenticeship. A lot of Steering Committee meetings, a lot of trying to motivate employers to take on apprentices…and that's going way beyond the remit of a training provider in our view….. That ought to be a given from that [industry] side, stakeholders ought to be investing in it to the extent that we're just worried about providing a good academic experience.' (Micro1)

In another case in which the HEI was similarly critical of the perceived lack of appropriate engagement by the industry representative on the consortium, an active decision *was* made by the HEI to adopt a broader role than initially expected or agreed to by the higher education institution. In this instance, the interviewee reported, the lack of appropriate industry engagement ultimately led to the industry body in effect withdrawing from the consortium, meaning that the HEI was faced with making a choice either to terminate the apprenticeship entirely or to make the decision, in

conjunction with relevant national apprenticeship stakeholders, to effectively take on the role of the industry lead, involving, for example, liaising with and recruiting employers to the programme. This contrasted with a more positive experience in another of this HEI's apprenticeships, wherein the remit and reach of the industry representative body and its input to the consortium were deemed by the HEI to be critical to the reported success of that apprenticeship.

As noted previously, however, some HEIs also acknowledged that the decision for the HEI to get involved in new apprenticeship may have been based on an inadequate understanding of the requirements associated with the new model of apprenticeship, and that in some instances the HEI itself may therefore have contributed to a less than positive experience as a consortium member.

Notwithstanding some positive consortium-related experiences reported by this and some other HEIs, however, and in comparison with other provision in higher education, many interviewees expressed the view that, in their experience of new apprenticeship, there are additional challenges for a HEI with respect to industry engagement at consortium level, potentially leading to challenges also at individual employer level in terms of employing apprentices in the first instance, or of subsequently meeting the requirements of the programme once apprentices are employed:

> 'From a labour intensity point of view, it takes an awful lot of work…. It's much easier, it absolutely is much easier to have 16 people come in through CAO on your honours degree programme than it is to try to get 16 people to do a level 8 apprenticeship….. I think probably one of the biggest challenges is your dependence on the industry to be part of the process. And I won't lie. That's actually probably quite difficult in the [named] industry, because of it being such an unregulated industry in itself….. One of the biggest difficulties that you might have, it's not in the delivery….. It's maybe the apprentice being released [by the employer] to engage with the off-the-job training.…. And one of the biggest things as well I would think is that…..there should be more of a role from the industry lead, in this case the [named representative organisation] in the promotion and marketing of apprenticeships and recruitment of apprentices, because at the end of the day we go through CAO [for applicants to other programmes], that's where our marketing campaigns are….. But because the consortia-led apprenticeships were intended to be industry driven, and then they got education partners, to partner with, to develop the apprenticeship…. the industry lead provider should be doing the heavy lifting.…. They should be coming to us with 16 apprentices to start the apprenticeship rather than us as the education provider having to go out and gain that, because they have the access, they have direct access to the industry that we want to support the apprenticeship.' (Micro2)

In addition to reported experiences in relation to individual apprenticeships, this broader issue of what the new apprenticeship model generally is *intended* to be, as opposed to what may or may not be happening in practice, was raised by interviewees at all levels:

> 'So [industry] engagement - you have a meeting, you have a consultation, you have somebody on your oversight group involved in the design of a Springboard programme - that's good, it's better than if it wasn't there, but look at how the consortium model is

meant to operate..… I keep coming back to that ['meant to'] - it's [meant to be] *embedded* involvement by the employer, enterprise….. The bit I *don't* understand about the new apprenticeship model is - because when you look at it, when you describe that landscape around it - the coordinating provider, the education and training provider, the employer, coming together in the consortium - who actually *does* that?' (Macro1)

5.4.2.3 Meaning of terms and implementation of concept: 'enterprise-led', 'consortium-led', 'employer-led'

Related questions were also raised by this and other interviewees about the extent to which the new model of apprenticeship generally can be, or is 'employer-led', 'enterprise-led', 'industry-led', 'consortium-led', or 'consortia-led' - terms variously used in national- and programme-level apprenticeship documentation - and about what these terms mean:

'It has taken a *long* time for employers to kind of jump on board….. I suppose the challenges have been trying to get industry to get involved, and to get places, to get actual employers to take on apprentices, that's been a huge challenge..… It's very difficult to engage with employers and get employers to come on board, and, in a way with the 10-step [apprenticeship development] process, it seems very kind of onerous and the amount of time it takes to actually get an apprenticeship off the ground is still about 2 years.' (Macro5)

'Because, as we all know from all our different engagements it's really hard to do collaboration. It's very hard to get employers *in* to things, it's hard to get them to stick with things, employers and academics speak different languages.....so in advocating and promoting and really looking to drive the model, the question that remains in my mind in terms of mainstreaming it is….. It's an enterprise-led model, so *how do you get enterprise to lead*? That's essentially it. If you had an enterprise engagement that was very organised, very systematic, very expert, very informed by expertise, that would help across the board…..but you'd ask the question about the risk that 'enterprise-led' becomes a sort of a….what would be the right word?..…a kind of a *veil*, so it's like, 'oh it's enterprise-led, and there's enterprise people involved', but actually it's the coordinating provider that *really* drives it, and that means that that sort of sweet spot that you want to achieve in terms of the engagement and the collaboration between education and training providers and enterprise..…it doesn't really happen?' (Macro1)

5.4.2.4 How to 'scale up', mainstream the model

In this context of the potential for 'mainstreaming' of the model - the potential for the model to be 'scaled up' or implemented more widely over time - the question of the institutional arrangements that would best support this, including the actual or potential role of representative professional bodies, was referred to by this and other interviewees:

'So [to ensure] that you have the enterprise people on board…...the role of the professional bodies is very interesting because that helps a lot with that. Because they're driving out on behalf of the professions….. They represent the profession in that respect..… Let's say the [named apprenticeship] - you realise the [named professional body] is absolutely driving this.…. So it's just kind of getting to that point I suppose, and that's the challenge around

that new apprenticeship model - how would you drive that cohesion, that cooperation, that collaboration that you need for this to work?' (Macro1)

'We also must see that these [new apprenticeship programmes] are not *collaborative* in provision, they are *co-designed between enterprise and the academy*. Now that's fine in isolated instances, but if you try to put a structure in for that that's sustainable, that's actually quite a challenge.' (Meso1)

5.4.3 The HEI as coordinating provider in the delivery and HEI-level management of an apprenticeship

Apart from a HEI's role as a member at consortium level, another key role for a HEI in any apprenticeship for which it is coordinating provider is its role *as* the coordinating provider, working internally with its own personnel and with individual employers and apprentices in the initial and ongoing delivery and management of the apprenticeship programme. In this section (5.4.3), interviewees' reported understanding and experiences relating to elements of this aspect of new apprenticeship in higher education are presented.

The activities associated with this aspect of the coordinating provider role itself can be said to potentially involve two related but distinct phases. The first concerns the initial design, development, and delivery of the apprenticeship programme and associated systems and supports for staff, students (apprentices), and apprentice employers. The second concerns the ongoing delivery, management, and development of the programme and those systems and supports over time. Most of the experiences and understanding reported by interviewees relating to a HEI's role *as* coordinating provider focused on activities and issues associated with the first of these 'phases' - initial implementation of a new apprenticeship programme in a HEI - and these are presented in this section. Experiences and understanding associated with ongoing delivery, management, and development of a new apprenticeship in the HEI over time - the second of these 'phases' - are referenced in Section 5.5, relating to the next theme in this chapter which is about reported understanding and experiences related to the perceived 'success' or otherwise of apprenticeship in higher education.

5.4.3.1 Challenges internally introducing new apprenticeship into HEIs

All HEI interviewees reported having experienced some challenges, to a greater or lesser degree, internally in terms of introducing and/or implementing new apprenticeship into the HEI, once the decision had been made to do so. These included dealing with questions and concerns from various quarters internally about the appropriateness or value of the new apprenticeship model itself for the HEI, and challenges and changes related to alignment, or not, with existing systems and supports, such as those associated with teaching and assessment of learning.

Appropriateness of the model

An example of the former is from an interviewee with overall decision-making authority and responsibility for the HEI in question:

> 'I'm not sure if that's true of all apprenticeships but if I can speak to the experience of ours: It was my job to get us over the internal hump of 'Is this a real qualification? Can someone really 'get' teaching within the work environment? Can that *really* contribute to learning outcomes? Can that *really* add up to a qualification at the end of the day?' - It was my job to get over that from the pedagogy perspective and to kind of explain 'Yes, this can be done' and 'this is a real way of people learning which has loads of advantages for the individual student who's essentially an employee.' (Meso3)

Similar concerns were reported to have been expressed in another HEI in relation to a specific award:

> 'When we put the proposal in and the President signed off….. Then we heard [from colleagues] 'this is a [named] level award, you have destroyed academia, you might as well hand things out at the photocopier, how can someone do a [named level award] this way?' (Meso5)

The extent to which - or if - these and other initial concerns were allayed within and throughout HEIs, or the timeframe within which they were dealt with, reportedly differs between HEIs, and is also referenced further in the findings relating to the next theme in this chapter, but in many cases their existence was reported by interviewees to have been due partly or largely to a lack of understanding in the HEI relating to the new model of apprenticeship:

> 'We did already have programmes with work-based learning in them, significant elements at undergraduate level, both degrees and level 7 programmes, so for many reasons people would have been saying 'we already have a work placement, we don't need another work placement'….. So I think if you're going to develop an apprenticeship, what the apprenticeship is going to be needs to be very, very, clearly defined.' (Meso6)

Alignment with and impact on existing systems and supports

Apart from these and other questions and concerns related to the appropriateness or value of the model itself in higher education, however, most of the challenges that were reported to have been experienced in HEIs in terms of implementing new apprenticeship in the HEI - and apart from those experienced at consortium level, as a consortium member, already outlined in Section 5.4.2 - relate to alignment, or not, with existing systems and supports in the higher education institution. Some of these challenges are presented below, and they reveal some of the main ways in which new apprenticeship is experienced as different in HEIs, compared with their other provision.

With regard to introducing new apprenticeship into a HEI, different degrees of alignment or non-alignment with existing systems and supports were reported by different interviewees, as were the different degrees of change that were deemed to be needed in those systems and supports to facilitate implementation and delivery of new apprenticeship. Some interviewees reported that minimal changes were needed. For example, in one HEI that had previous experience of craft apprenticeship, the interviewee reported that implementation and delivery of new apprenticeship was relatively seamless:

> 'There weren't any particularly significant changes, it's a bit like any programme….. Basically, I suppose what's important in creating the delivery model was ensuring that it was aligned with our academic year, such that we could allocate staff, along with contractual obligations around staffing.' (Micro1)

In another HEI that was new to statutory apprenticeship but adapted some of its existing provision to be delivered in the form of new apprenticeship, with the off-the-job element, the work-based learning element, delivered mainly online, the interviewee reported that with respect to implementation of apprenticeship, the HEI 'did not have a lot of challenges internally'. In this instance, where some apprenticeships were developed to provide a different route to the same award in areas in which the HEI was already providing programmes designed for industry-based participants, the interviewee reported that the different cohorts of learners - those participating in the apprenticeship and those participating in the standard programme - could be and were jointly taught, with additional supports such as workplace mentors provided only to those participating in the apprenticeship programme.

5.4.3.2 Ways in which new apprenticeship has been experienced as different in HEIs

Some interviewees reported however that significant changes were needed to facilitate implementation of new apprenticeship, including in one HEI, also new to statutory apprenticeship, where the interviewee was of the view that 'it was like somebody coming in like a bull in a china shop and breaking all the dishes'.

The many ways in which new apprenticeship was reported to have been experienced as different compared with HEIs' other provision, and necessitating changes in the HEI's systems and supports, include those related to teaching and learning, assessment of learning, the number and nature of stakeholders involved, the level of complexity, level of flexibility, level of control, and the level and type of resources needed, including some new roles and responsibilities for HEI staff.

Teaching and learning

In terms of teaching and learning, for example, and compared with the HEI's 'standard' provision, one interviewee noted that the work-based nature of the model means that students themselves - the apprentices - play a greater role in what is a more interactive process:

> 'Some people would automatically think that if you have somebody full-time [standard programme] and somebody part-time [apprenticeship], that that would potentially allow for sharing, to make both programmes viable.….. But it doesn't work like that, because the way in which you're talking to them and teaching them is, it's a different model.….. The theory side of it is the same, but sometimes with a full-time programme you're constantly having to give industry examples, because maybe the people are working in industry, or maybe have never worked in industry, whereas on the other [apprenticeship] side they're constantly working in industry so they have industry examples that they can pull from themselves as well.' (Micro2)

In this instance, where apprenticeships were developed to provide a different route to the same award in areas in which the HEI was already providing programmes, the interviewee reported that the different cohorts of learners - those participating in the apprenticeship and those participating in the standard programme - could not be and were not jointly taught, unlike the situation in another HEI providing a different route to the same award, referred to above, where the two groups, both described as 'industry-based', are jointly taught on the off-the-job element of these programmes.

Assessment of learning

Differences relating to a more interactive process in terms of teaching and learning were reported to also extend to assessment of learning in some HEIs:

> 'We do flipped classroom-style stuff for a lot of ours, so there's pre-reading in advance, it's interactive on the day when you're with your lecturers, and then there's the follow up things, the forums, so it's quite involved, there's a lot of work, and the assignments are very work-related assignments….. [Apprenticeship programmes are] more project-based so that our students are doing more work-based learning and projects that benefited their own company and benefited them than would have been in the standard [craft] apprenticeship model for example.….. And then within modules, if something had been quiz-based before, for example, it might now be a company-based assignment, to assess learning.' (Micro5)

There are nevertheless different models of engagement with the employer - or with the employer's designated representative in the apprentice's place of employment, variously described as the 'mentor', 'coach', or, less frequently, 'supervisor' - reported to be in operation in different HEIs involved in the delivery of new apprenticeship, and some staff reportedly play different roles with different responsibilities than heretofore. In one HEI, for example, a new role that is 'different

to just lecturing on a formal module' was introduced, a role that demands 'a different set of skills because it's less teaching and more an approach of explaining the assessments - as in 'this is what we're looking for' - having smaller group meetings, individual meetings, and meeting with mentors to make sure that the apprentice is getting on ok' (Micro3). Another HEI introduced a new role for 'somebody who goes out and visits apprentices once a semester in their location and talks to the mentors, talks to the employer, talks to the apprentice to try and get feedback and address any issues they may have, any difficulties they may have' (Micro4). This is similar, in some respects, to the situation that pertains in teacher training placements, for example.

Higher education institutions are ultimately responsible for accrediting apprentices' learning, however, both that which is acquired in the on-the-job and the work-based, off-the-job elements of the programme, and some HEI interviewees reported that new mechanisms were introduced to support this. Although a large percentage of learning is expected to be acquired in the on-the-job element in all apprenticeship programmes, in some cases, all or most of the assessment of learning is reportedly done off the job, by the HEI:

> 'All of the assessment is off the job by the [HEI's] tutors; we took the decision, when we started out, that the [workplace-based] mentor wasn't going to be grading - all the grading and assessment would be done through the [HEI-] taught element..… So if you have an assignment, it has to be on your organisation, the structure of the programme is designed so that if, for example, you're doing Leadership and Change, your assignment is looking at your own organisation's change example.…. The role of the mentor then is to facilitate - for example, if somebody can't get access to their HR to talk about the change management strategy or something like that, the mentor's role is to get them that access so that they can do their assignment on their own organisation and learn about their own organisation and their network.…. [But] all of the assessment is effectively off the job.' (Meso5)

Other HEIs operate a similar approach to assessment of learning in terms of workplace mentors' non-involvement in 'grading', but with some differences. In one instance, for example, the mentor 'signs off' to say that what the apprentice has presented as evidence in the workplace meets a specified learning outcome, on a pass or fail basis, and relevant documentation is submitted to a central portfolio system hosted in the HEI; the HEI module leader then assesses and grades the off-the-job element only and submits relevant documentation to the portfolio system. In this case, therefore, the apprentice must pass the on-the-job learning element, but marks are allocated to the off-the-job element only. In another apprenticeship, a similar model applies, except that the HEI module leader does also grade the workplace evidence in the portfolio, based on a certain percentage of total marks being allocated to the on-the-job learning element of an apprenticeship programme, and a certain percentage to the off-the-job element.

The reasons for mentors' non-involvement in grading, according to an interviewee in a HEI in which grading of assessment of all learning is done by the HEI's lecturing staff, may be related to mentors' own perceived lack of skill or confidence in doing so:

> 'In many instances mentors don't *want* to be grading….. There's a pushback from them about 'well how *do* I mark?'…..particularly in higher education because if you're contributing to the award of a degree, you want to be quite conscious about what you're marking and assessing and what you're giving….. Also they're perhaps only seeing one person [apprentice] and they're not seeing the range whereby they can compare….. And I think also because of their close relationship with the apprentice and a *reluctance*, they don't want to be giving their apprentices a bad mark for instance….. So both the off-the-job and the on-the-job modules are effectively delivered by and assessed by [named HEI]…..and there's some feedback from the mentor, the workplace mentor to say 'yeah, that's fine.' (Micro3)

In this HEI, therefore, the off-the-job modules in apprenticeship programmes are 'almost taught in a similar way to that on any normal lecture' while for the on-the-job modules the apprentice produces a [work-based] assignment which is uploaded to a portfolio system. The workplace mentor can comment on that work; the designated HEI staff member can then see both the apprentice's work and comments, and the mentor's comments; the HEI staff member marks the assignment and can add comments, and the external examiner also has the opportunity to enter comments on the portfolio. In this HEI, however, the work-based learning element of an apprenticeship programme *does* contribute to the credit allocation in the programme, to the award, and to the grade:

> 'One of the premises that we had about work-based learning was that the work-based learning would be equally valued as the off-the-job learning, which I don't think is always the case - sometimes, on-the-job learning isn't graded, it's pass or fail, and then all the credits or the determination of the award is basically what you do off the job….. So, in the assessment, we try and look for a minimum in every module, some of them are 50% work-based assessment, so how the assessment is driven is different….. It's a new area for [named HEI], and as an apprenticeship provider you have to get over the fact that this *isn't* the same as any other programme, it's different.' (Micro3)

It is clear that different approaches to assessment of learning in the workplace are reportedly in operation. While there is a requirement for all statutory apprenticeship programmes to have at least 50% of learning taking place in the workplace, there is no associated requirement with respect to assessment of that learning, including the proportion of total marks to be allocated to that.

Regardless of the approach adopted by HEIs to assessment of learning in the workplace and its relative contribution to grades and awards, however, direct liaison with employers and

workplace-based mentors with respect to apprentices' learning is new to many HEIs and to their HEI staff and students:

> 'In terms of the whole element of the introduction of the workplace mentor, it's not something that was ever in any of our programmes before, and actually it's proved to be hugely beneficial, from the student perspective obviously, and for me coming in and dealing with mentors, mentoring, and mentoring training.' (Micro5)

It has also presented some challenges in some HEIs:

> 'Apprenticeship is complex to manage, it takes more resources to manage, and you know there are easier areas of higher education to be involved in..... The engagement of mentors is something that you wouldn't have on a normal programme. You have some mentors that are absolutely fantastic, they exceed your expectations, and then, other mentors it's almost sometimes like having another student, you're chasing them for feedback and this sort of thing, or if the apprentice has a problem in terms of getting an opportunity to practice a task, you're chasing them [mentors] to try to get that opportunity [for the apprentice].' (Micro3)

Level of control

Higher education institutions' role in and responsibilities relating to the off-the-job element of apprenticeship is new to *all* HEIs involved in new apprenticeship. This includes those with previous experience of craft apprenticeship, at least one of whom reported not having had to make any significant changes in implementation and delivery of new apprenticeship. Notwithstanding this, however, challenges and concerns related to the extent to which the HEI can have control over that for which it is ultimately responsible, were highlighted by several interviewees:

> 'It is of course much simpler if you had 50 people sitting in front of you doing a [non-apprenticeship] degree, because you are almost responsible for and have control of everything, whereas when you've got 50 people in front of you doing a degree apprenticeship now you've got 50 employers potentially as well that are in the same mix..... I suppose if I was to be very honest with you, the minute you put an industry into anything, what you're doing is you're adding another layer of complexity.' (Micro2)

> 'Designing a whole programme that probably four fifths of which you don't have control over in delivery is a different process to designing a programme and that you can validly stand over learning outcomes..... So it's *quite* a different model.' (Meso3)

The possibility that this HEI interviewee did not believe the HEI could 'validly stand over learning outcomes' relating to all aspects of apprenticeship in this instance is perhaps implicit in this quote.

One interviewee suggested also that assessing work-based learning is a challenge in comparison with assessing other - off-the-job - learning because 'you are not in the workplace with

them and you won't be given that opportunity, so developing work-based assessments that are meaningful and credible, that's a challenge'. This interviewee reported also that the provision of evidence can sometimes present difficulties in assessment of work-based learning, and in some industries or areas of work more than others, including, for example, where a tangible product is not created and where there may be issues related to confidentiality in apprentices' work in the enterprises involved; that the integration of the learning between the off-the-job and the on-the-job elements of an apprenticeship programme, and the *integration* of the assessment of that learning, presents challenges; and that assessment of workplace learning generally 'is more complicated, and costs more.' (Micro3)

Number and nature of stakeholders

As noted above, different HEIs have attempted to address the reported challenges associated with the structure of new apprenticeship programmes, including those associated with the off-the-job element of the programme, in different ways including with the introduction of new roles and responsibilities among HEI staff. The challenges associated with new apprenticeship extend beyond the HEI-employer level, however, and include the HEI's engagement with a range of other stakeholders in the statutory apprenticeship infrastructure:

> 'Theoretically we could launch another degree tomorrow - yes you've got the rigours of the [QQI Accreditation] Panel but you don't have the additional rigours of the National Apprenticeship Office and getting it approved through them, and the rigours of testing the Consortium Steering Group, all of that sort of stuff..… So there's added hurdles to get over doing apprenticeship than there are launching any other programme.' (Micro3)

> 'Realistically, the design and delivery of the programme is in place when you have the apprentices, so it's the *getting* of them and the minding of them, the engagement, because you've another layer…..actually many other layers, you've got the National Apprenticeship Office, you've got Authorising [SOLAS Authorised] Officers…..you have subject matter experts, and then [if there are collaborating providers involved] you've got admin. staff in other institutes as well.' (Micro2)

Level of complexity

This perceived 'complexity of governance' associated with new apprenticeship was identified as a particular challenge by many interviewees. At HEI level, the statutory and regulatory role of SOLAS and its Authorised Officers in employer approval, apprentice registration, and ongoing monitoring of individual apprenticeships, and its role as also being the responsible provider for craft apprenticeship, were referred to in this context. While some HEI interviewees experienced SOLAS's statutory and regulatory roles and involvement in a positive light, particularly in terms of the

'legitimacy' it was perceived to bring to the process, all indicated that it was perceived as unnecessarily complex and confusing for many stakeholders:

> 'It's a work in progress….. On the recruitment side I think there's a duplication of work between ourselves and SOLAS, and, also, if I'm being brutally honest, it depends on which ETB you deal with….. I get feedback, frustrations from employers…. We still need to do our due diligence, it's up to me to ensure that that student can achieve and that the company can support, and that's part of my role…… But then I have SOLAS to go in and to do the same thing…..I'd like this to be seen as a professional seamless process, I'd like there to be only one set of paperwork for ourselves and for SOLAS.' (Micro5)

The perceived complexity of governance was raised also with reference to the potential sustainability, or not, of statutory apprenticeship in higher education in the longer term:

> 'You'll notice that one of the key points that came out of the OECD [2023 skills strategy] study is the complexity of the governance around apprenticeship.….. That is a *key theme* and will be a key theme going forward….. Because if you bring this to the operational level…let's take it if a HEI new to apprenticeship wanted to go down the road of doing apprenticeship and had a focus on a particular industry or enterprise group…..it would want, and the academy would want, to be secure in the knowledge that this was at least a medium- to long-term commitment.' (Meso1)

In this regard, and with respect also to the additional resources reported to be needed for a HEI to be appropriately involved in new apprenticeship, the relative uncertainty and the long-term commitment needed from a HEI was also identified as a challenge by several interviewees:

> 'But every year we're wondering, 'what'll the intake be this year?' - they're different programmes, they take a lot of teaching hours, a lot of teaching resources, and a lot of communication resources, so it's not something we can switch on lightly and you would have at least a two- if not a three-year run into a new programme being developed.' (Meso3)

Level of flexibility

This concept of long-term commitment was also raised by some interviewees in terms of what they perceived to be the relative inflexibility of the new apprenticeship model compared with other provision, particularly for the coordinating provider:

> 'I think we need to be very careful when we're establishing programmes that it's clear that they have routes to long-term viability.….. Otherwise, you're asking the educational provider to commit to getting involved in delivery, and that includes everything from recruiting the staff, providing the facilities, acquiring the technology if it's necessary, and all of that, so there's a big commitment in the medium to long term that you're signing up to on day one.….. *And* the academic coordinator [coordinating provider] can never really get out of the contract into the future, that's the way it's composed currently: if you're the one who's the

academic coordinator then you're in there indefinitely, if you're an academic collaborator [collaborating provider] you can come in today because there's a sudden demand in the region, and they [the coordinating provider] might deliver 16 students to you to get over that hump, but if tomorrow that's turned off again you might be not involved in the next phase, and you don't need to be involved, you might choose not to be involved, and there's no consequences for you….. Whereas the academic coordinator is still over there doing what they did on day one. So that's an issue.' (Meso6)

A similar experience with respect to long-term commitment and perceived inflexibility - of being 'locked in' - was reported by another interviewee, this time in comparison with the HEI's other industry 'outreach' provision and in relation to its own role in the process:

'We're out there meeting with industry all the time, and we can offer programmes to industry and customise them….. In fact we have one of the largest outreach engagements in collaborations with industry….so we do a lot of that, and we can kind of customise and tailor to meet the needs of that particular industry, in a flexible way, and then once that is done we can offer the programme in a way that fits - we don't have to run it every year, sometimes we run it with a collaborating partner on their facilities.…..so there's somewhat a degree of flexibility of how much of the engagement might be on campus versus their facilities versus timelines - you can customise it, you can have a minor breakout award where over time they can attain credits to build towards a major award…there's a lot of flexibility in our engagement….. If you compare that to the new form of apprenticeship model, it's quite structured, albeit that you can run it in different days in different ways, block release, etc., it's a nationally recognised apprenticeship so once you're in that system you want to try as best you can to be seen to run it in a consistent way, annually, so you're kind of somewhat locked into that.' (Micro1)

Some other HEIs, on the other hand, report having experienced new apprenticeship as providing *greater* flexibility, when compared with 'standard' degree programmes:

'A four-year academic programme is out of date by the time the cohort leaves, because they're made at a point in time and they're quite restricted in what can and can't be changed….. The apprenticeships though I think they're much more flexible and much more agile and certainly when you have that work-based element in it, that's constantly bringing in all the new stuff, and if you're smart you're constantly updating the 'asks' in assessment, which you can easily do without affecting…..your quality assurance or anything - you've got the learning outcomes still, but you're changing the ask….. You can introduce new things very rapidly.' (Micro4)

The different levels of perceived flexibility in new apprenticeship reported by interviewees are therefore partly based on the comparator used, for example, whether compared to a HEI's other industry-focused provision that is deemed by the HEI to already have potential flexibility built into it, or compared to other longer-term provision that is deemed by the HEI to be already relatively inflexible. In addition, perceived inflexibilities related to the duration of new apprenticeship were reported, including questioning of why one-year apprenticeships, for example, or exit awards at

different points in the apprenticeship journey, are not allowed.

One HEI's summary of its experience of introducing new apprenticeship into the HEI for the first time is quoted in full below because it illustrates concisely the associated changes and additional resources throughout the organisation that several HEIs report to have been required, to different degrees, in their own organisations, at least in the short term, including changes to IT, assessment, quality assurance, and personnel systems:

> '[Named organisation] was set up to run programmes in the traditional way, the traditional academic year….. And then, this big elephant came in! And it's meant a lot of change, in a good number of departments….. Like for instance the exam. boards have all had to change to accommodate the apprenticeship exam. boards because our year ends don't fit neatly into traditional year ends….. Even with the QA group, it's caused all sorts of issues around that, the curriculum is designed differently to the traditional one because you've got that whole workplace learning element….. We introduced an e portfolio system….. For IT that was colossal, for IT Support that's meant a lot of change, we struggled, we have that in place now, but that was, that is a big change….. Even down to getting office space, getting classroom space…..all of those things had to be negotiated and worked out, and they were all change for the organisation that was doing normal academic years and a suite of very successful programmes that are bringing in lots of things….. And then there's the whole induction of lecturers, it's different, the induction of mentors is new, all of that was new so it did mean a huge amount of change, and it means a lot of the traditional departments have had to move as well, and…..they found that a little bit difficult.' (Micro4).

While this HEI also reported that in its experience it is 'an uphill struggle to get staff to embrace apprenticeship', it also reported that its involvement in the provision of new apprenticeship is nonetheless viewed by the HEI as a process of 'working through all the growing pains', based on a belief in and a long-term commitment to new apprenticeship, and an expectation that its 'next apprenticeships will be a doddle in comparison'.

As noted, this contrasts with experiences of implementation of new apprenticeship that were reported by some interviewees to have been relatively seamless, including in some HEIs that already had experience of craft apprenticeship, or where an existing undergraduate or postgraduate programme, already part of a suite of programmes designed for industry-based participants, was adapted to be delivered in the form of new apprenticeship, with a largely online mode of delivery for the off-the-job element.

5.4.4 Conclusion: Theme 3

Interviewees' reported understanding and experiences of new apprenticeship in higher education, compared with other provision in higher education, were presented in this section.

Higher education institutions' own reported experiences indicate that, in practice, their responsibilities in their role as a consortium member differ to some extent in different apprenticeships for which they are the coordinating provider. In addition, in some cases HEIs' responsibilities in that role differ in practice - either by default or because of a decision on the HEI's part - compared to what they initially understood their role and responsibilities would be. In summary, HEIs' reports of their direct experiences as members of individual apprenticeship consortia indicate that some new apprenticeships have worked better than others in that respect, and other interviewees' reported experiences of the apprenticeship system reflect agreement with this view.

With respect to HEIs' role as the coordinating provider working internally with HEI personnel and with individual employers and apprentices in the initial delivery and management of the apprenticeship programme, the findings highlight many ways in which new apprenticeship is reported to have been experienced as different compared with HEIs' other provision, including those related to teaching and learning, assessment of learning, the number and nature of stakeholders, the level of complexity, level of flexibility, level of control, and the level and type of additional resources needed, including some new roles and new ways of operating for HEI staff.

Questions have also been raised about the meaning of core concepts according to which the new model of apprenticeship is variously described in official documentation including 'enterprise-led', 'consortium-led' or 'employer-led', about the feasibility of these concepts being implemented, in practice, as intended, and about the institutional arrangements and other factors that might best support their more widespread application in the new model of apprenticeship, including the potential role of representative professional bodies in this.

5.5 Theme 4: 'are we (getting) there yet?'
'Success' of new apprenticeship in higher education

5.5.1 Introduction: what and whose needs are being met by new apprenticeship in higher education? - metrics of success and expectations for the future

In this section (5.5), the perceived success or otherwise of new apprenticeship in higher education, and issues identified as needing particular consideration to ensure the success and sustainability of apprenticeship in higher education in the future, are presented. This understanding and experiences extend from interviewees' involvement in policy making and policy implementation processes at national and higher education sector levels to interpretation and implementation of that policy at various levels in individual higher education institutions.

With respect to individual HEIs, findings in relation to initial design, development, and delivery of apprenticeship programmes were presented in the previous section (Section 5.4). While acknowledging that there is not a clear distinction or dividing line between experiences of apprenticeship *during* initial implementation as opposed to *since* initial implementation, findings relating to the latter - ongoing delivery, management, and development of new apprenticeship - are the focus in this section.

5.5.2 The current status of apprenticeship in higher education: metrics of success

5.5.2.1 National level

Significant achievements

At a national level, tangible developments related to statutory apprenticeship are generally perceived by interviewees as indications of positive achievements. These include, for example, the increased number of new apprenticeships, in new sectors and occupations, leading to new awards at new levels, involving new (first time apprenticeship) providers from across the higher education sector, as well as more apprentices, new cohorts including people already in employment, and new stakeholders in new apprenticeship consortia. These, and the establishment of the National Apprenticeship Office, and the newly constituted National Apprenticeship Alliance, which is similar but different in important respects to the Apprenticeship Council, are considered by most to be significant and positive developments:

'We've engineered a huge shift in education provision.' (Macro4)

Data systems

Notwithstanding general acknowledgement that progress is being made, however, and that issues remain to be addressed - many of which are identified as specific actions in the Government's Action Plan for Apprenticeship 2021-2025 - a reportedly key issue, in terms of measuring the success or otherwise of apprenticeship, is the availability of appropriate or adequate data systems generally and in higher education. One interviewee, for example, referred to this in the context of the need to know, at a national apprenticeship system level, who is participating in apprenticeship, and whether policy aims with respect to access to new apprenticeship are being achieved:

> 'We don't really know that. That's one of the big challenges. We don't really know how many people [apprentices in new apprenticeships] are already employed, and I think that's quite a high proportion..... So we talk about increasing numbers [of apprentices], do we really want to increase the numbers of school leavers, or are we talking about increasing the number of people who are already working in organisations but have no qualification and so their status doesn't really change?..... Okay, they're doing an apprenticeship to gain a

qualification, but would you call that a success? I don't know….. Are we attracting people from lower socioeconomic backgrounds into the new apprenticeships? We certainly have them in the craft apprenticeship area. But are we attracting them in? And should we be attracting more of them in? Is it mature students? Are they people who are already in employment? Who are the people that are doing these apprenticeships? And I think if you actually broke it down, your number of school leavers would be in the minority there, but we just have no evidence of that.' (Macro5)

This issue is further exemplified in one interviewee's question on the reasons why people - in this instance mainly employed people - choose to participate in apprenticeship, and the interviewee's own answer to that question in relation to one specific apprenticeship:

'It would be very interesting to have a look [to the UK] at the profile of people going on to the various third level [apprenticeship] courses, what's the profile of people doing them, the level 7 and upwards? There will be an age component to it, people who had a qualification already….. It'd be interesting to look at what's driving them into it. We know in [named apprenticeship] for example, it is the standout success, and when you talk to the [named apprenticeship] people they will tell you that a large proportion of the people attending that programme are people who are already in employment, they have years of experience and employment, so why are they doing it?….. They're doing it for a couple of reasons: the industry sees it as retention, so they're investing in their people…..it's progression, it's upskilling, it's retention, in a kind of a 'hot' employment market.' (Macro4)

Particularly in relation to new apprenticeship that potentially includes people already in employment, however, the potential for 'unintended consequences' was also raised in this context:

'It's easy to look across the water and point fingers but look at the way the rules for the apprenticeship system there were so poorly formulated that apparently most of the money now ends up chasing deadweight management courses for established employees at higher levels, when that would have been delivered anyway, and not being transferred into skills shortages areas.' (Macro2)

Although the opinion above relates to developments in an apprenticeship system that is different in many respects to the Irish system, it nonetheless highlights some of the complexities potentially associated with attempting to measure the success or otherwise of apprenticeship, and other education and training programmes, at a national system level.

In general, however, and notwithstanding some reservations expressed, particularly in relation to the availability of data, and other issues in relation to the future of apprenticeship in higher education, discussed below, developments related to apprenticeship at a national level are perceived by interviewees as indications of positive achievements to date:

'I've never seen such a coherence of policy infrastructure as I do now, so it's a coming together…..The ground here is far more positive than negative….. We have challenges, we're

trying to work through those challenges.....and while all that might seem difficult, I think everyone is minded to make this work.' (Meso1)

5.5.2.2 Higher education sector level

With respect to the success or otherwise of apprenticeship at higher education sector level - and apart from that relating to apprenticeship in individual HEIs - there is general agreement that apprenticeship reforms in higher education to date, along with prospective reforms involving the 'migration' of craft apprenticeship and consortium-led apprenticeship to a single model of apprenticeship, already have, or have the potential to significantly change the landscape of tertiary education in Ireland.

Intra- and inter-sector collaboration and impact

In terms of impact to date, for example, joint work being undertaken by the two representative bodies for public sector HEIs - THEA and IUA - in conjunction with seven HEIs involved in the delivery of apprenticeship (craft and new), including a discussion paper from this 'Higher Education Apprenticeship Providers' (HEAP) group on implementation of the national apprenticeship action plan, is perceived by some interviewees to be particularly noteworthy, especially in terms of facilitating communication and collaboration among key stakeholders across the higher education sector:

> 'That THEA-IUA work, I think that has great potential because it has them engaging directly themselves rather than talking to SOLAS, or the Department, individually, and yes they're in the National Apprenticeship Alliance, but that ['bottom-up, joint work'] is what gets things moving, that's what drives change.' (Macro1)

Notwithstanding some recent notable developments in terms of membership, THEA largely represents the IoTs and TUs, and IUA largely represents other universities.

According to one interviewee, part of the impetus for the HEAP discussion paper was that the FET sector had already put out a position paper on implementation of the national apprenticeship action plan, and:

> 'To respect that, it was important that higher education came together and spoke with a single voice; it doesn't tie people to anything, but these are position papers; and there's now conversations happening between *all* providers, that's between further education and higher education.' (Meso1)

According to this interviewee, this level of intra-sector engagement and collaboration among key stakeholders in higher education in relation to implementation of the apprenticeship action

plan, is 'unprecedented', as is the level of inter-sector engagement across both FET and higher education. This view, previously quoted, was confirmed by another interviewee who reported that:

> 'Interestingly, in the discussions around the migration process now, and the development of a single integrated apprenticeship system, the IUA are at the table. That's the first time that has happened.' (Macro3)

Furthermore, and notwithstanding any 'politics' that may be perceived to have been involved, some of the recent developments with respect to the HEIs' representative bodies' membership are reported to potentially also have an impact at higher education sector level in terms of apprenticeship:

> 'Technological University Dublin - and I'm not getting into the politics! - is a member of the IUA now….. I think that may have unintended benefits for apprenticeship. Their experience, their view, their kind of living and breathing apprenticeships, as they have done, may lead into their conversations [about apprenticeship] with other ['traditional'] universities…..and it possibly means [in time] - just a guess - possibly means a single university representative body.' (Macro3)

In summary, therefore, apprenticeship reform in higher education to date, along with actions associated with prospective reforms involving a single model of apprenticeship, are reported to have already had significant impact at higher education sector level and on the evolution of a reportedly emerging more unified tertiary education sector in Ireland. In addition, and with respect to the concept of a more unified tertiary education sector in which apprenticeship is expected to play a key part, as outlined, for example, in national policy as stated in the Action Plan for Apprenticeship 2021-2025, interviewees reported that the potential for further change is significant:

> 'I agree with the Minister's concept of blurring the boundaries [between further and higher education]…..relieving the pressure on second level students, showing them there's more than one way into that university programme and into that profession that you want to get into, so it's kind of still providing them with the opportunity to reach the *Holy Grail* but slightly circuitous route, and much less pressure.' (Meso6)

5.5.2.3 HEI level

At individual HEI level, the perceived success or otherwise of new apprenticeship is reported to relate to many different aspects of HEIs' involvement as coordinating providers in new apprenticeship, and some of these have been already referred to, in Section 5.4, with respect to how apprenticeship is experienced in higher education compared with other provision in higher education. As noted, some HEIs have reportedly experienced more challenges than others, or in some apprenticeships more than others, as members of individual apprenticeship consortia and with

respect to the initial impact on internal HEI systems, personnel, and processes, including HEIs' engagement with industry and apprentices, and new roles and responsibilities for their own staff.

Programme-level criteria

Apart from these metrics, however, individual HEIs' ongoing engagement with new apprenticeship has allowed them to form a view with respect to the success or otherwise of individual apprenticeships to date. Key criteria according to which HEIs reportedly assess this include: the number of apprentices participating on a programme over time; apprentices' 'performance' as measured by completion of the programme and achievement of learning outcomes, grades, and awards; employers' and apprentices' satisfaction with aspects of the apprenticeship; and outcomes for apprentices, particularly in terms of their employment status (including for those already in employment) including progression to other learning initiatives.

On these and other metrics, as already noted in Section 5.4, interviewees in different HEIs have reported different experiences, including interviewees in HEIs that are the coordinating provider for more than one apprenticeship who reported different experiences in different apprenticeships, and some apprenticeships having been reportedly more successful to date, and potentially more sustainable in the future, than others. In general, however, in instances where an apprenticeship is continuing to be offered by a HEI, experiences are reported to be largely positive, and in a minority of instances where experiences are reported to have been less than positive, the programme is either currently not offered - 'the programme is in the refrigerator at the moment' according to one interviewee - or, in another HEI in which industry support was less than initially anticipated, an apprenticeship is 'on hold' and being re-designed in consultation with industry before being formally launched. In most HEIs, therefore, the number of participants on an apprenticeship programme over time - meaning in the first instance the number of employers willing to employ an apprentice(s) for the duration of that apprenticeship - is reported to provide an indication of the perceived likely sustainability or otherwise of the apprenticeship.

Other metrics are reportedly used to differing degrees in different HEIs, with one interviewee reporting that the HEI monitors on a range of measures relating to apprentices' performance and post-apprenticeship status, and the effect of involvement in new apprenticeship on HEI staff:

> 'Internally it [apprenticeship] is actually probably one of the best examples of tying in with the organisation's mission, and so the employment prospects on completion are excellent, the retention stats. for the programme are probably amongst the best in the organisation….. I'm not saying we don't lose anybody, we do lose some people…..[but] the retention rates are very good, the completion rates are good, the achievement rates in terms of the grade

of the award they're getting tends to be at higher levels, and then the post-apprenticeship employment rates are very strong….. And it may be different at different levels, but for teaching staff it's hugely rewarding being in the apprenticeship, because they see the opportunities that develop, and they see people getting jobs and their careers and opportunities changing.' (Micro3)

Some less tangible metrics at HEI level, including those considered by interviewees to be 'work in progress' were also reported by some interviewees, including in one HEI that is committed to continuing its involvement as coordinating provider in new apprenticeships:

'We're very open to looking at other ones [apprenticeships] because we believe that that's the way forward, to try and rebalance this *mania* in the Irish psyche of everybody going to university [full-time] and getting a qualification, and then working on a dustbin lorry….. People are overqualified for jobs….we're driving people's mindset too high, and we don't have enough people on the skills end….. Involvement in apprenticeship brings you [the HEI] closer to employers, that's for sure, and it gives you a better understanding of an industry, sector….. We do believe that programmes need to be creating people who are job ready as opposed to creating people who [just] have a particular standard, and apprenticeships are a great way of developing job ready people.' (Micro4)

'Work in progress': ongoing learning and continuous improvement

With respect to the future of apprenticeships in HEIs more broadly, many interviewees reported that the HEI's engagement could in some respects be considered as a pilot initiative, involving a 'learning curve', and that improvements were being made over time. In this regard, for some the question of how to embed or mainstream apprenticeship in the HEI and throughout the HEI is now a key consideration, including how to incorporate or extend aspects of the apprenticeship model into other areas of provision and management of apprenticeship in the HEI in future:

'In fact, we'll probably end up rolling out the e portfolio to all graduates and create a graduate attributes section in the e portfolio, which will allow them to build and demonstrate their graduate attributes through the e portfolio, so that when they finish their programme of training they can also finish their e portfolio for graduate attributes and say 'here's what I've done, here's my showcase'….. And I am encouraging the organisation to take on more apprenticeships and develop a fully blown section for statutory apprenticeships.' (Micro4)

'The organisation is set up primarily for undergraduate students, and then there is a bit of postgraduate students, but it's set up on an 80% model of undergraduates, so this isn't just about apprenticeships, this is about flexible education, and the apprentices are part of that, they're in work, they require more flexibility and hopefully actually the apprenticeship programmes within the organisation [the HEI] will have a positive impact on being able to add more flexibility to those other models.' (Meso5)

5.5.3 The future of apprenticeship in higher education: key considerations

5.5.3.1 'Scaling up', mainstreaming the model

As noted above, with respect to the future of apprenticeships in individual HEIs, many interviewees reported that the HEI's engagement could in some respects be considered a pilot initiative, that improvements are being made over time, and that the question of how to embed or mainstream apprenticeship in the HEI, and management of apprenticeship in the HEI into the future, are now key considerations for the higher education institution. The issues identified by interviewees as needing particular attention to ensure the future success of apprenticeship nationally, and in the higher education sector generally, are similar in many respects to those identified at HEI level, including how to embed, mainstream or 'scale up' apprenticeship in HEIs throughout the higher education sector.

Management and governance of apprenticeship: roles and responsibilities

In this regard, questions relating to the management and governance of apprenticeship in and throughout the sector in the future, and associated questions relating to apprenticeship programmes being conceptualised as 'national' programmes, and respective roles and responsibilities in the national apprenticeship infrastructure, were identified by interviewees as needing particular consideration to ensure the future success of apprenticeship in the higher education sector, and, ultimately, to ensure the future success of the national apprenticeship system generally.

National programme

There are reportedly different perceptions and understanding of what the concept of a 'national' apprenticeship programme means, in practice, among higher education stakeholders, and while some interviewees were of the view that the meaning and the implications for different stakeholders are relatively clear to them and to others, many were of the view that they are not, or that they are considered challenging or unacceptable by some.

One reported interpretation of what a national apprenticeship programme means is that it is available nationwide, and therefore, by implication, if the coordinating provider can ensure this nationwide delivery, supported, for example, by mainly online delivery of the off-the-job element of the programme, there is 'no clear reason why any other provider would want to take it, deliver it and run exactly the same thing' (Micro5). Other interviewees contrasted what is considered to be a national apprenticeship programme - defined by one as 'aligned to the needs of a particular sector nationally…..meeting a national need…..viable and applicable across the country' - with a sectoral or

regional apprenticeship programme that would be 'very, very regionally based and suiting the needs of a region or a very small number of companies.….very restricted in some sense to one particular area of industry' (Meso6).

Ownership and control

Other interpretations of what the concept of a national programme means in practice, and some concerns associated with that, were more related to the concepts of ownership of aspects of a programme and commercial viability of a programme, particularly in the competitive context within which HEIs are perceived to operate:

> 'I fully agree with the concept of national, and the concept of a national programme was an awful lot easier when there was one authority like SOLAS managing and doing all of that sort of element….. Now you have individual institutions…..we have a competitive education environment, it's the way it's set up….. The coordinating providers put a lot of effort into making them work to, you know, have others deliver it….. Having said that, there are other institutions that have expertise in areas that we want to do apprenticeships in, and we would like to work with them [but] there's a lot of politics around…..inter-institutional rivalries.' (Meso5)

From another perspective, however, the concept of an apprenticeship being a national programme is deemed to *specifically* mean that individual HEIs, including those who first develop and deliver an apprenticeship in a coordinating provider capacity, do *not* 'own' the programme:

> 'I think it's really important for all the players in the system - and by that I mean the system of government, that's the education provided by and large by the State, it's mostly State-owned institutions that are involved, there's some private institutions - it's important for everybody to see that this is not about the educational provider, it's not about the education provider developing courses and owning those courses, a big rule in all of this is that the State owns the IP from any developed course, and that is a real problem for institutions with authority to make awards….. There's a real conflict in thinking between a model of higher level education with awarding powers, and a national apprenticeship programme.…. What does presidential autonomy in a HEI mean in a national [apprenticeship] model?..... I think that what's going to get resolved as part of this [ongoing work with key stakeholders in HE] is a better understanding of what a national apprenticeship means in that context.' (Macro4)

There is, nonetheless, as noted previously, still some concern - 'an unease there, around what is meant by a 'national programme'' related also to the concerns about roles and responsibilities, and associated concerns about 'ownership' and 'control', particularly for universities:

> 'There's still a bit of an unease around the fact that they [universities] possibly don't have ownership of that apprenticeship because it was developed initially by a different university,

152

even though it still has to go through validation in the university that takes it on as a partner, but I think there's a bit of work to do in getting the universities to understand exactly how the apprenticeship works, and how the consortium in that apprenticeship works….. And I think there would be a bit of reluctance for a university to take on an apprenticeship that was developed by a technological university. I suppose that's just about a little bit of snobbery, but also probably a little bit of control.' (Macro5)

This disquiet therefore relates not only to considerations associated with the competitive environment within which HEIs are perceived to operate, but also to aspects of programme delivery where other HEI providers - collaborating providers - may subsequently be involved:

'It's more about maintaining….. Like how do I know the same level of service or the same kind of programme is going to be delivered?'….. And then it would be a case of who would accredit it, who would the awarding body be, who would get the credit from the HEA? - It would require a re-work at multiple levels for something like that.' (Micro5)

'BUT - and this is the big but - if we do this then we have to own the quality of this or we have to work with people to own the quality of this, because ultimately this is our award.' (Meso1)

From the perspective of the coordinating provider, therefore, the concerns revolve partly around the extent to which the HEI believes it can or cannot control aspects of the programme delivery including the quality.

According to one HEI, however, the situation is reportedly relatively straightforward, so that all prospective collaborating providers will have two choices:

'They will sign up to an agreement with the lead [coordinating] provider and they'll either have to prove to the lead provider that their quality assurance processes and their capability to deliver the programme match the needs of the programme and what is established by the lead provider as the appropriate QA process, or they'll have to back out of it….. That brings a national expectation of what it takes to deliver that programme and what that programme should be like and how that programme should be managed, which I think is useful.' (Meso6)

From a prospective collaborating provider's point of view, however, the situation may not be perceived in such a seemingly straightforward light:

'Let's take a hypothetical example, bioengineering, so a provider has approval for a bioengineering apprenticeship programme, that means no one else can run a bioengineering apprenticeship, because that particular name and title is taken. And if you want to run one you have to join, as *a subsidiary collaborating provider*, and be told what to do, and go through their QA procedures. And that's…..there's no way anyone is going to get involved in that, because it's completely anathema to the way people in our sector do business.' (Meso2)

This statement highlights some of the concerns and challenges reportedly associated with individual HEIs in the higher education sector about collaborating with other HEIs and with HEIs in one sub-sector collaborating with HEIs operating in another sub-sector of higher education, particularly in the already mentioned context of relative autonomy in some higher education institutions.

Notwithstanding these challenges, however, the advantages of such collaboration have been acknowledged by some interviewees, particularly at the early stages in the apprenticeship development process:

> 'At the same time, there are incredible advantages to being part of the development of the consortia-led apprenticeships in terms of sitting down with colleagues and trying to hammer out national agreements about what a programme in say, mechanical engineering, should be, and what should be the programme learning outcomes, and how should it be delivered and is one day a week the appropriate way to do it, and I think the sectors need to get on with the challenges of it.' (Meso6)

The question of respective roles and responsibilities associated with the management and governance of the national apprenticeship system - both craft and new, at national, higher education sector, and HEI levels - and associated questions related to the concepts of ownership of and control over aspects of apprenticeship are nonetheless key issues identified by interviewees as needing particular consideration to ensure the success of apprenticeship in higher education in the future. This includes also consideration of the roles and responsibilities of SOLAS (in its capacity as statutory and regulatory authority for apprenticeship) and of its statutory 'Authorised Officers' as well those of other key stakeholders such as the National Apprenticeship Office and the National Apprenticeship Alliance, in a potentially new landscape involving the creation of a single integrated model of apprenticeship which is the focus of an ongoing national project.

5.5.4 Conclusion: Theme 4

In this section, the perceived success or otherwise of new apprenticeship in higher education, and issues identified as needing particular consideration to ensure the success of apprenticeship in higher education in the future, were presented from the perspective of interviewees' - both those in individual HEIs and those involved in other aspects of higher education - stated understanding and experiences of new apprenticeship in higher education over time.

The findings on the perceived success or otherwise of new apprenticeship in higher education are presented relating to three levels, national, sectoral, and higher education institution. In general, and notwithstanding some reservations expressed, particularly relating to the availability of adequate data systems, changes that have been implemented at a national level relating to the

national apprenticeship infrastructure are perceived by interviewees as indications of significant progress. At higher education sector level, apprenticeship reform in higher education to date, along with prospective reforms involving craft apprenticeship, are reported to have already had significant impact, and the potential for significant further impact, in the sector and on the evolution of a more unified tertiary education sector in Ireland.

At HEI level, HEIs use a variety of metrics, to differing degrees in different HEIs, to provide insight into and evidence of the success or otherwise of their individual apprenticeships. HEIs' reported experiences of individual apprenticeships indicate that, using these metrics and for various reasons outlined in this research report, some new apprenticeships can be deemed to have been more successful to date, and potentially more sustainable in the longer term, than others.

With respect to the future of apprenticeship in higher education, the findings show that issues identified as needing particular consideration to ensure longer term success and sustainability of apprenticeship relate to concepts of scale and mainstreaming of apprenticeship in and throughout the higher education sector. Considerations related to the management and governance of the national apprenticeship system and associated questions related to the concepts of ownership of and control over aspects of apprenticeship, are considered critical to make the apprenticeship system better, stronger, more effective, and communicated in a way that more stakeholders are interested in it.

5.6 Summary of key findings from the thematic analysis

A **summary of the key findings** from the thematic analysis is presented below. These are summarised under three headings that relate to the themes as follows (Table 5.2):

Table 5.2: Presentation of key findings from thematic analysis	
Presentation of key findings	**Themes from thematic analysis**
Demand for new apprenticeship in higher education	1. ''Apprenticeisation of higher education'
	2.''Apprenticeisation of occupations'
Implementation of new apprenticeship in higher education institutions - the HEI in individual apprenticeships	3. 'Apprenticeship is different'
Success of apprenticeship perspectives on the success and sustainability of apprenticeship in higher education and in the national apprenticeship system	4. 'Are we getting there yet?'

The summary is also presented in a concise table format in Appendix C, which includes a comment on what each key finding means, why it matters.

5.6.1 Demand for new apprenticeship

5.6.1.1 Purpose of policy and reforms

The findings show a high level of agreement overall in terms of interviewees' stated understanding of the various reasons why a new model of apprenticeship was introduced in Ireland and the issues the associated reforms in higher education are intended to address at a national level. Most of these reasons relate to meeting actual and anticipated work-related educational needs, involving a wider profile of participants in this, and putting in place a new more flexible and industry-led way of doing things to facilitate this.

5.6.1.2 Reasons for HEIs' involvement in new apprenticeship

The reasons given for individual HEIs deciding to take on a coordinating provider role in new apprenticeship were largely framed in the context of **a stated desire to have a positive impact at different levels while also operating in a competitive higher education environment**.

The reasons given include those that involve what might be termed **'pull' factors**, such as a desire to be involved in and influence the new apprenticeship initiative at a national level from the start as well as what might be termed **'push' factors** such as a fear that if this HEI didn't lead an apprenticeship in a particular area of perceived strength some other HEI would do so and potentially affect its existing provision in that area, a fear of not being 'left behind' or of being perceived in a negative light by important stakeholders.

In some cases, some of the stated reasons for a HEI's involvement in new apprenticeship were reportedly **more considered within the HEI or based on a greater understanding of the requirements associated with the consortium-led model of apprenticeship, than others**.

5.6.1.3 Perceived reasons for HEIs' non-involvement in new apprenticeship

Perceived reasons as to why some HEIs, particularly universities, have not engaged to a greater extent in new apprenticeship were frequently framed in the context of a **perceived distinction between the universities and other institutions**, particularly the more recently created technological universities.

Reasons given for this relate to perceptions of **distinct histories, missions, and status *vis à vis* statutory apprenticeship**, as well as **perceived concerns in some HEIs about the new apprenticeship model itself**, and the relative **newness of the model** ('wait and see')

Perceived **concerns about the model** itself included that apprenticeship programmes are required to be 'national' programmes, but that there is some **uncertainty or 'unease' regarding the exact meaning of what a national programme is**, of what it involves with respect to involvement of

other providers, and associated concerns about 'ownership' and 'control' that are perceived to be factors in some HEIs' decisions on their involvement or non-involvement, and the extent of their involvement, in new apprenticeship.

5.6.1.4 Demand for new apprenticeship in different occupations

Statutory apprenticeships are reported to be **perceived to be likely to be more suitable, successful, and sustainable in some occupations than in others**.

Reasons given for this relate to **demand from industry** such as those related to the nature of the industry or sector and demand for an apprenticeship in that industry or sector including norms associated with the development of existing and potential workforce.

In addition, some apprenticeships, in some areas of activity, are reported to be considered to be **more suitable for, and more readily accepted** by some stakeholders in **the higher education sector** and in some parts of the sector than others. Some of these reported reasons include those related to whether the occupation is considered to be a 'trade', or a 'profession' or in a 'professional' area, and to the perceived potential impact of an apprenticeship in a particular occupation on existing provision and reputations, in individual HEIs, in the higher education sector generally, and in defined parts of that sector.

5.6.2 Implementation of new apprenticeship - the HEI in individual apprenticeships

5.6.2.1 Two key roles

A HEI's participation in an individual apprenticeship may be viewed as potentially involving **two key roles: as a member of the apprenticeship consortium** and as the **coordinating provider** in the development and delivery of the apprenticeship programme.

5.6.2.2 HEI as consortium member

Higher education institutions' experiences as a consortium member reportedly differ to some extent in different apprenticeships, and in some cases HEIs' responsibilities in that role differ in practice compared to what they initially understood their role and responsibilities would be**. Some new apprenticeships have therefore reportedly worked better than others with respect to the consortium**, and some of the reasons for this are attributed to consortium members' - including the HEI's own - **levels of understanding of the requirements as well as levels of engagement in a consortium**.

5.6.2.3 HEI as coordinating provider

With respect to the coordinating provider role in the HEI, **HEIs experienced some challenges and associated changes needed**, to a greater or less degree, internally in terms of introducing and/or implementing new apprenticeship into the HEI, and **many of these relate to alignment, or not, with existing systems and supports in the higher education institution**. **Different degrees of alignment or non-alignment with existing systems and supports** were reported, as were the **different degrees of change that were deemed to be needed** in those systems and supports to facilitate implementation and delivery of new apprenticeship.

5.6.2.4 Differences compared with HEIs' other provision

The many ways in which new apprenticeship is reported to have been **experienced as different** compared with HEIs' other provision include those related to **teaching and learning; assessment of learning; the number and nature of stakeholders; the level of complexity; level of flexibility; level of control; and the level and type of additional resources needed, including some new roles and new ways of operating for HEI staff**. Different approaches to assessment of learning were reported, for example, including cases where all or most of the assessment of learning is done off the job, by the HEI, as opposed to the employer, and cases where marks are allocated to assessment of the off-the-job element of learning only, and those where a certain percentage of marks is allocated to assessment of the work-based, on-the-job element also.

5.6.2.5 Uncertainty about core concepts

There is **some uncertainty around the meaning of core concepts according to which the new model of apprenticeship is variously described in official documentation** including 'enterprise-led', 'consortium-led', or 'employer-led', about the feasibility of these concepts being implemented, in practice, as intended, and about the institutional arrangements and other factors that might best support their more widespread application in the new model of apprenticeship, including the potential role of representative professional bodies in this.

5.6.3 Success of apprenticeship

The findings on the perceived success or otherwise of new apprenticeship in higher education were presented relating to three levels: national, sectoral, and higher education institution.

5.6.3.1 National level

In general, and notwithstanding some reservations expressed, particularly relating to the availability of adequate data systems, changes that have been implemented at a **national level** relating to the national apprenticeship infrastructure are **perceived as indications of significant progress**.

5.6.3.2 Sector level

At **higher education sector level**, apprenticeship reform in higher education to date, along with prospective reforms also involving craft apprenticeship, are reported to have already had **significant impact, and the potential for significant further impact**, in the sector and on the evolution of a reportedly emerging unified tertiary education sector in Ireland.

5.6.3.3 HEI level

At HEI level, HEIs use a variety of metrics, to differing degrees in different HEIs, to provide insight into and evidence of the success or otherwise of their individual apprenticeships, using metrics such as **participation rates** on apprenticeships and **apprentices' performance** including achievement of learning outcomes, grades, and awards, and **less tangible metrics** such as engagement with industry, alignment with existing systems and supports in the HEI, and the introduction of new systems and supports including new roles and responsibilities for their own staff.

In summary, HEIs' reported experiences of individual apprenticeships indicate that, **using these metrics and for various reasons outlined in this research, some new apprenticeships can be deemed to have been more successful to date, and potentially more sustainable in the longer term, than others**.

5.6.3.4 Future of apprenticeship in higher education

With respect to the **future of apprenticeship in higher education**, issues identified as needing particular consideration to ensure longer term success and sustainability of apprenticeship relate to concepts of scale and mainstreaming of apprenticeship in HEIs and throughout the higher education sector. Considerations related to the **management and governance of the national apprenticeship system and associated questions related to the concepts of ownership of and control over aspects of apprenticeship, are considered critical**.

A summary of the key findings from the thematic analysis is also presented in a concise table format in **Appendix C**, including a comment on what each means, why it matters.

5.7 Conclusion

This chapter presents the findings from the thematic analysis of data gathered in 17 semi-structured, and a summary of the key findings from this analysis.

The findings are presented as a story of supply-side stakeholders' understanding and experiences of recent reforms in apprenticeship in higher education in Ireland. They represent participants' voices in the form of a repository or record of experiences at a particular point in time.

The findings from the analysis of this primary data gathered for this research demonstrate the depth and breath of stakeholders' experiences of recent reforms in apprenticeship in the higher education sector in Ireland. These include stakeholders' experiences related to the *demand for* new apprenticeship in higher education, their experiences of *implementation of* new apprenticeship in higher education, and their associated perspectives with respect to the current and *future success* and sustainability of apprenticeship in higher education and in the national apprenticeship system in Ireland.

The next chapter presents the researcher's consideration of these findings with respect to previous research and publicly available data and information.

Chapter 6 Discussion

6.1 Introduction

The aim of this chapter is to **consider findings from the analysis of the primary data gathered in this study with reference to previous research and publicly available data and information**.

To meet this aim, the chapter commences with a consideration of the key findings related to **demand** for new apprenticeship in higher education, primarily with reference to publicly available data and information on new apprenticeship activity in higher education Ireland. This is followed by consideration of key findings related to **implementation** of new apprenticeship, and then to those related to **success** of apprenticeship, primarily with reference to previous research on apprenticeship and work-based and work-integrated learning in higher education. Although the key findings are necessarily presented as relating primarily to demand for, or implementation or success of apprenticeship (as in the summary of key findings in Chapter 5 and Appendix C), some of the findings relate to and are discussed with respect to more than one of these in this Discussion chapter.

6.2 Demand for new apprenticeship in higher education

The findings show that perceptions related to respective histories, missions, and status of key stakeholders in the higher education sector *vis à vis* statutory apprenticeship are reported to be a key determinant in forming the basis for different levels of HEI engagement and different HEI experiences in consortium-led apprenticeship in higher education. In this section (6.2), this is considered as it relates to apprenticeship activity in Ireland, and some support for the validity of these perceptions is presented.

As noted, publicly available information and academic research on apprenticeship in Ireland is scarce, in particular that relating to recent reforms in apprenticeship. In the context of this relative dearth of information and research, some of the publicly available, high-level data relating to current and in-development apprenticeships leading to higher education awards at end 2023 are presented in Chapter 2 (Section 2.4) and Appendix B. These data provide an indication of reported demand for apprenticeships leading to higher education awards. Further consideration of these data, with reference to relevant findings from the thematic analysis, helps to provide an insight into stakeholders' experiences of recent reforms in apprenticeship in the higher education sector in relation to this demand.

6.2.1 Apprenticeship coordinating providers, awards, categories, and occupations

These high-level data show that demand to date for consortium-led apprenticeship in the higher education sector, as expressed in the number of current apprenticeships leading to higher

education awards officially listed on the national apprenticeship website at end 2023, is primarily from the technological universities.

Of the 30 consortium-led apprenticeships being led by eight HEIs at end 2023, five of these HEIs are TUs, one is a university, and two are 'independent' HEIs (one not-for-profit and one private).

The five TUs are coordinating providers for 18 (60%) of HEI-led apprenticeships, the university is coordinating provider for seven (23%), and the two independent providers are coordinating providers for five (17%) HEI-led apprenticeships.

To date, therefore, eight years after the introduction of apprenticeship reforms including the consortium-led model of apprenticeship, a particular and significant sub-sector of the higher education sector has not engaged in new apprenticeship as providers of current apprenticeships, and at end 2023 just one HEI in this university sub-sector is the responsible provider for almost a quarter of all new apprenticeship programmes and accounts for one fifth of all new apprentice registrations on apprenticeship programmes leading to higher education awards in that year.

Reports on apprenticeship activity in Ireland also demonstrate a difference particularly between the universities and TUs when considered with respect to the demand to date for consortium-led apprenticeship in the higher education sector as expressed in the number of current apprenticeship programmes leading to awards at different levels on the National Framework of Qualifications. In this regard, the data show the TUs adhering to their 'mission and ethos that is aligned and consistent with the current mission and focus of institutes of technology with an emphasis on programmes at levels 6 to 8…..' (HEA, nd (TUs)).

Data on apprenticeship activity show that this profile changes somewhat with respect to apprenticeships that are at various stages of development (not yet operational) and therefore based on more recent proposals for new apprenticeships. Although based on only three TUs with eight apprenticeships in development, the data suggest that in apprenticeship in the higher education sector the general trend with respect to future apprenticeships is for the TUs to deliver programmes leading to awards at level 8 and upwards. In addition, and while also based on data relating to only three universities with five apprenticeships in development, the general trend with respect to future apprenticeships in the higher education sector is for these universities to deliver programmes leading to awards at level 7 (two apprenticeships) and level 8 (two apprenticeships), and level 9 (one apprenticeship). While these numbers are small in absolute terms, they do nonetheless represent 100% of apprenticeships in development and 100% of their proposed HEI coordinating providers in the higher education sector in Ireland at end 2023.

This profile may reflect to some extent the predicted phenomenon of 'academic drift, Irish style' in Irish higher education (White, 2001, pp. 252-254), which was projected to be characterised by the technological sector moving from primarily part-time sub-degree level to more degree level provision, along with ambitions towards university norms and practices, similar in some respects to the experience of the British polytechnics. Findings from this research suggest that the situation is more complex, however, with perceived distinctions and a perceived 'hierarchy' within the higher education sector reported not only between the universities and other institutions, but perceived distinctions also between sub-sectors, including, for example, between the older universities (the 'old NUI colleges' as referred to by one interviewee (Macro4)) and the more recently established universities, formerly the national institutes of higher education, as well as within the TU sector itself. A statement by one interviewee concisely illustrates one aspect of these perceptions, as follows:

'[Some personnel in a named technological university] think it's a university, not a technological university, and have aspirations for it to be an *actual* university.' (Macro5)

Distinctions between 'education' and 'training', between 'academic' and 'vocational', and between 'trade' and 'profession' in the education system in Ireland, and an associated hierarchy relating to these, have been widely articulated over time (Coolahan, 2017; Nyhan, 2009, pp. 465-466; Walsh, 2018). More recently in a Joint Oireachtas Committee meeting in 2021, the Minister for Further and Higher Education referred to negative connotations in relation to what is perceived to be vocationally oriented apprenticeship (Joint Committee on Education, Further and Higher Education, Research, Innovation and Science, 2021a). Research on perceptions of culinary education and chef apprenticeships in Ireland also reports a stigma associated with apprenticeship in Ireland generally (Gray and Farrell, 2021, p. 235). In addition, the legislation that underpins statutory apprenticeship in Ireland until recently specifically excluded the possibility of statutory apprenticeship in 'any activity of a professional occupation' (Ireland. *Industrial Training Act 1967,* Part 1, Section 2 (1)).

Aside from any legislative restrictions that might have applied, the findings from this research do show that apprenticeships in some areas of activity or occupations are reported to be considered to be more suitable for, and more readily accepted by some higher education stakeholders than others. Some of the reported reasons for this include those related to whether the occupation is considered to be a 'trade', or a 'profession' or in a 'professional' area, and to the perceived potential impact of an apprenticeship in a particular occupation on existing provision and

reputations, in individual HEIs, in the higher education sector generally, and in defined parts of that sector.

Some of the particularly notable interviewee statements quoted in this research in this regard suggest that the reported perceptions of distinct histories, missions, and status *vis à vis* statutory apprenticeship are potentially of relevance in this, including, for example, in this instance between the TUs and the universities, in relation to the then imminent introduction of a suite of four new apprenticeships in Civil Engineering led by a TU and designed to lead to awards at levels 6, 7, 8 and 9 on the NFQ:

> 'There's an apprenticeship in Civil Engineering [due to be announced] that has caused a lot of, a lot of kind of angst amongst the universities, because they're saying, 'why are we getting a Civil Engineering apprenticeship? - we have *tons* of civil engineering courses around the country, like *degrees*, and how is this going to impact on the intake into our degrees?'.....' (Macro5)

This angst was perceived to be a particular concern not only in the universities, however, but also in the TUs and in relation to the distinction between the two types of university:

> '.....That caused a huge amount of kerfuffle, around the HE system...... A TU brought it [the suite of programmes] forward and there was *real* concern around the other TUs and.....in the universities.....this was now a degree in Civil Engineering and this was now going into - these are my words - the '*holy of holies*' in terms of the long established tradition, particularly of the old NUI colleges.....My sense is that the Civil Engineering one caused a few ripples around the place, and people were kind of saying 'my God, Civil Engineering coming out of a TU, who do they think they are?' (Macro4)

The question of occupations and areas of educational provision that apprenticeship is deemed to be suitable for, or not, and how this relates to the 'professional' nature of occupations, or 'the professions', was specifically referred to also in another notable interviewee statement that included reference to HEIs' marketing of apprenticeships to industry:

> 'I tend to use, and *always* tended to use the phrase '*professional* apprenticeships'...... It shouldn't have to be said, but unfortunately when you say the word 'apprenticeship' the next thing that comes to mind in most people's minds is electrician, plumber, you know, carpenter, welder..... If you were listening to a radio chat show and someone mentioned apprenticeship, the audience would *instantly* think of a trade..... I think there's a bit of snobbery around that, building sites or the ESB [electricity supplier], but it's not for an *international global professional company!*' (Meso3)

While there is no full record available of all proposals for new apprenticeships submitted at a national level but subsequently not approved for further development since 2015, or of those that were approved for further development but ultimately did not progress to the point of being

officially designated as statutory apprenticeships, the list of current and in-development apprenticeships at end 2023 (Generation apprenticeship, 2024e) does indicate that the demand for statutory apprenticeship in Ireland to date, as measured by the number of programmes in a listed industry or occupation, is largely emanating from a relatively small but growing number of industries and occupations, and not from others. This listing shows that at end 2023, almost half of the current 30 apprenticeships being led by eight HEIs are categorised as being either in 'Engineering' or 'Logistics', and most of these lead to awards at levels 6, 7 or 8 on the National Framework of Qualifications. Most of the 13 in-development apprenticeships with a HEI as proposed coordinating provider are categorised under 'Engineering', 'Finance', or in areas 'to be decided', and most are expected to lead to awards at levels 8 or 9 on the National Framework of Qualifications.

It is not clear what the definition of, or the basis for, the apprenticeship categorisations in the official list of current and in-development apprenticeships is, however, as these are not aligned with recognised classifications systems such as ESCO (the European Skills, Competences, Qualifications and Occupations classification system used by SOLAS in its National Skills Bulletins), the SOC (Standard Occupational Classification system for classifying roles into occupational categories which is used by the Department of Enterprise, Trade and Employment, for example, in compiling its Critical Skills Occupations List and determining which employments are either in high demand or ineligible for consideration for an employment permit), or the International Standard Classification of Education (ISCED fields of learning used by SOLAS and the National Skills Council in the recent report on monitoring Ireland's skill supply (SOLAS, 2024)).

This is of particular relevance, and has potential implications, from a national skills policy perspective and with respect to determining the basis for the demand for apprenticeships, particularly in the context of a reported need for Ireland to 'develop a skills system that helps to secure a balance between skills demand and supply' and to 'strengthen the collection, exchange and use of skills information' for this purpose (OECD, 2023, p. 13).

6.2.2 Apprentice participation in current apprenticeships

Apart from the number of current and in-development apprenticeship programmes leading to higher education awards, however, the demand to date for consortium-led apprenticeship in the higher education sector can be gauged also to some extent with reference to the number of participants - apprentices and employers - participating in these apprenticeship programmes annually (Cavaglia *et al.*, 2022). It is important to note in this context that HEIs' - or any off-the-job providers' - level of influence on the participation of apprentices in individual apprenticeships may be limited, given that the employer is the primary recruiter of apprentices (Powell and Walsh, 2018).

The findings do show however that HEIs have experienced greater engagement from enterprise representatives and employers in some apprenticeships more than in others, for a variety of reported reasons. These include, for example, a stated preference in a particular sector for the 'traditional approach to recruiting entry level talent' from among third level graduates, perceived concerns among employers regarding the commitment required and 'external involvement' - including from the HEI - in the workplace learning process, as well as a perceived inability of many smaller enterprises to make the required commitment to employing an apprentice, albeit acknowledging that recently introduced financial incentives may help smaller enterprises in particular (Meso3).

While there may be specific industry requirements or other capacity constraints in terms of numbers of apprentices participating in some apprenticeships, apprentice registration data for consortium-led apprenticeships between 2019 and 2023 (NAO, 2024) do also show that relatively high apprentice registration figures have been consistently reported for some apprenticeships (for example, Insurance Practitioner, level 8 on the NFQ). Relatively modest but steady or incrementally increasing apprentice registration figures have been reported for some other apprenticeships (for example, Manufacturing Technology level 6 and Manufacturing Engineering level 7), and relatively low figures have been consistently reported for some other apprenticeships. In addition, some apprenticeships are reported to have had very low or no apprentice registrations for several years. The 2-year, level 8 CGI Technical Artist apprenticeship, for example, has had no apprentice registrations since 2019 (seven new registrations that year) and no apprentice registrations are anticipated for this programme in 2024. In addition, the 2-year level 8 Sous Chef apprenticeship had five, three, 11, one and zero apprentice registrations annually between 2019 and 2023, and the 3-year level 8 Cybersecurity Practitioner apprenticeship, launched in 2021, had two and zero apprentice registrations in 2022 and 2023 respectively as well as a forecast at end 2023 of three apprentice registrations for 2024. The minutes of the April 2024 meeting of the NAA (Generation apprenticeship, 2024f) acknowledge that this issue of lower than anticipated apprentice registrations has been considered but is not deemed to be a cause for concern, that a number of apprenticeships that have not attracted the expected level of demand from employers, such as the Cybersecurity Practitioner apprenticeship, have been paused to enable a review of the content and format, that there might be additional scope for the apprenticeship proposals process (Step 1 on the 10-step apprenticeship development process) to 'test' the viability and sustainability of new apprenticeships, and that the and that apprenticeships with low registrations will be reviewed periodically by the Alliance.

Some of the questions that nonetheless arise in this context include whether and in what sense an apprenticeship that has had no new apprentice registrations for several years - and does not anticipate having any in the coming year - can be considered to be a 'current' apprenticeship, and whether a distinction needs to be made between those apprenticeships that have been statutorily designated as apprenticeships and those that are operational, active, and 'open' in the sense of being open at a particular point in time to employers and potential apprentices to apply to participate. In addition, the question arises as to whether and to what extent apprenticeships with very low numbers of participants for several years can be considered to be viable or sustainable, whether and to what extent they are being adequately resourced and promoted by stakeholders (Lester, 2020, p. 710), if or how their continuation relates to skills needs and to objectives in the Action Plan for Apprenticeship 2021-2025, whether or not other modes of intervention may be more appropriate to meet the stated needs, and how much flexibility the enterprise-led, consortium-led model of apprenticeship allows in these respects. It is important to note also that the number of employers and apprentices involved in itself is not necessarily an adequate measure of success, given the potential for 'deadweight', where employers may engage in apprenticeship funded activity that they would otherwise have undertaken themselves, particularly for people already in their employment (for example, Graham, 2019, p. 76).

The findings from this research do not provide the basis for reaching a conclusive determination of the factors that individually contribute relatively more or less to the demand for and success or otherwise of individual apprenticeships, including with respect to the number of employers and apprentices involved. Notwithstanding this, however, the findings do indicate that some consortium-led apprenticeship programmes, including the Insurance Practitioner apprenticeship, for example, are aligned with professional, regulatory, or statutory bodies' requirements and lead to a professional licence to practise as well as an 'academic' award, while most do not, and some apprenticeships, including also the Insurance Practitioner apprenticeship, for example, target people already in employment as well as other potential participants such as school leavers, and others do not.

In addition, while most of the 30 HEI-led apprenticeships are in occupations in which there was no previously existing equivalent provision or award, some are in areas in which the relevant HEI was already providing an undergraduate or postgraduate programme, and a new apprenticeship was created to provide a different route to the same award. This is the situation, for example, in some of those apprenticeships categorised under the most populated categories of current apprenticeships with respect to apprentice registrations - Engineering and Logistics - and in several of these most of the participants are already in employment and the off-the-job learning element of the

apprenticeship is delivered almost entirely online. The impact of these arrangements on the 'impact, viability, and effectiveness' of HEI apprenticeship provision (Quew-Jones, 2023) is not clear, and the extent to which findings from the research on apprenticeships in other jurisdictions may or may not apply to consortium-led apprenticeships in Ireland is also not clear. This includes, for example, whether consortium-led apprenticeships that are designed 'from the ground up' as new apprenticeships, as opposed to those that are based on and possibly run concurrently or in parallel with existing equivalent provision and existing awards, are likely to be more or less in accordance with the intended operation of the national apprenticeship system and whether they are likely to be more or less impactful, sustainable, and provide more or less value for money (Lester, 2020, p. 709). It has been argued that apprenticeships that are based on existing provision may be considered by HEIs as 'relatively low risk entry to the apprenticeship market' (Graham, 2019, p. 111) and that the perception that they require relatively less effort to design and deliver may also make them more attractive to HEIs (p. 114).

6.2.3 Conclusion: demand for new apprenticeship in higher education

The National Strategy for Higher Education to 2030 argued for 'retaining institutional diversity' in higher education, that is, for the IoTs and the universities to continue to each play 'different and complementary roles to meet the diverse needs of students, society and the economy' (DES, 2011, p. 98). The strategy also recommended that the IoT sector commence a process of regional consolidation and, where appropriate, that the relevant amalgamated institutes be re-designated as TUs (p. 23), but not as universities 'within the meaning of the Universities Act, 1997' as such a move would, it was stated, reduce the diversity in the system and negatively impact on its responsiveness in meeting innovation needs and development opportunities (p. 15).

Interviewees' perceptions of distinct histories, missions, and status *vis à vis* statutory apprenticeship in higher education as a key determinant in forming the basis for different levels of HEI engagement and different HEI experiences in consortium-led apprenticeship in higher education therefore reflect a reality in the history of education and apprenticeship in Ireland.

The so-called 'binary system', which had its roots in developments associated with the creation of the 1930 Vocational Training Act (Clarke, 2016, p. 303) followed by a series of Government policies that aimed to diversify the third level education sector, led to distinct differences in mission and governance between the universities and IoTs, now also TUs (Walsh, 2018, p. 281; Ireland. *Technological Universities Act 2018*). These, as well as exclusions specified in apprenticeship legislation, mean that Government policy and associated legislation over time has underpinned some real and some perceived distinctions between the technological and university

sectors in Ireland, including with respect to apprenticeship. The TUs' involvement in new apprenticeship is understandable in this context therefore, and in the context of their previous and ongoing involvement in craft apprenticeship as well as their remit to 'focus on science and technology programmes that are vocationally and professionally oriented' (HEA, nd (TUs)).

As noted, findings from this research suggest that the situation is also more complex and changing, however, with perceived distinctions and a perceived 'hierarchy' within the higher education sector reported not only between the universities and other institutions, particularly the more recently created TUs, but perceived distinctions also between sub-sectors, as well as within the TU sector itself, with evidence of some of these distinctions in some of the current and in-development apprenticeship activity in Ireland.

The analysis of apprenticeship activity in this research confirms, for example, trends with respect to the TUs' move to offer apprenticeship programmes that lead to higher levels on the NFQ, and in areas traditionally perceived to be the preserve of the universities, such as Civil Engineering, but also potentially greater engagement by universities in apprenticeship in the future.

Of note also in relation to the changing landscape of apprenticeship in the higher education sector is the proportion of consortium-led apprenticeships - one-fifth of the HEI-led apprenticeships at end 2023 - being led by independent HEIs, which includes one private higher education institution. Apprenticeship is entirely new to the independent sector and to the two HEIs involved. The impact of the implementation of these apprenticeships, in terms of challenges and changes related to alignment with some of the HEIs' existing systems and supports, is reported in this research to have been significant, reportedly due in part to the organisations' newness to statutory apprenticeship and in part also to their commitment to organisation-wide adoption of the apprenticeship agenda.

In addition to the changing landscape of apprenticeship in the higher education sector in terms of types of HEIs, recent changes in Government policy relating to the 'professionalisation' of apprenticeship, as reflected in the primary underpinning apprenticeship legislation, are important and potentially have significant implications for the apprenticeship and education systems in Ireland. In principle, statutory apprenticeship is now potentially an option for development in any 'trade or occupation' including any 'regulated profession' (Ireland. *Higher Education Authority Act 2022*), and it is potentially open to any HEI, including public and private HEIs, to be involved in the provision of these apprenticeships.

Government policy relating to the development of a 'unified tertiary system' (DFHERIS, 2023) is also of note in this regard. This policy underpins the recent establishment of undergraduate 'tertiary degrees' jointly developed and delivered by FET providers (ETBs) and HEIs (to date, primarily

TUs and IoTs) in areas such as nursing. In May 2024 DFHERIS also announced the launch of two 'groundbreaking pathways in social work education' (DFHERIS, 2024), both of which will operate outside the traditional CAO process. One pathway is a tertiary undergraduate degree in social work involving a university, and one is a HEI-led apprenticeship also involving the same university, leading to a master's degree in social work and launched on a pilot basis with 37 places, 25 of which will be offered by the national Child and Family Agency.

Together these developments, as well as Government policy relating to the consortium-led model of apprenticeship and the planned single integrated apprenticeship system, indicate that the aim of recent Government policy is to blur traditional distinctions, for learners, both within higher education and between FET and higher education, to provide options outside the traditional CAO process for access to programmes that lead to higher education awards, and to increase collaboration and cooperation between FET and higher education providers, and between higher education providers, in the tertiary education system, as a means of facilitating these changes.

Parts of the higher education sector, and some HEIs, have been quicker than others to engage in these new initiatives, including new apprenticeship, in particular occupations, for reasons including those related to distinct histories, missions, and status *vis à vis* statutory apprenticeship, and with varying degrees of success when considered with reference to the one key metric on which data are published annually, that is new apprentice registrations on individual apprenticeships.

As noted, an increased drive for internationalisation and recognition in global university ranking systems in higher education also means that Irish HEIs, particularly the universities, increasingly need to attract international students and other sources of funding in their 'struggle for survival in a pitiless global marketplace' (Walsh, 2018, p. 392). Reported inadequacies in public funding for HEIs are ongoing and the subject of much debate (IUA, 2022, 2023; THEA, 2022, 2023). The Government's aims to blur traditional distinctions within higher education and between FET and higher education, to provide access options for learners that are outside the traditional CAO process including increased provision of statutory apprenticeship in the higher education sector, are now situated in this context. The aim to increase the demand for and provision of apprenticeship in higher education and apprenticeships leading to higher education awards may therefore face additional challenges in terms of its achievement in this context.

6.3 Implementation of new apprenticeship

As noted, the findings show a high level of agreement overall in terms of interviewees' stated understanding of the various reasons why a new policy and associated model of apprenticeship was introduced in Ireland and the issues the associated reforms in higher education

are intended to address at a national level. These were frequently framed in the context of perceived deficiencies or shortcomings in the existing craft model of apprenticeship and in aspects of the existing 'conventional' model of higher education.

6.3.1 The HEI in individual apprenticeships

6.3.1.1 Different understandings, interpretations, and operationalisations

The findings also show that there are different understandings and interpretations among HEIs, among different personnel at different levels within individual HEIs, and reportedly also among some other stakeholders including enterprise representatives, of how the consortium-led model of apprenticeship is intended to work, however. The findings include that HEIs' involvement in some consortium-led apprenticeships has been reportedly more considered within the HEI or based on a greater understanding of the requirements associated with the consortium-led model of apprenticeship, than in others. Consequently, different approaches to operationalisation of the model have evolved with respect to HEIs' roles and responsibilities in national apprenticeship.

In some consortium-led apprenticeships, for example, the HEI's actual role in the apprenticeship was reported to be different to what the HEI expected or initially agreed it to be, leading to the HEI in some cases taking responsibility for recruitment of employers to the programme and needing to allocate additional resources to this unanticipated role. This situation was reported among HEIs that are entirely new to apprenticeship as well as those that had previous experience of craft apprenticeship and is illustrated in the following:

> 'In hindsight, I think, it's quite an extensive process to engage in to create an apprenticeship, a new form of apprenticeship. A lot of Steering Committee meetings, a lot of trying to motivate employers to take on apprentices…and that's going way beyond the remit of a training provider in our view….. That ought to be a given from that [industry] side…...' (Micro1)

These findings reflect similar findings in the literature on public policy implementation (Ball, 2012; Bell and Stevenson, 2015; Hupe, 2014; Hupe and Hill, 2016) including that policy may be viewed as 'the realisation of contested meanings' (Bell and Stevenson, 2015, p. 147) and that there are different contexts, levels, and ways that policy can be 'mediated and contested' both in terms of policy development and policy enactment (p. 148). Furthermore, as presented by Howlett and Cashore (2014, pp. 23-24) in an ideal world all relevant actors would have adequate authority, knowledge, and resources required throughout the policy process to identify, choose, and implement appropriate actions. Given that HEIs are key actors in the implementation of public policy on apprenticeship, the extent to which those involved have the necessary authority, understanding,

and other resources is therefore an important consideration. Research specifically related to experiences following the introduction of a new model of degree apprenticeships in the UK also reports 'a complex implementation landscape' for stakeholders, including universities, with respect to how national apprenticeship policy aims are framed in national policy documents and how these are interpreted and expressed by universities and employers (Smith *et al.*, 2021, p. 505). In addition, as reported by QQI in its review of quality assurance and governance arrangements and processes specifically in consortium-led apprenticeships in Ireland (QQI, 2022a), there is wide variety across a range of characteristics in these apprenticeships, with 'almost as many variants…..as there are programmes' (p. 14). This variety is credited by QQI to the model's inherent ability to adapt to and facilitate a range of occupations, industries, and contexts, and QQI posits an associated need for customised supports from central agencies to facilitate the growth and development of apprenticeships. The minutes of the August 2023 meeting of the NAA (Generation apprenticeship, 2024f) acknowledge that additional supports and resources are needed for stakeholders involved in consortium-led apprenticeships to facilitate increased participation by, or demand from, employers and apprentices in the consortium-led model of apprenticeship. The minutes of the January 2024 meeting also note that QQI's statutory quality assurance guidelines for providers of statutory apprenticeship programmes will be reviewed and updated as the planned single integrated national apprenticeship system materialises, and in April 2024 QQI issued a request for tender for research to inform the development of statutory guidelines on work-integrated learning (QQI, 2024).

6.3.1.2 Impact of different understandings, interpretations, and operationalisations

The literature indicates also however that different understandings, interpretations, and operationalisations may affect 'impact, viability, and effectiveness' of HEI apprenticeship provision at different levels in a HEI (Quew-Jones, 2023).

At *HEI strategy level*, for example, as well as the need for HEIs to have a mission that supports a work-based learning pedagogy (Bravenboer, 2016) and a central internal infrastructure to support extra administrative processes, or a commitment to invest in one (Rowe *et al.*, 2016), additional investment of resources is needed over and above standard undergraduate and postgraduate programmes, particularly for HEIs that are new to apprenticeship. These include additional investment in existing services to support apprenticeships such as training for staff, or commitment to invest in these, at *academic department level* in order to work with employers and workplace mentors, and at *teaching or pedagogical level* in order to work with employers and apprentices (Quew-Jones, 2023, pp. 1264-1268).

Consideration of apprenticeship from the perspective of these three governance levels within a HEI - strategic, academic department, and teaching team or pedagogical - indicates the need for alignment at all levels, and is broadly in accordance with the meso (HEI executive and senior management) and micro (HEI professional and academic staff) levels that formed the basis for interviews with HEI personnel in this research, the meso level relating to the 'strategic' level, and the micro level incorporating both the 'departmental' and 'teaching' or 'academic' levels.

Different approaches to implementation of apprenticeship in HEIs, from the perspective of its being 'top-down' or 'bottom-up' (Sabatier, 1986) is also relevant to the findings. In this regard, Graham's (2019) report of top-down implementation of apprenticeship from the meso level (executive and senior management (p. 103)) may be equated to the commitment to the organisation-wide adoption of the apprenticeship agenda reported by some interviewees in this research, and a bottom-up implementation initiated and led by units or academic departments at the micro level (p. 104) which may be equated to an approach reported by some others, with potentially different levels of impact, viability, and effectiveness of apprenticeship.

The findings show that there are different understandings, interpretations, and operationalisations among different personnel within individual HEIs of how the consortium-led model of apprenticeship is intended to work, both at meso and micro levels in higher education institutions. This means that any interventions to address those differences in HEIs, where appropriate, need to focus on both the meso and the micro levels, and on alignment between the two.

Much of the literature confirms the complexity of apprenticeship and complexity in HEIs' involvement in apprenticeship, and the potential implications of a HEI's decision to engage in apprenticeship if, for example, it is misaligned with the HEI's mission and ambitions or is based on a misunderstanding of the requirements associated with the relevant model of apprenticeship. These implications relate to factors such as disparities in stakeholder motivations (Sevens and Nightingale, 2019), stakeholder commitment (Irons, 2017), stakeholder roles and responsibilities (Lambert, 2016), strong partnerships (Crawford-Lee and Moorwood, 2019; Lester, 2020), and application of work-integrated learning pedagogy across sectors and professions (Lillis and Bravenboer, 2020), as referenced in an integrative literature review on degree apprenticeships in UK HEIs (Quew-Jones, 2023).

The findings from this research indicate that reportedly different understandings and experiences, and some of the reported reasons for some HEIs' involvement in some consortium-led apprenticeships, relate to such factors. With respect to disparities in stakeholder motivations, for example, and in this instance with reference to the basis for the HEIs' decision to engage in

apprenticeship in a coordinating provider role, potential disparities in motivations are evident in two different interviewees' assertions on this issue:

> '….. And that's what we [named HEI] are setting up to do, to be a player in statutory apprenticeships, because we believe in them, we believe they're part of the future for the organisation, and if we miss this boat, we'll be missing out on a significant area that we can easily get involved in - we'll go through the pain now, and once we've taken the pain……' (Micro4)

> 'We said, 'look, we can put them [proposals for new apprenticeships] in….. one is bound to stick, all going well.'' (Meso5)

As noted above, different approaches to implementation of apprenticeship in HEIs, from the perspective of its being 'top-down' or 'bottom-up' are of relevance, in that the statements potentially reflect different motivations and approaches to implementation of apprenticeship in HEIs with potentially different levels of impact, viability, and effectiveness.

The findings show that there is some uncertainty around the meaning of the core concepts according to which the new model of apprenticeship is variously described in official documentation including 'enterprise-led', 'consortium-led', or 'employer-led'. There is also some uncertainty about the feasibility of these concepts being implemented, in practice, as intended, and about the institutional arrangements and other factors that might best support their more widespread application. Findings show different degrees of understanding of the nature of engagement required from HEIs in consortium-led apprenticeship including, for example, a view that new apprenticeship programmes must be seen by all not as *collaborative* provision but as being '*co-designed* between enterprise and the academy' (Meso1), the implication being that they are not currently seen by all in this way. Although the exact role that employers - and by implication, therefore, also HEIs - play in co-design or co-creation of a programme may not be fully defined (Konstantinou and Miller, 2020, p. 770), the need for stakeholders to work closely to co-create curricula, and the need for strong working relationships between employers and the education institution involved, is confirmed in the research (Dalrymple *et al*., 2012; Bravenboer, 2016; Rowe *et al*., 2016; Irons, 2017; Lester, 2020; Taylor-Smith *et al*., 2023), as is the need for specific resources to support co-design and collaboration in apprenticeships (Rowe and Moss, 2017; Rowe, 2018).

6.3.2 National level

At a national level - the macro level in this research - and with respect also to understanding of the consortium-led model of apprenticeship in relation to its aims and implementation, Chapter 2 included an outline of the recent evolution of apprenticeship in Ireland (c. 2011-2021) and noted that at the time when the reforms in apprenticeship were first introduced, national-level

stakeholders and others involved were initially largely operating within a realm of relative unknowing, dealing with questions and challenges as they arose, learning as the work progressed, and effectively, to some extent at least, operating in a scenario of *ad hocery* (Ball, 1993, p. 16) to varying degrees.

Several years after the introduction of these reforms, in its submission to the 2020 consultation process to inform the development of the Action Plan for Apprenticeship 2021-2025, the Irish Universities Association identified the need for 'a clearer development process' and a range of information and other supports to address 'considerable differences in how roles are interpreted' and robust oversight mechanisms to ensure appropriate execution of these roles (DFHERIS, 2020a; 2020c). The findings from this research concur with this statement, as illustrated by the following:

> 'So you know when you make a change…..you need to get down and dirty and explain to people what it actually means…… Put the framework in place to demonstrate how that'll happen….. We felt it [the reform in apprenticeship] didn't perhaps address as clearly as it could the role of the employer as a stakeholder and their responsibilities in terms of the learning process for the apprentice, and going into a root and branch investigation of how that is operating, and how well it's operating, how well it's being managed, and the oversight of that….. Roles need to be clear, authority needs to be clear and responsibilities need to be clear.' (Meso6)

Findings from this research corroborate this perceived need for adequate and appropriate information, structures, and systems at a national level, as well as collection of a wider range of data to assess implementation and 'efficiency and effectiveness of apprenticeship', a need that has been acknowledged in the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2021a, p. 45). The findings concur also with data-related needs identified in the literature on degree apprenticeships in the UK (Cavaglia *et al*., 2022; Nawaz *et al.*, 2022; Quew-Jones, 2023; Taylor-Smyth *et al*., 2023). At present, the number of apprenticeships, and the number of new apprentices registered annually by programme (and the proportion of male and female registrants in each programme population) are metrics publicly reported on in relation to apprenticeship activity in Ireland. As in other jurisdictions, however, 'it is not only apprenticeship starts that matter, but whether apprenticeships are achieved and what they lead on to' (Cavaglia *et al*., 2022, p. 37), with different measures of success for different stakeholders, including HEIs and their staff, in different contexts (Taylor-Smyth *et al*., 2023, pp. 780-781). This consideration is important not only to substantiate the generally accepted view that work-based learning has a positive impact on employability (Perusso and Wagennar, 2021; Vanderhoven, 2023), but also to determine the extent to which apprenticeships are supporting employers and apprentices, in different contexts, industries, sectors, and occupations (Lester *et al*.,

2016; Lester, 2020) in Ireland to meet current and emerging skills needs and to build a highly skilled workforce (DFHERIS, 2021a, p. 1).

6.3.3 Conclusion: implementation of new apprenticeship

The Irish Government has articulated its policy choice to promote and fund renewal of apprenticeship by extending apprenticeships to new industries and occupations (Fortwengel *et al*., 2019, p. 72) and involving additional stakeholders in these. The findings show that significant progress has been reported with respect to reforms in apprenticeship, including the commencement of 30 new HEI-led apprenticeships since 2016. The findings also show that there are different understandings and interpretations of how the consortium-led model of apprenticeship is intended to work, both within and between HEIs and reportedly also with respect to other stakeholders involved in individual apprenticeships. These differences are not clearly linked to any particular type of HEI - university, TU, independent HEI - but they are reflected in different ways of operationalisation by HEIs and other stakeholders involved in individual apprenticeships, which has implications in terms of activity and impact in the higher education and apprenticeship systems in Ireland.

The apprenticeship system in Ireland has gone through significant change since the 1990s, and the key stakeholders involved, and how their roles and responsibilities are represented, has also changed over time. One of the main differences in recent representations (Figure B1.4, Appendix B) it that, firstly, the NAO - set up in 2022 and jointly managed by SOLAS and the HEA - is identified, along with SOLAS itself, as now having joint responsibility for operation of aspects of the apprenticeship system, although the exact nature of these and how they relate to SOLAS's existing statutory and regulatory responsibilities have not been specified.

Secondly, QQI is no longer named as a distinct stakeholder, demonstrating that quality assurance roles and responsibilities in the national apprenticeship system 'are organic and continue to evolve', particularly in light of the planned single apprenticeship system, as also referenced in the January 2024 meeting of the NAA (Generation apprenticeship, 2024f) and in the most recent (proposed) iteration of 'governance bodies' in the national apprenticeship system (Figure B1.5, Appendix B).

Thirdly, a distinction has been proposed between employer representatives in the consortium and employers of apprentices (Figure B1.5), highlighting the critical role of employer representatives in the operation of the consortium as well as the critical but separate role of individual employers in the employment of apprentices during and after the period of apprenticeship. A formal distinction has also been made between the coordinating and collaborating

provider roles, demonstrating an acknowledgement of the importance of expressly naming and taking account of these two provider roles separately. These clarifications are welcome and are likely to some extent to help address the existence of different understandings and interpretations of how the consortium-led model of apprenticeship is intended to work.

6.4 Success of apprenticeship

The findings show that perceptions related to concepts of 'ownership' and 'control' at national and HEI level are perceived to be a key factor in forming the basis for different levels of HEI engagement and different HEI experiences in consortium-led apprenticeship in higher education.

6.4.1 The HEI coordinating provider - national and HEI level

With respect to the coordinating provider role in the HEI, the findings indicate that some of the stated reasons as to why some HEIs have not engaged or have not engaged to a greater extent in new apprenticeship relate to perceived concerns with respect to governance of apprenticeship at a national level and to what were frequently referred to as concerns related to concepts of 'ownership' and 'control' at HEI level. One interviewee's perspective on the matter refers to these concepts at the two (national and HEI) levels:

> 'First are the reputation and the regulations involved in getting involved…..and to a certain extent the risk…..because you'd be getting into bed with a new, a different [statutory and regulatory authority for apprenticeship] agency that has a very different way of doing business…..and different legislation, different funding schemes….. To a certain extent, it could be seen as removing very important aspects of university autonomy in terms of the ability to do their own quality assurance, make your own awards, decide your own programme content….. And if you want to run one [an existing consortium-led apprenticeship] you have to join, as a subsidiary collaborating provider, and be told what to do, and go through their QA procedures.' (Meso2)

This latter reference to a 'subsidiary role' concurs with related concerns reported about apprenticeships being 'national' programmes, about associated uncertainty or 'unease' regarding the exact meaning of what a national programme is and of what it involves with respect to involvement of other providers. These concerns are well illustrated in another interviewee's stated understanding on the issue:

> 'There's still a bit of an unease around the fact that they [universities] possibly don't have ownership of that apprenticeship because it was developed initially by a different university, even though it still has to go through validation in the university that takes it on as a partner ….. And I think there would be a bit of reluctance for a university to take on an apprenticeship that was developed by a technological university. I suppose that's just about a little bit of snobbery, but also probably a little bit of control.' (Macro5)

In QQI's review of the quality assurance and governance arrangements and processes in consortium-led apprenticeships a 'notable degree of ambiguity as to what constitutes a national consortium-led apprenticeship programme' was also reported (QQI, 2022a) as well as associated issues specifically related to concepts of ownership and control (p. 28), 'particularly [for] those involved in consortium-led apprenticeship programmes above NFQ Level 6' - that is, higher education institutions.

At HEI level also, the findings from this research indicate that HEIs experienced some challenges internally, to a greater or lesser degree, in terms of introducing and/or implementing new apprenticeship into the HEI, and that many of these relate to alignment, or not, with existing systems and supports in the HEI (Fabian *et al*., 2021; Quew-Jones, 2023; Parkinson and Dziallas, 2024). Interviewees reported that some of the challenges related to the extent to which they can have control over that for which they are ultimately responsible:

> 'Designing a whole programme that probably four fifths of which you don't have control over in delivery is a different process to designing a programme and that you can validly stand over learning outcomes..… So it's *quite* a different model.' (Meso3)

Other associated challenges that HEIs encountered, and changes in HEIs that were needed, reportedly relate also to this relationship between the workplace elements and HEI elements of the apprenticeship, including the relationship between the 'practical' and 'theoretical', the 'academic' and the 'workplace' in designing, describing, and delivering apprenticeship programmes, and in integrating learning between the off-the-job and the on-the-job elements of an apprenticeship programme and integrating the assessment of that learning (Lester *et al*., 2016, p. 7). As reported by one interviewee, assessing work-based learning is a challenge in comparison with assessing other learning because 'you are not in the workplace with them and you won't be given that opportunity, so developing work-based assessments that are meaningful and credible, that's a challenge' (Micro3).

These findings concur with challenges identified in the literature, including, for example, those related to integration of assessment of learning gained in the workplace and of learning gained in the educational or training institution (for example, Lasen *et al*., 2018; Ajjawi *et al*., 2020), and associated challenges related to the time pressures associated with balancing the requirements of assessment of learning with a busy workplace (Fuller *et al*., 2015, p. 63), the possible need for employers, their supervisors and/or managers to undertake training themselves in the provision of on-the-job training (OECD, 2018, p. 13), and the need for rigorous and consistent use of assessment

but tensions that arise between education institutions' primary goal of teaching and employers' primary goal of producing (p. 21).

The challenges reported in this research also reflect those reported in the literature with respect to the distinction between 'parallel' or 'dual' professional entry routes and degree programmes and those that are more 'integrated' and involve greater alignment and coordination between the theoretical and practical (Lester *et al*., 2016; Lester, 2020; Lillis and Bravenboer, 2020). A clear shift has been reported in work-integrated higher education, particularly degree apprenticeships in the UK, from 'parallel' or 'dual' models of learning to more integrated models, albeit in the context of the need for further research on potential differences in this respect in different sectors, occupations, professions, and types and sizes of work organisations (Lester *et al*., 2016, p. 30).

It is notable in this regard that apprenticeship in Ireland is officially defined with reference to its being 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 and leads to an award on the National Framework of Qualifications' (Generation apprenticeship, 2024c).

It is interesting to note however that the definition of apprenticeship provided in the Action Plan for Apprenticeship 2021-2025 does not refer to this 'dual system' or to on- or off-the job training, rather it refers to it as a 'programme of structured education and training which formally combines learning in the work place with learning in an education or training centre' and it does also refer to other defining features of apprenticeship in Ireland including the statutory, occupation-specific and apprentice employment elements of apprenticeship, as well as successful programme completion leading to awards at levels 5 to 10 on the NFQ (DFHERIS, 2021a, p. 9).

What is notable however is that while it may be implied in these definitions that there should be some alignment (Lauterbach, 2009) - if not 'integration' (Lillis and Bravenboer, 2020) - between the two locations of learning, this is not specified. It is not clear whether this is intentional or what the implications may be, but it is possible that different understandings of the consortium-led model of apprenticeship in HEIs include different understandings, interpretations, and operationalisations of their apprenticeship programmes with respect to this conceptualisation of learning in and between the two main sites of learning in apprenticeship in Ireland, the workplace and an education or training centre.

Of potential interest here also with respect to the reported challenges encountered or changes needed to facilitate implementation and delivery of consortium-led apprenticeship in HEIs is that because the consortium-led model of apprenticeship in Ireland aims to place the workplace and

employers ever more at the centre of the apprenticeship process in conjunction with off-the-job providers, decisions must be made in individual apprenticeships relating to respective roles and responsibilities of key stakeholders, and their respective levels of input, in this process. According to Brennan and Little (1996), these decisions include choosing a curriculum framework from among those that differ according to the level of control and power exercised by the main parties - the education institution, the employer, and the individual learner. In this conceptualisation, the HEI that confers an academic award always retains overall control of the framework (along with a regulatory or professional body when a programme leads to a professional licence to practise as well as an academic award) and the employer and learner control the focus and content of the curriculum to varying degrees (p. 52).

This 'transfer of power over the curriculum' nonetheless reduces HEIs' influence in the apprenticeship, as reported by Powell and Walsh (2018, p. 91), and it 'allocates a major stakeholder role to employers, who have previously mostly consumed Higher Education outputs but have had little involvement in inputs, and often none in the design of degree programmes' (p. 98). In this context, the possibility arises that employers may not want or be able to deliver the level of influence and engagement envisaged (p. 91). This possibility potentially explains to some extent also HEIs' decisions with respect to the extent of their own input to the design, development, and delivery process in individual consortium-led apprenticeships in Ireland, and the associated changes needed in the HEI internally to support this, as reported by one interviewee dealing with enterprise representatives on two different apprenticeship consortia:

> 'I have two complete opposites! In the [named apprenticeship] Consortium Steering Group, I have great difficulty getting them to 'get' the engagement.…. They're very much saying 'you're the Coordinating Provider, you get on and you do it'….. In the other [named] apprenticeship, they're a very active Consortium Steering Group, they're very articulate and they want to be involved in everything.' (Micro4)

It is possible also that this factor - the level of influence and engagement that enterprise representatives, employers, and HEIs are willing or able to take on in the design, development, and delivery of apprenticeships - may feature more strongly in some occupations, sectors, industries - and education providers - than others, as alluded to previously in relation to demand for apprenticeship and with reference to degree apprenticeships in the UK.

The findings from this research suggest therefore that HEIs' previously noted concerns about the consortium-led model of apprenticeship, including those with respect to governance of apprenticeship at a national level and ownership and control at HEI level, may usefully be understood when framed with reference to this concept of 'transfer of power' over the curriculum

and other aspects of apprenticeship (Powell and Walsh, 2018) and to potential choices (Parkinson and Dziallas, 2024) that may differ according to the level of control exercised by the main parties. These parties include not only the education institution, the employer, and the individual learner (Brennan and Little, 1996, 2006; Taylor-Smith *et al.*, 2023), but also the State apprenticeship apparatus, underpinned by apprenticeship and quality assurance legislation, and potentially also professional, statutory, and regulatory bodies, in the 'triple helix' of the education provider, enterprise, and Government referred to by one interviewee 'working in partnership….. to deliver a more optimal tertiary education system' (Macro1).

6.4.2 Conclusion: success of apprenticeship

As noted in Chapter 2, the development of a formal national education system, including a national apprenticeship system, in Ireland has been characterised by efforts to gain or maintain control over different aspects of those systems by different parties, including the Church, State, and employers, over time. Terms such as conflict, control, cost, quality, and compromise feature in much of the relevant literature (Ryan, 2000; Field and o dubhchair, 2001; White, 2001; O'Connor, 2006; Coolahan, 2017; Walsh, 2018).

The national statutory apprenticeship system that evolved within this context was characterised by increasing State intervention in the form of the standards-based apprenticeship system, introduced in 1993, which included regulation of the work-based element and public funding of the off-the-job element of apprenticeship, along with subsequent requirements associated with an emerging national quality and qualifications infrastructure. Establishment of this new standards-based system was preceded by dialogue between representatives of the State (including two Government departments), employers, and trade unions, and it included 'hard fighting' to gain control of the new apprenticeship programme 'in accordance with their traditional positions'; employers supported the new system but argued that 'the state should pay for it but that they (employers) were the best people to control it' (Nyhan, 2009, p. 462). The National Training and Employment Authority under the Department of Enterprise and Employment 'won the battle' - against employers and the Department of Education - to gain the leadership role in the design and implementation of the craft apprenticeship programme (p. 463). Two decades later, concerns related to on-the-job quality assurance, the limited number of sectors involved, and the high cost of apprenticeship (Thoma, 2016, p. 52, p. 56) were among the reasons for another review of apprenticeship which led to the introduction of the new consortium-led model of apprenticeship. This model is intended to be 'enterprise-led', 'employer-led', more 'flexible and responsive'

(DFHERIS, 2021a), and the employer must pay the apprentice's wages throughout the apprenticeship.

It could be argued, therefore, that the State is apportioning increasing responsibility for the cost of apprenticeship to employers, in return for less State intervention in the form of additional control of the enterprise-led, consortium-led apprenticeship process by employers. As noted above, the extent to which employers may or may not want or be in a position to deliver the level of influence and engagement envisaged – including with reference to 'external involvement' including from HEIs, in the workplace learning process (Meso3) - and a HEI's perspective on this, potentially explains to some extent HEIs' decisions with respect to the nature and magnitude of their own input to the design, development, and delivery of individual consortium-led apprenticeships in Ireland, and the associated changes needed in the HEI internally to support this.

6.5 Conclusion

In this chapter the key findings from the research are considered in relation to demand, implementation and success of apprenticeship.

The next chapter draws on this to present answers to the research questions, offer recommendations for action and possible areas for further and future research, and a reflection on the significance of the research.

Chapter 7 Conclusion

7.1 Introduction

The aim of this chapter is to consider the results of this research with respect to what this study set out to do. To meet this aim, the chapter commences with a re-statement of the **purpose and aim of the research**. This is followed by **answers to the research questions**, **recommendations for action**, suggestions for **possible areas for further and future research**, and a reflection on the **significance of the research**.

7.2 Purpose and aim of the research

There is a gap - or even a 'neglect' (Cohen *et al*., 2018, p. 154) - to be filled in relation to research on apprenticeship in Ireland, particularly that relating to the reforms introduced in 2015.

Apprenticeship forms a key element in the Irish Government's policy to establish and significantly grow work-based learning, but the story relating to the period of significant change in apprenticeship between 2016 and 2023, following the introduction of a new consortium-led model of apprenticeship in 2015, has not been told.

This research is situated within and aims to somewhat reduce that gap.

This research set out to examine recent reforms in statutory apprenticeship in Ireland since 2016, from the perspective of those involved at various levels in apprenticeship policy and practice in higher education. The aim of the research was to examine these stakeholders' understanding and experiences of the reforms, primarily with respect to the new consortium-led model of apprenticeship in the higher education sector.

The choice to focus in this research on apprenticeship in higher education - on apprenticeship that leads to higher education awards - was prompted by the potential significance and impact of the reforms for the higher education sector, for apprenticeship, and for tertiary education in Ireland following the introduction of the new model of apprenticeship in 2015.

7.3 Research questions answered

One central research question and two sub-questions were posed at the start of this research, and these are revisited here.

7.3.1 Central research question:

What are supply-side stakeholders' experiences of recent reforms in apprenticeship in the higher education sector in Ireland?

The response to the central research question is based on findings about *demand* for new apprenticeship in higher education, about experiences of *implementation* of new apprenticeship in higher education, and about associated perspectives with respect to the current and future *success* and sustainability of apprenticeship in higher education and in the national apprenticeship system. Summary responses relating to these are presented below.

With respect to **demand**, progress has been made in terms of involvement of different types of HEIs in statutory apprenticeship, in different occupations, leading to awards at different levels on the NFQ, and for a variety of target groups including people in employment. Progress has been slow, however, and still partly reflects traditional distinctions in the provision of higher education.

With respect to **implementation** of new apprenticeship in higher education and HEIs' experiences as coordinating providers in individual apprenticeships, several factors affect the nature of engagement and the impact of that engagement, including that apprenticeship is experienced as different in many respects to HEIs' existing provision and as more complex and resource intensive, and that the changes needed in HEIs differ, largely depending on the extent of alignment, or not, with existing systems and supports in the institution. The many ways in which apprenticeship is experienced as different compared with HEIs' other provision include those related to teaching and learning; assessment of learning; the number and nature of stakeholders involved; the level of complexity involved; the level of flexibility allowed; the level of control the stakeholders have; and the level and type of additional resources needed, including some new roles and new ways of operating for HEI staff.

In addition, different understandings and interpretations of how the consortium-led model of apprenticeship is intended to work, and different motivations for engagement in it, both within and between HEIs and reportedly also with respect to other stakeholders involved in individual apprenticeships, are reflected in different ways of its operationalisation, and different HEI experiences, which has implications in terms of activity and impact in the higher education and apprenticeship systems in Ireland.

With respect to current and future **success** and sustainability of apprenticeship in higher education, progress is being made at national level, at higher education sector level with the potential for further impact in higher education and beyond, and at HEI level. A relative dearth of data and information at a national level relating to participation in, outcomes from, and impact of apprenticeship however is a significant gap in terms of identifying 'what and whose needs are being

met' (Brennan and Little, 1996) by apprenticeship in higher education or by higher education in apprenticeship in Ireland.

7.3.2 Sub-question 1: What has been the experience of higher education institutions (HEIs) in the implementation of this national apprenticeship reform initiative?

Demand - diversity and distinctions in higher education

Perceptions related to respective histories, missions, and status of key stakeholders in the higher education sector *vis à vis statutory apprenticeship*, as well as perceived concerns in some HEIs about the new apprenticeship model itself, and the relative newness of the model are reported to be a key determinant in forming the basis for different levels of HEI engagement and experiences. When considered in relation to information on apprenticeship activity in Ireland, some support for the validity of these perceptions is presented.

Perceptions related to respective histories, missions, and status of key stakeholders in the higher education sector *vis à vis* statutory apprenticeship reflect a reality in the history of education and apprenticeship in Ireland that have underpinned distinctions between different types of HEI in higher education in Ireland. Significant changes in recent Government policy and legislation, however, point to an intention to blur those distinctions, and to blur distinctions between FET and higher education, for learners. This policy intention is evident in recent initiatives, including that relating to reform in apprenticeship, but it goes further back in time, including with the creation of the NFQ in 2003 and establishment of QQI in 2012. Both the NFQ and QQI operate across the FET and the higher education sectors and in this respect could be said to have heralded two of the first visible cross-sector approaches to education and training in Ireland before the term 'unified tertiary sector' was explicitly referred to in Government policy. This policy intention, which is designed to provide pathways to learning between and across different provider institutions (NTO, 2024) is increasingly evident in recent policy documents related to the creation of a unified tertiary education system, in the introduction of the consortium-led model of apprenticeship itself in 2015 and the subsequent plan to create a single integrated apprenticeship system, as well as in the change in legislation in 2022 which means that apprenticeship is now potentially an option for any 'trade or occupation' including any 'regulated profession'. It is evident also in the establishment of DFHERIS in 2020, establishment of the NTO jointly managed by the HEA and SOLAS in 2022, and establishment of the NAO in 2022, also jointly involving the HEA and SOLAS in its management.

In this respect, progress has been made in terms of involvement of different types of HEIs in statutory apprenticeship, in different occupations, leading to awards at different levels on the NFQ, and for a variety of target groups including people in employment. Progress has been slow, however,

and still partly reflects traditional distinctions in the provision of higher education. The reported 'wait and see' approach among some HEIs, as well as different cultures and competing realities related to shortfalls in public funding and the associated international landscape within which large parts of the higher education sector now operate are likely to be factors in the pace of this progress, particularly in the context of the reported relatively resource intensive nature of consortium-led apprenticeship and its operation outside the traditional undergraduate and postgraduate applications processes.

Implementation - flexibility in the enterprise-led, consortium-led model of apprenticeship

Different understandings and interpretations of how the consortium-led model of apprenticeship is intended to work, and different motivations for engagement in it, both within and between HEIs and reportedly also with respect to other stakeholders involved in individual apprenticeships, are reflected in different ways of its operationalisation and different HEI experiences, which has implications in terms of activity and impact in the higher education and apprenticeship systems in Ireland. These differences are not clearly linked to any type of HEI - university, TU, independent HEI - or type of apprenticeship. The relative dearth of data and information at a national level relating to participation in, outcomes from, and impact of apprenticeship, is a significant gap in terms of identifying the impact of these differences or determining what and whose needs are being met by apprenticeship in higher education or by higher education in apprenticeship in Ireland.

7.3.3 Sub-question 2: What are stakeholders' perspectives on this initiative now and for the future?

Success and sustainability

Progress is being made at national, higher education sector, and HEI levels, and with the FET sector, albeit with a particular need for a strategic national approach to identifying and addressing national and regional skills priorities. This need relates to the vision and objectives in the Action Plan for Apprenticeship 2021-2025 including, for example, the commitment to ensuring that apprenticeship 'will deliver the highest quality of work-based learning, supporting and demonstrating innovation to empower apprentices and employers to meet current and emerging skills needs' (DFHERIS, 2021a, p. 1).

The extent to which this and other policy objectives in the Plan are being achieved, or the extent to which this can be determined, however, is not clear, particularly with respect to availability of data on participation in apprenticeship and associated metrics and data systems, including links between apprenticeship and identifiable skill priorities. It is noted in this regard that according to the

minutes of the February 2024 meeting of the NAA (Generation apprenticeship, 2024f) a cost-benefit analysis of the socio-economic impact of apprenticeships in Ireland is expected to be commissioned by the NAO, and a newly-constituted National Skills Council has recently been announced by the Government (DFHERIS, 2024b).

Considerations related to the management and governance of the national apprenticeship system and associated concepts of ownership of and control over aspects of apprenticeship are considered critical for the future success and sustainability of new apprenticeship in higher education. In this respect there are challenges and complexities for HEIs and other stakeholders at different stages in the HEI-led apprenticeship design and delivery process, some of which some stakeholders may or may not be adequately resourced to deal with, meaning that there are likely to be differing levels of quality in the learning and assessment experiences of those ostensibly participating in the same or similar programmes. It is likely also that the nature of HEIs' engagement in consortium-led apprenticeship in Ireland, and reported issues related to integration of learning, confirmed in this research, may be a reflection, at least in part, of stakeholders' decisions related to the levels of ownership and control they believe they are able or willing to exercise in the consortium-led model of statutory apprenticeship and in the design, development, and delivery of individual apprenticeships at both national engagement and HEI-enterprise engagement levels. It is possible that this factor - stakeholders' perceptions and decisions related to their levels of ownership and control in apprenticeship - may feature more strongly in some occupations, sectors, industries, and types of education provider than others. This is a topic that may prove interesting and impactful for future research.

7.4 Recommendations

Recommendations arising from this research are presented below for those with current overall responsibility for the apprenticeship system at a national level: the Department of Further and Higher Education, Research, Innovation and Science, and the National Apprenticeship Office and its constituent members (the Department, SOLAS, and HEA).

7.4.1 Roles and responsibilities

With regard to roles and responsibilities in apprenticeships leading to higher education awards, it is recommended that:
- greater clarity and guidance is provided for HEIs and other stakeholders regarding the respective roles of HEIs and enterprises and their representatives in apprenticeship,

including as members of an apprenticeship consortium and in the co-design, co-development, and co-delivery of an apprenticeship programme

- greater consideration is given to the impact of adherence to statutory apprenticeship requirements, at the national and HEI-enterprise levels, on the culture of ownership and autonomy in HEIs in designing and awarding qualifications at levels 7 to 10 on the National Framework of Qualifications

7.4.2 Data and metrics

With regard to apprenticeship data systems and metrics, it is recommended that:

- a comprehensive and consistent national approach to strategic foresight activity and data collection, aligned with national and regional skills priorities, be designed, agreed, and implemented, with data published annually and freely available

- consideration be given to the variety of metrics needed for this including, for example, cost effectiveness, value for money, apprentice outcomes, HEI-industry links, and the impact of apprenticeships for different stakeholders and in different contexts

- a review of apprenticeship categories and titles be undertaken to align them with recognised classification systems, thereby facilitating relevant comparisons to be made nationally and internationally wherever possible

7.4.3 Framework for work-integrated learning

With regard to work-integrated learning in apprenticeship in higher education, it is recommended that:

- consultation is undertaken with HEIs and other stakeholders to inform the development of a framework for work-integrated learning with a specific focus on apprenticeship, including with respect to teaching, learning, assessment of and for learning, and HEIs' validation of the learning acquired in the apprentice's place of work

7.4.4 Apprenticeship proposals

With regard to proposals for new apprenticeships in higher education, it is recommended that:

- greater clarity and guidance be provided to stakeholders regarding the means by which proposals for new apprenticeships leading to higher education awards are considered in terms of alignment with national and regional skills priorities and with other existing and planned provision

7.4.5 Resourcing

With regard to the stated need for appropriate resourcing, it is recommended that:

- DFHERIS and relevant State agencies recognise that HEIs are working in a new environment that is resource intensive in terms of the complexity of apprenticeship, including new roles and requirements related to stakeholder communication and consultation; teaching, learning, and assessment of on- and off-the-job learning; consideration of mentors and tutors; and new thinking on work-based and work-integrated learning

- the need for appropriate resourcing to support apprenticeships leading to higher education awards be considered with respect to different contexts including:

  - apprenticeships in different industries, sectors, and occupations and at different stages of development

  - different types of HEI, including

    - HEIs that are new to statutory apprenticeship *vis à vis* those that have previous experience of apprenticeship

    - HEIs that are publicly funded *vis à vis* others including private HEIs

    - providers that *are* HEIs *vis à vis* those that are not HEIs but do provide apprenticeships that lead to higher education awards

  - different types of apprenticeship, including

    - apprenticeships that are developed from, and delivered along with, existing provision in a HEI(s), *vis à vis* those that are developed in entirely new areas

    - apprenticeships in which the HEI's delivery of the off-the-job element is mainly online *vis à vis* those in which it is delivered mainly in person or on campus

    - apprenticeships that target different cohorts including, for example, people in employment *vis à vis* school leavers or unemployed people

7.5 Conclusion

The Irish Government has articulated its policy choice to promote and fund renewal of apprenticeship by extending apprenticeships to new industries and occupations and involving additional stakeholders in these.

Significant progress has been reported with respect to reforms in apprenticeship, including the commencement of 30 new HEI-led apprenticeships since 2016. These apprenticeships have had varying degrees of success when considered with reference to the one key metric on which

apprenticeship data are published annually, that is new apprentice registrations on individual apprenticeships. Parts of the higher education sector, and some HEIs, have been quicker than others to embrace expansion of apprenticeship in higher education.

Notwithstanding general acknowledgement that progress is being made, and that issues remain to be addressed, many of which are identified as objectives and specific actions in the Government's Action Plan for Apprenticeship 2021-2025, it is currently not clear *what* needs, or *whose* needs, are currently being met by apprenticeship in higher education or by higher education in apprenticeship.

The research has identified three key issues to be addressed by the relevant national authorities in this respect.

- Firstly, in order to inform apprenticeship policy and activity, including identification and addressing of skills needs and allocation of public resources to addressing these priorities, there is a need for examination of what is working in apprenticeship, where, why or why not, and for whom, in the higher education sector.

- Secondly, there is a need for greater clarity and guidance for HEIs and other stakeholders regarding requirements of the model and the commitments and resources needed to implement it in different contexts in the higher education sector.

- Thirdly, appropriate supports and resources are needed for HEIs and other stakeholders to identify and facilitate optimum levels of flexibility in the consortium-led model of apprenticeship, or an adapted version of this model, to facilitate achievement of objectives in different contexts.

Each of these issues is related to the need for more appropriate and adequate data systems relating to participation in apprenticeship, and other metrics associated with apprenticeship, and to the need for links to a skills strategy and associated infrastructure to help determine if and when apprenticeship is the most appropriate means of addressing identified skills needs.

7.6 Possible areas for further and future research

Possible areas for further research include research in three areas that were purposely not examined in this exploratory case study, as follows:

- Firstly, other key stakeholders' - for example, employers', employee representatives' or apprentices' - understanding and experiences relating to reforms in apprenticeship in higher education.

- Secondly, understanding and experiences of the HEI coordinating provider role in new apprenticeship, which involves working with others in their role as collaborating providers in individual apprenticeship programmes.
- Thirdly, understanding and experiences relating to work-based learning of HEIs that are currently not engaged, either as a coordinating or collaborating provider, in consortium-led apprenticeship.

Other possible areas for future research include:
- Further examination of the concepts of ownership and control, and power, conflict, and compromise, with respect to HEIs', enterprises' - including employers' and employee representatives' - and other stakeholders' engagement in apprenticeship, at system, programme, and individual enterprise levels; this research may also draw on and inform experiences in existing non-statutory apprenticeship-type arrangements in higher education (e.g. legal, medical, and teacher education).

- Identification of good practice and challenges specifically in relation to work-integrated learning and learning assessment strategies and associated infrastructure in apprenticeship in higher education, as well as the solutions to address these challenges, taking account of the complex environment in which apprenticeship operates.

7.7 Significance of the research

Research on apprenticeship in Ireland is scarce, and the story of the recent expansion of statutory apprenticeship in Ireland has not yet been told. The purpose of this research is to tell part of that story, focusing on the developments in that period particularly as they relate to understanding and experiences in the higher education sector.

The story includes findings about the stated reasons for HEIs' involvement in new consortium-led apprenticeship and the perceived reasons for some HEIs' non-involvement, about some of the ways in which new apprenticeship has been experienced compared with other higher education provision, and about some of the changes made in HEIs to facilitate implementation and ongoing delivery and management of new apprenticeship in higher education in Ireland.

Direct quotations from participants - the participants' voices, as presented in Chapter 5 - form a central part of this research. In the researcher's view, these findings, this story, on its own represents one of the most valuable aspects of the research.

The findings overall illustrate a depth and breadth of stakeholders' experiences related to the demand for new apprenticeship in higher education, to the introduction and implementation of new apprenticeship in higher education, and to associated perspectives with respect to the future success and sustainability of apprenticeship in higher education and in the national apprenticeship system. The research provides a baseline of information in terms of reported experiences at a particular point in time and it has the potential to inform further development of the apprenticeship system in higher education and beyond.

List of references

Ajjawi, R., Tai, J., Nghia, T.L.H., Boud, D., Johnson, L. and Patrick, C.J. (2020) 'Aligning assessment with the needs of work-integrated learning: the challenges of authentic assessment in a complex context', *Assessment & Evaluation in Higher Education*, 45(2), pp. 304-316. Available at: DOI 10.1080/02602938.2019.1639613

Alase, A. (2017) 'The interpretative phenomenological analysis (IPA): a guide to a good qualitative research approach', *International Journal of Education & Literacy Studies*, 5(2), pp. 9-19. Available at: https://journals.aiac.org.au/index.php/IJELS/article/view/3400 (Accessed: 09 May 2024).

Anderson, A., Bravenboer, D. and Hemsworth, D. (2012) 'The role of universities in higher apprenticeship development', *Journal of Higher Education, Skills and Work-Based Learning*, 2(3), pp. 240-255. Available at: DOI 10.1108/20423891211271773

Baird, J., Andrich, D., Hopfenbeck, T.N. and Stobart, G. (2017) 'Assessment and learning: fields apart?', *Assessment in Education: Principles, Policy & Practice*, 24(3), pp. 317-350. Available at: DOI 10.1080/0969594X.2017.1319337

Ball, S.J. (1993) 'What is policy? texts, trajectories and toolboxes', *Discourse: Studies in the Cultural Politics of Education*, 13(2), pp. 10-17. Available at: DOI 10.1080/0159630930130203

Ball, S. J. (2012) *Politics and policy making in education: explorations in sociology*. Abingdon: Routledge.

Bazeley, P. and Jackson, K. (2013) *Qualitative data analysis with NVivo*. London: SAGE.

Bazeley, P. (2021) *Qualitative data analysis: practical strategies*. London: SAGE.

Bell, E. and Bryman, A. (2007) 'The ethics of management research: an exploratory content analysis', *British Journal of Management,* 18(1), pp. 63-77. Available at: DOI 10.1111/j.1467-8551.2006.00487.x

Bell, L. and Stevenson, H. (2015) 'Towards an analysis of the policies that shape public education: setting the context for school leadership', *Management in Education*, 29(4), pp. 146-150. Available at: DOI 10.1177/0892020614555593

Biesta, G. (2010) 'Pragmatism and the philosophical foundations of mixed methods research', in A. Tashakkori and C. Teddlie (eds) *Handbook of mixed methods in social & behavioural research* (2nd edn.). Thousand Oaks, CA: SAGE, pp. 95-118.

Bowe, R., Ball, S.J., with Gold, A. (1992) *Reforming education and changing schools.* London: Routledge.

Brannick, T. and Coghlan, D. (2007) 'In defense of being "native" - the case for insider academic research', *Organizational Research Methods*, 10(1), pp. 59-74. Available at: DOI 10.1177/1094428106289253

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77-101. Available at: DOI 10.1191/1478088706qp063oa

Braun, V. and Clarke, V. (2019) 'Reflecting on reflexive thematic analysis', *Qualitative Research in Sport, Exercise and Health*, 11(4), pp. 589-597.
Available at: DOI [10.1080/2159676X.2019.1628806](10.1080/2159676X.2019.1628806)

Braun, V. and Clarke, V. (2020) 'Can I use TA? Should I use TA? Should I *not* use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches', *Counselling Psychotherapy Research*, 21(1), pp. 37-47. Available at: DOI 10.1002/capr.12360

Braun, V. and Clarke, V. (2021) 'One size fits all? What counts as quality practice in (reflexive) thematic analysis?', *Qualitative Research in Psychology*, 18(3), pp. 328-352.
Available at: DOI [10.1080/14780887.2020.1769238](10.1080/14780887.2020.1769238)

Braun, V. and Clarke, V. (2022a) *Thematic analysis: a practical guide*. London: SAGE.

Braun, V. and Clarke, V. (2022b) 'Conceptual and design thinking for thematic analysis', *Qualitative Psychology*, 9(1), pp. 3-26. Available at: DOI [10.1037/qup0000196](10.1037/qup0000196)

Braun, V. and Clarke, V. (2022c) 'Toward good practice in thematic analysis: avoiding common problems and be(com)ing a *knowing* researcher', *International Journal of Transgender Health*, 24(1), pp. 1-6. Available at: DOI [10.1080/26895269.2022.2129597](10.1080/26895269.2022.2129597)

Bravenboer, D. (2016) 'Why co-design and delivery is "a no brainer" for higher and degree apprenticeship policy', *Higher Education, Skills and Work-Based Learning*, 6(4), pp. 384-400.
Available at: DOI 10.1108/HESWBL-06-2016-0038

Brennan, J. and Little, B. (1996) *A review of work based learning in higher education*. Sheffield: Department for Education and Employment. Available at:
http://oro.open.ac.uk/11309/1/A_review_of_work_based_learning_in_higher_education.pdf (Accessed: 09 May 2024).

Brennan, J. and Little, B. (2006) *Towards a strategy for workplace learning*. Available at:
https://dera.ioe.ac.uk/id/eprint/6201/2/rd09_06.pdf (Accessed: 09 May 2024).

Brinkmann, S. and Kvale, S. (2015) *InterViews: learning the craft of qualitative research interviewing*. 3rd edn. Thousand Oaks, CA: SAGE.

Bryant, A. and Charmaz, K. (eds) (2019) *The SAGE handbook of current developments in grounded theory*. London: SAGE.

Bryman, A. (2016) *Social research methods*. 5th edn. Oxford: Oxford University Press.

Burke Johnson, R., Onwuegbuzie, A. J. and Turner, L. A. (2007) 'Towards a definition of mixed methods research', *Journal of Mixed Methods* 1(2), pp. 112-133. Available at: DOI [10.1177/1558689806298224](10.1177/1558689806298224)

Burke Johnson, R. (2014) *Educational research: quantitative, qualitative, and mixed approaches.* 5th edn. Thousand Oaks, CA: SAGE.

Cavaglia, C., McNally, S. and Ventura, G. (2022) '*The recent evolution of apprenticeships: participation and pathways*', Centre for Vocational Research, research discussion paper series ISSN 2398-7553 No. 039. Available at: https://cver.lse.ac.uk/textonly/cver/pubs/cverdp039.pdf (Accessed: 09 May 2024).

Cedefop (2018a) *Apprenticeship schemes in European countries: a cross-nation overview*. Available at: https://www.cedefop.europa.eu/en/publications/4166 (Accessed: 09 May 2024).

Cedefop (2018b) *Database on financing apprenticeships in the EU.* Available at: https://www.cedefop.europa.eu/en/tools/financing-apprenticeships/cross-country-overview (Accessed: 09 May 2024).

Cedefop (2019a) *European database on apprenticeship schemes*. Available at: https://www.cedefop.europa.eu/en/tools/apprenticeship-schemes (Accessed: 09 May 2024).

Cedefop (2019b) *Analytical framework for apprenticeships.* Available at: https://www.cedefop.europa.eu/en/publications/8130 (Accessed: 09 May 2024).

Cedefop (2020) *Briefing note - apprenticeships for adults.* Available at: https://www.cedefop.europa.eu/en/publications/9147 (Accessed: 09 May 2024).

Cedefop (2021a) *EFQEA implementation: a Cedefop analysis and main findings. How schemes in Cedefop's European database on apprenticeship schemes compare with EFQEA criteria*. Available at: http://data.europa.eu/doi/10.2801/563247 (Accessed: 09 May 2024).

Cedefop (2021b) *How many apprentices are there in the EU?* Available at: https://www.cedefop.europa.eu/en/publications/4196 (Accessed: 09 May 2024).

Cedefop (2021c) *Enablers and disablers of cross-border long-term apprentice mobility: evidence from country- and project-level investigations.* Available at: https://www.cedefop.europa.eu/en/publications/3089 (Accessed: 09 May 2024).

Chankseliani, M., Keep, E. and Wilde, S. (2017) *People and policy: a comparative study of apprenticeship across eight national contexts*. World Innovation Summit for Education: University of Oxford. Available at: https://ora.ox.ac.uk/objects/uuid:56a3d0c9-3221-43d9-9da4-e1883e5a7a00 (Accessed: 09 May 2024).

Chankseliani, M. and Anuar, A. (2019) 'Cross-country comparison of engagement in apprenticeships: a conceptual analysis of incentives for individuals and firms', *International Journal for Research in Vocational Education and Training,* 6(3), pp. 261-283. Available at: DOI 10.13152/IJRVET.6.3.4

Charmaz, K. (2006) *Constructing grounded theory*. Thousand Oaks, CA: SAGE.

Cheek, J. (2004) 'At the margins? Discourse analysis and qualitative research', *Qualitative Health Research*, 14 (8), pp. 1140-1150. Available at: DOI 10.1177/1049732304266820

Clancy, P. (2015) *Irish higher education: a comparative perspective*. Dublin: Institute of Public Administration.

Clandinin, D.J. and Connolly, F.M. (2000) *Narrative inquiry: experience and story in qualitative research.* San Francisco: Jossey-Bass.

Clark, T., Foster, L., Sloan, L. and Bryman, A. (2021) *Bryman's social research methods*. 6th edn. UK: Oxford University Press.

Clarke, M. (2016) 'The development of vocational and technical education in Ireland, 1930-2015', in B. Walsh (ed.) *Essays in the history of Irish education*. London: Palgrave Macmillan UK, pp. 297-319. Available at: DOI 10.1057/978-1-137-51482-0_11

Cohen, L., Manion, L. and Morrison, K. (2018) *Research methods in education*. 8th edn. London: Routledge.

Coll, R.K., Eames, C., Paku, L., Lay, M., Ayling, D., Hodges, D., Ram, S., Bhat, R., Fleming, J., Ferkins, L., Wiersma, C. and Martin, A. (2008) 'Investigating the 'integrated' in work-integrated learning', *Annual Conference New Zealand Association for Cooperative Education: proceedings of the conference.* New Zealand, 23rd-24th April 2008. New Zealand: New Zealand Association for Cooperative Education, pp. 38-41. Available at: https://wilnz.nz/wp-content/uploads/2008-Proceeding.pdf (Accessed: 09 May 2024).

Coll, R.K., Eames, C., Paku, L., Lay, M., Hodges, D., Bhat, R., Ram, S., Ayling, D., Fleming, J., Ferkins, L., Wiersma, C. and Martin, A. (2009) 'An exploration of the pedagogies employed to integrate knowledge in work-integrated learning', *Journal of Cooperative Education & Internships* 43(1), pp. 14-35. Available at: https://www.researchgate.net/publication/288961891_An_exploration_of_the_pedagogies_employed_to_integrate_knowledge_in_work-integrated_learning (Accessed: 09 May 2024).

Coolahan, J. (2017) *Towards the era of lifelong learning - a history of Irish education 1800-2016*. Dublin: Institute of Public Administration.

Corbin, J. and Strauss, A. (2007) *Basics of qualitative research: techniques and procedures for developing grounded theory*. 3rd edn. Thousand Oaks, CA: SAGE.

Corbin, J. and Strauss, A. (2015) *Techniques and procedures for developing grounded theory.* 4th edn. Thousand Oaks, CA: SAGE.

Crawford-Lee, M. and Moorwood, S. (2019) 'Degree apprenticeships: delivering quality and social mobility?', *Higher Education, Skills and Work-Based Learning*, 9(2), pp. 134-140. Available at: DOI 10.1108/HESWBL-05-2019-123

Creswell, J.W. (2007) *Qualitative inquiry and research design: choosing among five approaches.* 2nd edn. Thousand Oaks, CA: SAGE.

Creswell, J.W. (2011) 'Controversies in mixed methods research', in N.K. Denzin and Y.S. Lincoln (eds) *The SAGE handbook of qualitative research*. 4th edn. Thousand Oaks, CA: SAGE, pp. 269-284.

Creswell, J.W. (2013) *Qualitative inquiry and research design: choosing among five approaches.* 3rd edn. Thousand Oaks, CA: SAGE.

Creswell, J.W. and Plano Clark, V.L. (2017) *Designing and conducting mixed methods research*. 3rd edn. Thousand Oaks, CA: SAGE.

Creswell, J.W. and Creswell, J. D. (2018) *Research design: qualitative, quantitative and mixed methods approaches*. 5th edn. Los Angeles: SAGE.

Creswell, J.W. and Poth, C.N. (2018) *Qualitative inquiry and research design: choosing among five approaches.* 4th edn. Thousand Oaks, CA: SAGE.

Creswell, J.W. and Creswell, J. D. (2023) *Research design: qualitative, quantitative and mixed methods approaches*. 6th edn. Los Angeles: SAGE.

CSO (2021) *Further education outcomes - graduation years 2010-2016 - apprenticeships*. Available at: https://www.cso.ie/en/releasesandpublications/ep/p-feo/furthereducationoutcomes-graduationyears2010-2016/apprenticeships/ (Accessed: 09 May 2024).

Dalrymple, R., Kemp, C. and Smith, P. (2012) 'Characterising work-based learning as a triadic learning endeavour', *Journal of Further and Higher Education*, 38(1), pp. 75-89. Available at: DOI 10.1080/0309877X.2012.699516

DCU (2017) *DCU Research Ethics Committee guideline statement on insider research*. Available at: https://www.dcu.ie/sites/default/files/research_support_editor/2023-09/InsiderResearch_V1%20Dec%202017.pdf (Accessed: 09 May 2024).

Denzin, N.K. and Lincoln, Y.S. (2005) 'Introduction: the discipline and practice of qualitative research', in N.K. Denzin and Y.S. Lincoln (eds) *The SAGE handbook of qualitative research*. 3rd edn. Thousand Oaks, CA: SAGE, pp. 1-32.

Denzin, N.K. (2008) 'The new paradigm dialogs and qualitative inquiry', *International Journal of Qualitative Studies in Education* 21(4), pp. 315-325. Available at: DOI 10.1080/09518390802136995

Denzin, N.K. and Lincoln, Y.S. (2011) 'Introduction: the discipline and practice of qualitative research', in N.K. Denzin and Y.S. Lincoln (eds) *The SAGE handbook of qualitative research*. 4th edn. Thousand Oaks, CA: SAGE, pp. 1-32.

Department of Labour (1986) *White paper on manpower policy*. Dublin: Government Publications Office.

Department of Public Expenditure and Reform (2019) *Review of participation and costs of apprenticeship*. Available at: https://assets.gov.ie/25648/15c387193a7a46e8a4ad5e392e22fc95.pdf (Accessed: 09 May 2024).

DES (2011) *National strategy for higher education to 2030.* Available at: https://hea.ie/assets/uploads/2017/06/National-Strategy-for-Higher-Education-2030.pdf (Accessed: 09 May 2024).

DES (2013a) *Review of apprenticeship training in Ireland*. Available at: https://www.gov.ie/en/publication/abb137-review-of-apprenticeship-training-in-ireland/ (Accessed: 09 May 2024).

DES (2013b) *Apprenticeship review - background issues paper.* Available at:
https://www.gov.ie/en/publication/abb137-review-of-apprenticeship-training-in-ireland/
(Accessed: 09 May 2024).

DES (2014a) *Apprenticeship implementation plan.* Available
at: https://www.gov.ie/en/publication/abb137-review-of-apprenticeship-training-in-ireland/
(Accessed: 09 May 2024).

DES (2014b) *Press release: launch of Apprenticeship Council.* Available at:
https://merrionstreet.ie/en/category-index/education/skills/apprenticeship-council-to-be-
appointed-which-will-issue-a-call-for-proposals-for-new-apprenticeships.html (Accessed: 09
May 2024).

DES (2015) *Apprenticeship Council report on new apprenticeship programme proposals.*
Available at:
https://www.gov.ie/pdf/?file=https://assets.gov.ie/24438/667b5cba008b48b8bb1da72d447
97470.pdf#page=null (Accessed: 09 May 2024).

DES (2016a) *Action plan for education 2016-2019.* Available at:
https://www.gov.ie/en/collection/action-plan-for-education-2016-2019/ (Accessed: 09
May 2024).

DES (2016b) *Ireland's national skills strategy*. Available at:
https://www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-
future/ (Accessed: 09 May 2024).

DES (2017a) *Action plan to expand apprenticeship and traineeship in Ireland 2016-2020.* Available at:
https://www.gov.ie/en/publication/81ef9-action-plan-to-expand-apprenticeship-and-
traineeship-in-ireland-2016-2020/ (Accessed: 09 May 2024).

DES (2017b) *Press release: approval of 26 apprenticeship proposals.* Available at:
https://merrionstreet.ie/en/news-
room/releases/ministers_bruton_halligan_announce_26_new_apprenticeships.html
(Accessed: 09 May 2024).

DES (2018a) *Review of National Training Fund.*
https://www.indecon.ie/assets/files/pdf/indecon_review_of_national_training_fund.pdf
(Accessed: 09 May 2024).

DES (2018b) *Review of National Training Fund implementation plan*. Available at:
https://www.gov.ie/en/publication/6f600f-review-of-national-training-fund-
implementation-plan/ (Accessed: 09 May 2024).

DES (2019) *Action plan for education 2019*. Available at:
https://www.gov.ie/en/collection/8701a5-action-plan-for-education-2019/
(Accessed: 09 May 2024).

DES (2021) *National briefing note on education at a glance 2021 OECD indicators: a country
profile for Ireland.* Available at:
https://www.gov.ie/en/publication/74919-education-at-a-glance-oecd-indicators-2021/
(Accessed 09 May 2024).

DFHERIS (2020a) *Consultation on the apprenticeship action plan 2021-2025*. Available at: https://www.gov.ie/en/consultation/13be2-consultation-on-the-apprenticeship-action-plan-2021-2025/ (Accessed: 09 May 2024).

DFHERIS (2020b) *Consultation on the statement of strategy 2021-2035*. Available at: https://www.gov.ie/en/consultation/708d2-public-consultation-on-statement-of-strategy-2021-2023/ (Accessed: 09 May 2024).

DFHERIS (2020c) *Consultation on the apprenticeship action plan 2021-2025: IUA submission* Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/133849/041e7012-f176-4a86-9c05-3915a9593aa1.pdf#page=null (Accessed: 09 May 2024).

DFHERIS (2021a) *Action plan for apprenticeship 2021-2025.* Available at: https://www.gov.ie/en/publication/0879f-action-plan-for-apprenticeship-2021-2025/ (Accessed: 09 May 2024)

DFHERIS (2021b) *Statement of strategy 2021-2023 - submissions, themes, and strategy.* Available at: https://www.gov.ie/en/organisation-information/3f066-statement-of-strategy-2021-2023/ (Accessed: 09 May 2024).

DFHERIS (2021c) *Statement of strategy 2021-2023 - infographic references.* Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/126479/5ac45928-df7d-4d83-84ae-cc674516b1e4.pdf#page=null (Accessed: 09 May 2024).

DFHERIS (2021d) *Statement of strategy 2021-2023 - submissions from organisations.* Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/125792/13f32924-4e4c-47fe-93e2-e510264e261e.pdf#page=null (Accessed: 09 May 2024).

DFHERIS (2022a) *Unified tertiary education sector*. Available at: https://www.gov.ie/en/consultation/982e2-unified-tertiary-education-sector/ (Accessed: 09 May 2024).

DFHERIS (2022b) *Funding the future: investing in knowledge and skills: Ireland's competitive advantage*. Available at: https://www.gov.ie/en/policy-information/49e56-future-funding-in-higher-education/ (Accessed: 09 May 2024).

DFHERIS (2023) *Unified tertiary system.* Available at: https://www.gov.ie/en/policy-information/4d5cb-unified-tertiary-system/ (Accessed: 09 May 2024).

DFHERIS (2024a) *Press release: Minister O'Donovan announces launch of new educational pathways in social work*. Available at: https://www.gov.ie/en/press-release/c2bb1-minister-odonovan-announces-launch-of-new-educational-pathways-in-social-work/ (Accessed: 09 June 2024).

DFHERIS (2024b) *New National Skills Council*. Available at: https://www.gov.ie/en/organisation-information/7637e6-national-skills-council/ (Accessed: 09 August 2024).

Doyle, K. (2014) *Evaluating and improving the delivery of work-based learning in the hospitality, tourism and leisure industry*. EdD thesis. Dublin City University, Ireland. Available at: https://doras.dcu.ie/20218/1/Kieran_Doyle_-_Final_Thesis_-_18_Sept_2014.pdf (Accessed: 09 May 2024).

Eames, C. and Coll, R.K. (2010) 'Cooperative education: integrating classroom and workplace learning', in S. Billett (ed.) *Learning Through Practice, Professional and Practice Based Learning*. Dordrecht: Springer, pp. 180-196. Available at: DOI 10.1007/978-90-481-3939-2_10

European Commission (2016) *High-performance apprenticeships and work-based learning: 20 guiding principles.* Available at: https://op.europa.eu/en/publication-detail/-/publication/8f010ea2-265b-11e7-ab65-01aa75ed71a1/language-en (Accessed: 09 May 2024).

European Commission (2020) *Quality and effective apprenticeships*. Available at: https://ec.europa.eu/social/main.jsp?lagId=en&catId=89&furtherNews=yes&newsId=10070#navItem-1 (Accessed: 09 May 2024).

Evans, K., Hodkinson, P., Rainbird, H., Unwin, L., Fuller, A., Hodkinson, H., Kersh, N., Munro, A., and Senker, P. (2006) *Improving workplace learning*. London: Routledge. Available at: https://www.routledge.com/Improving-Workplace-Learning/Evans-Hodkinson-Rainbird-Unwin/p/book/9780415371209 (Accessed: 09 May 2024).

Fabian, K., Taylor-Smith, E., Smith, S., Meharg, D. and Varey, A. (2021) 'An exploration of degree apprentice perspectives: a Q methodology study', *Studies in Higher Education*, 47(7), pp. 1397-1409. Available at: DOI 10.1080/03075079.2021.1897094

Fealy, G. (2006) *A history of apprenticeship nurse training in Ireland*. London: Routledge.

Fenwick, T. (2006) 'Tidying the territory: questioning terms and purposes in work-learning research', *Journal of Workplace Learning*, 18(5), pp. 265-278. Available at: DOI 10.1108/13665620610674953

Field, J. and o dubhchair, M. (2001) 'Recreating apprenticeship: lessons from the Irish standards-based model', *Journal of Vocational Education & Training*, 53(2), pp. 247-261. Available at: DOI 10.1080/13636820100200157

Fleming, T., Loxley, A. and Finnegan, F. (eds) (2017) *Access and participation in Irish higher education*. London: Palgrave and Macmillan.

Fleming, J. and Haigh, N. (2018) 'Using sociocultural insights to enhance work-integrated learning', *Higher Education, Skills and Work-Based Learning*, 8(4), pp. 395-407. Available at: DOI 10.1108/HESWBL-09-2017-0071

Fortwengel, J., Gospel, H. and Toner, P. (2019) 'Varieties of institutional renewal: the case of apprenticeship in the US, England, and Australia', Journal of Vocational Education & Training, 73(1), pp. 71-94. 24p. Available at: DOI 10.1080/13636820.2019.1688855

Fullan, M. (1991) *The new meaning of educational change*. London: Cassell.

Fuller, A., Leonard, P., Unwin, L. and Davey, G. (2015) *Does apprenticeship work for adults? - Project Report*. Available at: http://workfutures.southampton.ac.uk/wp-content/uploads/sites/188/2013/08/Adult-Apprenticeship-Full-Report.pdf (Accessed: 09 May 2024).

Galdas, P. (2017) Revisiting bias in qualitative research: reflections on its relationship with funding and impact', *International Journal of Qualitative Methods*, 16(1), pp. 1-2. Available at: DOI 10.1177/1609406917748992

Garavan, T., Costine, P. and Hegarty, N. (1995) *Training and development in Ireland: context, policy and practice*. Dublin: Oak Tree Press.

Generation apprenticeship (2024a) *About apprenticeships*. Available at: https://www.apprenticeship.ie/more/about (Accessed: 09 May 2024).

Generation apprenticeship (2024b) *Developing a national apprenticeship: handbook (2017).* Available at: https://content.apprenticeship.ie/f/83224/x/7baa14492b/handbook_document.pdf (Accessed: 09 May 2024).

Generation apprenticeship (2024c) *Developing and delivering national apprenticeships in Ireland: a handbook (2023).* Available at: https://content.apprenticeship.ie/f/83224/x/46a5139d42/apprenticeshiphandbook_publicationjanuary2023.pdf (Accessed: 09 May 2024).

Generation apprenticeship (2024d) *Initial proposal guidance document (2020).* Available at: https://a.storyblok.com/f/83224/x/34a80518c0/submitting-an-initial-proposal-guidance-document-final.pdf (Accessed: 09 May 2024).

Generation apprenticeship (2024e) *Directory of apprenticeships at December 2023*. Available at: https://content.apprenticeship.ie/f/83224/x/08fb25bae6/2023-11-29-list-of-apprenticeships-as-of-dec-23-002.pdf (Accessed: 09 May 2024).

Generation apprenticeship (2024f) *Notes of meetings of the National Apprenticeship Alliance*. Available at: https://www.apprenticeship.ie/more/about (Accessed: 09 May 2024).

Generation apprenticeship (2024g) *Directory of apprenticeships*. Available at: https://www.apprenticeship.ie/more/apprenticeship-directory (Accessed: 09 May 2024).

Generation apprenticeship (2024h) *Initial proposal form*. Available at: https://content.apprenticeship.ie/f/83224/x/14b079321e/making-a-proposal-3.pdf (Accessed: 09 May 2024).

Generation apprenticeship (2024i), *Briefing on integrated apprenticeship system.* Available at: https://content.apprenticeship.ie/f/83224/x/9b4fbcd30c/integratedsystemconsultationfeb2024.pdf (Accessed: 09 May 2024).

Gerloff, A. and Reinhard, K. (2019) 'University offering work-integrated learning dual study programs', *International Journal of Work-Integrated Learning*, 20(2), pp. 161-169. Available at: https://www.ijwil.org/files/IJWIL_20_2_161_169.pdf (Accessed: 09 May 2024).

Giblin, D. (2020) *A guide for enacting an apprenticeship education model as a mechanism for facilitating higher education and industry collaboration*. DBA thesis. Waterford Institute of Technology, Ireland. Available at: https://research.setu.ie/en/publications/a-guide-for-enacting-an-apprenticeship-education-model-as-a-mecha-4 (Accessed: 09 May 2024).

Giorgi, A. (2009) *The descriptive phenomenological method in psychology: a modified Husserlian approach*. Pittsburgh, PA: Duquesne University Press.

Glaser, B.G. and Strauss, A.L. (1967) *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine.

Gonon, P. and Deissinger, T. (2021) 'Towards an international comparative history of vocational education and training', *Journal of Vocational Education & Training*. 73(2), pp. 191-196. Available at: DOI 10.1080/13636820.2021.1912945

Graf, L. (2015) 'The rise of work-based academic education in Austria, Germany and Switzerland', *Journal of Vocational Education & Training*, 68 (1), pp. 1-16. Available at: DOI 10.1080/13636820.2015.1107749

Graham, S. (2019) *Higher and degree apprenticeships in English higher education: a policy implementation study*. PhD thesis. Lancaster University, UK. Available at: https://eprints.lancs.ac.uk/id/eprint/139630/ (Accessed: 09 May 2024).

Grant, M.J. and Booth, A. (2009) 'A typology of reviews: an analysis of 14 review types and associated methodologies', *Health Information and Libraries Journal*, 26, pp. 91-108. Available at: https://onlinelibrary.wiley.com/doi/10.1111/j.1471-1842.2009.00848.x (Accessed: 09 May 2024).

Gray, E. and Farrell, K.G. (2021) 'Perceptions of culinary education and chef apprenticeships in Ireland', *Journal of Higher Education, Skills and Work-Based Learning*, 11(1), pp. 228-240. Available at: DOI 10.1108/HESWBL-06-2019-0083

Grollman, P. (2018) 'Varieties of "duality": work-based learning and vocational education in international comparative research', in Choy *et al*. (eds) *Integration of vocational education and training experiences, technical and vocational education and training: issues, concerns and prospects.* Singapore: Springer, pp. 63-82. Available at: DOI 10.1007/978-981-10-8857-5_4

Grollmann, P. and Markowitsch. J. (2019) 'The role of apprenticeship in the future of vocational education in Europe', Deissinger *et al*. (eds) *Contemporary apprenticeship reforms and reconfigurations*. Zurich: LIT Verlag, pp. 28-32.

Guba, E.G. and Lincoln, Y.S. (1981) *Effective evaluation: improving the usefulness of evaluation results through responsive and naturalistic approaches.* San Francisco, CA: Jossey-Bass.

Hammersley, M. and Atkinson, P. (2019) *Ethnography: principles in practice*. 4th edn. London: Routledge.

Harris, R. and Simons, M. (1999) 'Views through three windows: a study of the purposes and usefulness of on- and off-job training', *Australian and New Zealand Journal of Vocational Education Research*, 7(2), pp. 55-80. Available at: https://www.voced.edu.au/content/ngv:2163 (Accessed: 09 May 2024).

HEA (nd) *Higher education institutions*. Available at: https://hea.ie/higher-education-institutions/
(Accessed 09 May 2024).

HEA (nd) *Technological universities*. Available at:
https://hea.ie/policy/he-reform/technological-universities/ (Accessed: 09 May 2024).

HEA (2013) *Developing apprenticeship - submission to the Apprenticeship Review Group*. Available at:
https://hea.ie/assets/uploads/2017/05/HEA-Submission-to-Apprenticeship-Review.pdf
(Accessed 09 May 2024).

HEA (2020) *Annual report 2020*. Dublin: HEA. Available at:
https://hea.ie/assets/uploads/2021/12/v3-AR-HEA-2020-v-2020.pdf (Accessed: 09 May
2024).

HEA (2022a) *Springboard+*. Available at: https://hea.ie/skills-engagement/springboard/ (Accessed:
09 May 2024).

HEA (2022b) *Statistics*. Available at: https://hea.ie/statistics/ (Accessed: 09 May 2024).

HM Government (nd) *Levels of apprenticeship*. Available at: https://www.gov.uk/become-apprentice
(Accessed: 09 May 2024).

HM Government (2012). *The Richard review of apprenticeships*. Available at:
https://www.gov.uk/government/news/the-richard-review-of-apprenticeships (Accessed: 09
May 2024).

Hordern, J. (2015) Higher apprenticeships in England: professional and vocational
formation. *International Journal of Training Research*, 13(3), pp. 174-193. Available at: DOI
10.1080/14480220.2015.1051350

Howlett, M. and Cashore, B. (2014) 'Conceptualizing public policy', in I. Engeli, I. and C. R. Allison,
C. (eds) *Comparative policy studies: conceptual and methodological challenges*.
London: Palgrave Macmillan UK (Research Methods Series), pp. 17–33.
Available at: DOI 10.1057/9781137314154_2

Hughes, C. and Saieva, G. (2019) 'Degree apprenticeships - an opportunity for all?',
Higher Education, Skills and Work-Based Learning, 9(2), pp. 225-236. Available at: DOI
10.1108/HESWBL-10-2018-0113

Hughes, C. and Saieva, G. (2021) 'The journey of higher degree apprenticeships' in D.A. Morley
and M.G. Jamil (eds) *Applied pedagogies for higher education*. Palgrave Macmillan, pp. 243-
266. Available at: DOI 10.1007/978-3-030-46951-1_11

Hupe, P. (2014) 'What happens on the ground: persistent issues in implementation research',
Public Policy and Administration, 29(2), pp. 164-182. Available at: DOI
10.1177/0952076713518339

Hupe, P. and Hill, M. (2016) ''And the rest is implementation' comparing approaches to what
happens in policy processes beyond great expectations', *Public Policy and Administration,*
31(2), pp. 103-121. Available at: DOI 10.1177/0952076715598828

Interagency Group on Technical and Vocational Education and Training (2017) '*Investing in work-based learning*'. Paris: UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000260677 (Accessed: on 09 May 2024).

Ireland, Government of. *Vocational Education Act.* (1930) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/1930/act/29 (Accessed: 09 May 2024).

Ireland, Government of. *Industrial Training Act.* (1967) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/1967/act/5/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Universities Act.* (1997) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/1997/act/24/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Qualifications (Education and Training) Act.* (1999) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/1999/act/26/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Qualifications and Quality Assurance (Education and Training) Act*. (2012) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/2012/act/28/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Education and Training Boards Act.* (2013) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/2013/act/11/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Further Education and Training Act.* (2013) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/2013/act/25/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Technological Universities Act.* (2018) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/2018/act/3/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Qualifications and Quality Assurance (Education and Training) (Amendment) Act*. (2019) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/2019/act/32/section/15/enacted/en/html (Accessed: 09 May 2024).

Ireland, Government of. *Higher Education Authority Act.* (2022) Dublin: Government Publications Office. Available at: https://www.irishstatutebook.ie/eli/2022/act/31/enacted/en/html (Accessed: 09 May 2024).

Irons, A. (2017) 'Reflection on higher degree apprenticeship development', *Higher Education, Skills and Work-Based Learning,* 7(1), pp. 112-122. Available at: DOI 10.1108/HESWBL-05-2016-0033

IUA (2022) *Funding the future - budget 2023 submission*. Available at:
https://www.iua.ie/wp-content/uploads/2022/08/IUA-Budget-2023-Submission.pdf
(Accessed: 09 May 2024).

IUA (2023) *Press release: Budget 2024 - positive funding move welcomed but falls well short of government promise.* Available at: https://www.iua.ie/press-releases/budget-2024-positive-funding-move-welcomed-but-falls-well-short-of-government-promise-unlocking-e1-5-billion-national-training-fund-surplus-a-missed-opportunity/ (Accessed: 09 May 2024).

James, M. (2006) 'Assessment, teaching and theories of learning', in J. Gardner (ed.) *Assessment and learning*. London: SAGE, pp. 47-60.

James, M. with Lewis, J. (2012) 'Assessment in harmony with our understanding of learning: problems and possibilities', in J. Gardner (ed.) *Assessment and learning*. London: SAGE, pp. 187-205.

Joint Committee on Business, Enterprise and Innovation (2018a) '*Ireland's skills needs: discussion', debate, 13 November*. Available at:
https://www.oireachtas.ie/en/debates/debate/joint_committee_on_business_enterprise_and_innovation/2018-11-13/3/ (Accessed: 09 May 2024).

Joint Committee on Business, Enterprise and Innovation (2018b) '*Ireland's skills needs: discussion', debate, 27 November*. Available at:
https://www.oireachtas.ie/en/debates/debate/joint_committee_on_business_enterprise_and_innovation/2018-11-27/4/ (Accessed: 09 May 2024).

Joint Committee on Education and Skills (2018a) '*Uptake of apprenticeships and traineeships: discussion', debate, 15 November*. Available at:
https://www.oireachtas.ie/en/debates/debate/joint_committee_on_education_and_skills/2018-11-15/3/ (Accessed: 09 May 2024).

Joint Committee on Education and Skills (2018b) '*Uptake of apprenticeships and traineeships: discussion', debate, 20 November*. Available at:
https://www.oireachtas.ie/en/debates/debate/joint_committee_on_education_and_skills/2018-11-20/4/ (Accessed: 09 May 2024).

Joint Committee on Education and Skills (2018c) '*Uptake of apprenticeships and traineeships: opening statement Ibec'*. Available at:
https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_education_and_skills/submissions/2018/2018-11-20_opening-statement-tony-donohoe-head-of-education-and-social-policy-ibec_en.pdf (Accessed: 09 May 2024).

Joint Committee on Education, Further and Higher Education, Research, Innovation and Science (2021a) '*Leaving certificate reform', debate, 02 November.* Available at:
https://www.oireachtas.ie/en/debates/debate/joint_committee_on_education_further_and_higher_education_research_innovation_and_science/2021-11-02/2/ (Accessed: 09 May 2024).

Joint Committee on Education, Further and Higher Education, Research, Innovation and Science (2021b) *SOLAS opening statement and submission*, *27 April.* Available at: https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_education_further_and_higher_education_research_innovation_and_science/submissions/2021/2021-04-27_opening-statement-and-submission-andrew-brownlee-ceo-solas_en.pdf (Accessed: 09 May 2024).

Joint Committee on Education, Further and Higher Education, Research, Innovation and Science (2024) '*European years of skills 2023', debate, 30 April.* Available at: https://www.oireachtas.ie/en/debates/debate/joint_committee_on_education_further_and_higher_education_research_innovation_and_science/2024-04-30/3/ (Accessed: 09 May 2024).

Konstantinou, I. and Miller, E. (2020) 'Investigating work-integrated learning and its relevance to skills development in degree apprenticeships', *Higher Education, Skills and Work-Based Learning*, 10(5), pp. 767-781. Available at: DOI 10.1108/HESWBL-05-2020-0112

Lambert, S. (2016) 'Are current accountability frameworks appropriate for degree apprenticeships?', *Higher Education, Skills and Work-Based Learning*, 6 (4), pp. 345-356. Available at: DOI 10.1108/HESWBL-05-2016-0027

Lasen, M., Evans, S., Tsey, K., Campbell, C. and Kinchin, I. (2018) 'Quality of WIL assessment design in higher education: a systematic literature review', *Higher Education Research & Development*, 37(4), pp. 788-804. Available at: DOI 10.1080/07294360.2018.1450359

Lauterbach, U. (2009) 'The pedagogy of apprenticeship' in R. Maclean and D. Wilson (eds) *International handbook of education for the changing world of work*. Springer: Dordrecht, pp. 1653-1668. Available at: DOI 10.1007/978-1-4020-5281-1_111

Lester, S. (2009) 'Routes to qualified status: practices and trends among UK professional bodies', *Studies in Higher Education* 34 (2), pp. 223-236. Available at: DOI 10.1080/03075070802528296

Lester, S., Bravenboer, D. and Webb, N. (2016) *Work-integrated degrees: context, engagement, practice and quality - a literature review for QAA*. Available at: https://devmts.org.uk/wid.pdf (Accessed: 09 May 2024).

Lester, S. (2020) 'Creating conditions for sustainable degree apprenticeships', *Higher Education, Skills and Work-Based Learning*, 10(5), pp. 701-714. Available at: DOI 10.1108/HESWBL-04-2020-0062

Lester, S. and Bravenboer, D. (2020) *Sustainable degree apprenticeships*. Centre for Degree Apprenticeships, Middlesex University. Available at: https://www.mdx.ac.uk/__data/assets/pdf_file/0033/565863/sustainable-degree-apprenticeships-2020.pdf (Accessed: 09 May 2024).

Leung, L. (2015) 'Validity, reliability, and generalizability in qualitative research', *Journal of Family Medicine and Primary Care*, 4(3), pp. 324-327. DOI 10.4103/2249-4863.161306

Li, J. and Pilz, M. (2021) 'International transfer of vocational education and training: a literature review'*, Journal of Vocational Education & Training*. Available at: DOI 10.1080/13636820.2020.1847566

Lillis, F. and Bravenboer, D. (2020) 'The best practice in work-integrated pedagogy for degree apprenticeships in a post-viral future', *Higher Education, Skills and Work-Based Learning,* 10(5), pp. 727-739. Available at: DOI 10.1108/HESWBL-04-2020-0071

Linehan, M. (2008) *Work based learning - graduating through the workplace*. Cork: CIT Press. Available at: https://arrow.tudublin.ie/cgi/viewcontent.cgi?article=1011&context=reaprepo (Accessed: 09 May 2024).

Lincoln, Y. and Guba, E.G. (1985) *Naturalistic inquiry*. Beverly Hills, CA: SAGE.

Lincoln, Y.S., Lynham, S.A. and Guba, E.G. (2018) 'Paradigmatic controversies, contradictions and emerging confluences, revisited', in N.K. Denzin and Y.S. Lincoln (eds) *The SAGE handbook of qualitative research*. 5th edn. Thousand Oaks, CA: SAGE, pp. 108-150.

Lingard, B. (2011) 'Policy as numbers: ac/counting for educational research', *The Australian Educational Researcher*, 38(4), pp. 355-382. Available at: DOI 10.1007/s13384-011-0041-9

Malmqvist, J., Hellberg, K., Möllås, G., Rose, R. and Shevlin, M. (2019) 'Conducting the pilot study: a neglected part of the research process? Methodological findings supporting the importance of piloting in qualitative research studies', *International Journal of Qualitative Methods*, *18*, pp. 1-11. Available at: DOI 10.1177/1609406919878341

Maloney, F. (2021) *Exploring further education and training: "who is the further education and training adult learner"?* EdD thesis. Dublin City University, Ireland. Available at: https://doras.dcu.ie/25322/2/Fiona%20Maloney%20Ed%20D%20Thesis.pdf (Accessed: 09 May 2024).

Markowitsch, J. and Grollmann, P. (2019) 'The changing role of vocational education and training in Europe: concepts and models, in F. Marhuenda and M.J. Chisvert-Tarazona (eds) *Pedagogical concerns and market demands in VET - proceedings of the 3rd Crossing Boundaries in VET conference. Vocational Education and Training Network,* pp. 390-395. Available at: https://doi.org/10.5281/zenodo.2641816 (Accessed: 09 May 2024).

Markowitsch, J. and Wittig, W. (2020) 'Understanding differences between apprenticeship programmes in Europe: towards a new conceptual framework for the changing notion of apprenticeship', *Journal of Vocational Education & Training*, 74(4), pp. 597-618. Available at: DOI 10.1080/13636820.2020.1796766

McAllum, K., Fox, S., Simpson, M. and Unson, C. (2019) 'A comparative tale of two methods: how thematic and narrative analyses author the data story differently', *Communication Research and Practice*, 5(4), pp. 358-375. Available at: DOI 10.1080/22041451.2019.1677068

McGuinness, S., Bergin, A., Kelly, E., McCoy, S., Smyth, E., Whelan, A. and Banks, J. (2014) *Further education and training in Ireland: past, present and future*. Dublin: The Economic and Social Research Institute. Available at: https://www.esri.ie/publications/further-education-and-training-in-ireland-past-present-and-future (Accessed: 09 May 2024).

McLeod, J. (2001) *Qualitative research in counselling and psychotherapy.* London. SAGE.

Mercer, J. (2007) 'The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas', *Oxford Review of Education*, *33*(1), pp. 1-17. Available at: DOI [10.1080/03054980601094651](10.1080/03054980601094651)

Miles, M.B. and Huberman, A.M. (1994) *Qualitative data analysis: an expanded sourcebook.* 2nd edn. London: SAGE

Minton, A. and Lowe, J. (2019) 'How are universities supporting employers to facilitate effective "on the job" learning for apprentices?', *Higher Education, Skills and Work-Based Learning*, 9(2,) pp. 200-210. Available at: DOI 10.1108/HESWBL-10-2018-0099

Mordhorst, L. and Jenert, T. (2022) 'Curricular integration of academic and vocational education: a theory-based empirical typology of dual study programmes in Germany', *Higher Education,* 85, pp. 1257-1279*.* Available at: DOI [10.1007/s10734-022-00889-7](10.1007/s10734-022-00889-7)

Morse, J.M. (1997) '"Perfectly healthy, but dead": the myth of inter-rater reliability', *Qualitative Health Research*, 7(4), pp. 445-447. Available at: DOI [10.1177/104973239700700401](10.1177/104973239700700401)

Morse, J.M., Barrett, M., Mayan, M., Olson, K. and Spiers, J. (2002) 'Verification strategies for establishing reliability and validity in qualitative research', *International Journal of Qualitative Methods*, 1(2), pp. 13-22. Available at: DOI [10.1177/160940690200100202](10.1177/160940690200100202)

Moss, P.M. and Haertel, E. H. (2016) '*Engaging Methodological Pluralism*', in C. Bell and D.H. Gitomer (eds) *Handbook of research on teaching*. 5th edn. Washington, District of Columbia: American Educational Research Association, pp. 127-247.

Mulder, M. (2017) 'Workplace learning and competence development', *The Journal of Agricultural Education and Extension*, 23(4), pp. 283-286. Available at: DOI [10.1080/1389224X.2017.1348030](10.1080/1389224X.2017.1348030)

Mulkeen, J., Abdou, H. A., Leigh, J. and Ward, P. (2017) 'Degree and higher level apprenticeships: an empirical investigation of stakeholder perceptions of challenges and opportunities', *Studies in Higher Education*, 44(2), pp. 333-346. Available at: DOI [10.1080/03075079.2017.1365357](10.1080/03075079.2017.1365357)

Murphy, R. (2020) *Trades and apprenticeship survey 2020 focus on wet trades*. Dublin: Construction Industry Federation. Available at: https://arrow.tudublin.ie/beschrecrep/23/#:~:text=CIF%20commissioned%20the%20Trades%20and,Painting%20and%20Decorating%20and%20Plastering (Accessed: 09 May 2024).

NAO (2023) *Progress report 2022 and plans 2023.* Available at: https://content.apprenticeship.ie/f/83224/x/17217314b4/nationalapprenticeshipoffice_annualreport2022plans2023.pdf (Accessed: 09 May 2024).

NAO (2024) *Progress report 2023 and plans 2024*. Available at: https://content.apprenticeship.ie/f/83224/x/cae1e47a17/nationalapprenticeshipoffice_progressreport2023-plans2024.pdf (Accessed: 09 May 2024).

National Forum for Enhancement of Teaching and Learning in Higher Education (2017) '*Work-based assessment of/for/as learning*'. Available at: https://www.teachingandlearning.ie/publication/work-based-assessment-of-for-as-learning-context-purposes-and-methods/ (Accessed: 09 May 2024).

Nawaz, R., Edifor, E.E., Holland, S.R., Cao, Q. and Liu, L.S. (2022) 'The impact of degree apprenticeships: analysis, insights and policy recommendations', *Transforming Government: People, Process and Policy*, 17(3), pp. 372-386. Available at: https://www.emerald.com/insight/content/doi/10.1108/tg-07-2022-0105/full/html (Accessed: 09 May 2024).

Newton, B., Hirst, A. and Miller, L. (2019) 'How do we solve a problem like apprenticeships?', *International Journal of Training and Development*, 23(1), pp. 1-6. Available at: DOI 10.1111/ijtd.12147

NTO (2024) *About NTO.* Available at: https://nto.hea.ie/about/ *(Accessed: 09 May 2024).*

Nyhan, B., (2009) 'Creating the social foundations for apprenticeship in Ireland', *Journal of European Industrial Training*, 33(5), pp. 457-469. Available at: DOI 10.1108/03090590910966599

O'Connor, L. and Harvey, N. (2001) 'Apprenticeship training in Ireland: from time-served to standards based; potential and limitations for the construction industry', *Journal of European Industrial Training*, 25(6), pp. 332-342. Available at: DOI 10.1108/EUM0000000005603

O'Connor, L. (2003) *A socio-technical analysis of the standards based apprenticeship in Ireland: a case study of the construction industry*. EdD thesis. University of Leicester, UK. Available at: https://figshare.le.ac.uk/articles/thesis/A_Socio_-_Technical_Analysis_of_the_Standards_Based_Apprenticeship_in_Ireland_a_case_study_of_the_construction_industry/10096487 (Accessed: 09 May 2024).

O'Connor, L. (2006) 'Meeting the skills needs of a buoyant economy: apprenticeship - the Irish experience', *Journal of Vocational Education & Training*, 58(1), 31-46. Available at: DOI 10.1080/13636820500478967

OECD (2010) *Vocational education and training in Ireland strengths, challenges and recommendations*. Available at: https://web-archive.oecd.org/2012-06-14/105605-45399591.pdf (Accessed: 09 May 2024).

OECD (2018) *Seven questions about apprenticeships: answers from international experience*. OECD Reviews of Vocational Education and Training, OECD Publishing, Paris. Available at: DOI 10.1787/9789264306486-en

OECD (2023) *OECD skills strategy Ireland: assessment and recommendations*. OECD Skills Studies, OECD Publishing, Paris. Available at: https://www.oecd.org/en/publications/oecd-skills-strategy-ireland_d7b8b40b-en.html (Accessed: 09 May 2024).

Office of Government Procurement (2019) *Request for tender: level 6 comparison*. Available at: https://irl.eu-supply.com/ctm/Supplier/PublicPurchase/158242/0/0?returnUrl=transactions.asp (Accessed: 09 May 2024).

O'Leary, Z. (2004) The essential guide to doing research. Thousand Oaks, CA: SAGE.

Olsen, D. and Tikkanen, T. (2018) 'The developing field of workplace learning and the contribution of PIAAC', *International Journal of Lifelong Education*, 37(5), pp. 546-559. Available at: https://doi.org/10.1080/02601370.2018.1497720 (Accessed: 09 May 2024).

Ó Murchadha, E. and Murphy, R. (2016) 'Rethinking apprenticeship training for the construction industry in Ireland', *32nd Annual ARCOM Conference*. Manchester, UK, 5-7 September 2016. pp. 384-392. Available at: https://arrow.dit.ie/cgi/viewcontent.cgi?article=1105&context=beschreccon (Accessed: 09 May 2024).

Ó Murchadha, E. and Murphy, R. (2018) *Trades and apprenticeships skills survey: the employers perspective*. Dublin: Construction Industry Federation. Available at: https://arrow.tudublin.ie/cgi/viewcontent.cgi?article=1019&context=beschrecrep (Accessed: 09 May 2024).

Ó Murchadha, E. (2022) *A socio-ecological, multi-stakeholder investigation of apprenticeship training engagement in the Irish construction industry*. PhD thesis. TU Dublin, Ireland. Available at: https://arrow.tudublin.ie/cgi/viewcontent.cgi?article=1147&context=engdoc (Accessed: 09 May 2024).

O'Sullivan, R. (2017) *From the 'Cinderella' to the 'fourth pillar' of the Irish education system - a critical analysis of the evolution of further education and training in Ireland*. PhD thesis. Trinity College Dublin, Ireland. Available at: http://www.tara.tcd.ie/handle/2262/82824 (Accessed: 09 May 2024).

Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N. and Hoagwood, K. (2015) 'Purposeful sampling for qualitative data collection and analysis in mixed method implementation research', *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), pp. 533-544. Available at: DOI 10.1007/s10488-013-0528-y

Parahoo, K. (1997) *Nursing research: principles, process, Issues*. London: Macmillan.

Parkinson, P. and Dziallas, S. (2024) 'Institutional perspectives on formal work-based learning programs in the UK', *SIGCSE 2024*: *proceedings of the 55th ACM Technical Symposium on Computer Science Education.* Portland, OR, USA, 20-23 March 2024. pp. 1028-1034. Available at: DOI 10.1145/3626252.3630879

Patton, M.Q. (1999) 'Enhancing the quality and credibility of qualitative analysis', *Health Services Research,* 34(5), pp. 1189-1208. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/ (Accessed: 09 May 2024).

Perusso, A. and Wagenaar, R. (2021) 'The state of work-based learning development in EU higher education: learnings from the WEXHE project', *Studies in Higher Education*, 47(7), pp. 1423-1439. Available at: DOI 10.1080/03075079.2021.1904233

Polit, D.F. and Beck, C.T. (2014) *Essentials of nursing research: appraising evidence for nursing practice*. Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins Health.

Powell, L., Graf, L., Fortwengel, J. and Bernhard, N. (2014) *Dual study programmes in global context: Internationalisation in Germany and transfer to Brazil, France, Qatar, Mexico, and the US*. Bonn: Deutscher Akademischer Austauschdienst (DAAD - German Academic Exchange

Service) and Stifterverband für die Deutsche Wissenschaft (Donors' Association for German Science), pp. 69-129.
Available at: https://www.semanticscholar.org/paper/Dual-Study-Programmes-in-Global-Context%3A-in-Germany-Gr%C3%A1f-Powell/db1fbc594099a3be02ba63ae018c23a76221f6c1 (Accessed: 09 May 2024).

Powell, P. and Walsh, A. (2018) 'Whose curriculum is it anyway? Stakeholder salience in the context of degree apprenticeships', *Higher Education Quarterly*, 72(2), pp. 90-106.
Available at: DOI 10.1111/hequ.12149

Pringle, J., Drummond, J, McLafferty, E. and Hendry, C. (2011) 'Interpretative phenomenological analysis: a discussion and critique', *Nurse Researcher*, 18(3), pp. 20-24. Available at: DOI 10.7748/nr2011.04.18.3.20.c8459

QAA (2018) *UK quality code for higher education advice and guidance: work-based learning*.
Available at: https://www.qaa.ac.uk/quality-code/advice-and-guidance/work-based-learning (Accessed: 09 May 2024).

QAA (2022) *Higher education in apprenticeships characteristics statement*. Available at:
https://www.qaa.ac.uk/quality-code/characteristics-statements/higher-education-in-apprenticeships-characteristics-statement#:~:text=Characteristics%20Statements%20describe%20the%20distinctive,not%20include%20subject%20level%20detail
(Accessed: 09 May 2024).

QDA Training (2013a) *Day 1 - introduction to NVivo: setting up your qualitative database*. Dublin: QDA Training.

QDA Training (2013b) *Day 2 - NVivo underway: analysing your data*. Dublin: QDA Training.

QQI (2016) *Topic-specific statutory quality assurance guidelines for providers of statutory apprenticeship programmes*. Available at:
https://www.qqi.ie/Publications/Publications/Apprenticeship%20Programmes%20QAG%20Topic-Specific.pdf (Accessed: 09 May 2024).

QQI (2018) *Green paper on assessment of learners and learning*. Available at:
https://www.qqi.ie/Downloads/Green%20Paper%20Assessment%20of%20Learners%20and%20Learning%20March%202018.pdf (Accessed: 09 May 2024).

QQI (2019) *Green paper on assessment of learners and learning: stakeholder feedback report*.
Available at: https://www.qqi.ie/Downloads/QQI%20Green%20Paper%20Report.pdf (Accessed: 09 May 2024).

QQI (2021a) *Designated awarding bodies*. Available at:
https://www.qqi.ie/what-we-do/the-qualifications-system/listed-awarding-bodies (Accessed: 09 May 2024).

QQI (2021b) *QQI insight on assessment 2021*. Available at:
https://www.qqi.ie/sites/default/files/2022-01/qqi-insight-on-assessment.pdf (Accessed: 09 May 2024).

QQI (2021c) *About QQI.* Available at: https://www.qqi.ie/about-us (Accessed: 09 May 2024).

QQI (2021d) *Evaluation of the comparability of the advanced certificate and higher certificate qualifications*. Available at: https://www.qqi.ie/sites/default/files/2022-04/evaluation-of-nfq-level-6-awards.pdf (Accessed: 09 May 2024).

QQI (2022a) *QQI insight: a review of consortia-led apprenticeships in Ireland*. Available at: https://www.qqi.ie/sites/default/files/2022-11/QQI%20Insight%20A%20Review%20of%20Consortia-Led%20Apprenticeships%20in%20Ireland.pdf (Accessed: 09 May 2024).

QQI (2022b) *National framework of qualifications*. Available at: https://www.qqi.ie/sites/default/files/2022-01/nfq-fan-postcard.pdf (Accessed: 09 May 2024).

QQI (2023a) *QQI insight: quality in Irish higher education institutions*. Available at: https://www.qqi.ie/sites/default/files/2023-10/quality-in-irish-higher-education-institutions.pdf (Accessed: 09 May 2024).

QQI (2023b) *The NFQ: a reason to celebrate.* Available at: https://www.qqi.ie/news/the-nfq-a-reason-to-celebrate (Accessed: 09 May 2024).

QQI (2024) *RFT: statutory QA guidelines on work-integrated learning*. Available at: https://www.qqi.ie/news/rft-statutory-qa-guidelines-on-work-integrated-learning (Accessed: 09 May 2024).

Quew-Jones, R.J. (2023) 'Degree apprenticeships in the UK higher education institutions - are they viable?: integrative literature review', *Higher Education, Skills and Work-Based Learning*, 13(6), pp. 1250-1268. Available at: DOI 10.1108/HESWBL-02-2023-0026

Reynolds, J. and Saunders, M. (1987) 'Teacher responses to curriculum policy: beyond the 'delivery' metaphor', in J. Calderhead (ed.) *Exploring teachers' thinking*. London: Cassell Educational Ltd., pp. 195-214.

Richards, L. (2015) *Handling qualitative data*. 3rd edn. London: SAGE.

Riessman, C.K. (2008) *Narrative methods for the human sciences*. Thousand Oaks, CA: SAGE.

Robson, C. and McCartan, K. (2016) *Real world research: a resource for users of social research methods in applied settings.* 4th edn. Chichester: John Wiley Sons Ltd.

Rowe, L., Perrin, D. and Wall, T. (2016) 'The chartered manager degree apprenticeship: trials and tribulations', *Higher Education, Skills and Work-Based Learning*, 6(4), pp. 357-369. Available at: DOI 10.1108/HESWBL-05-2016-0034

Rowe, L. and Moss, D. (2017) 'The challenges of managing degree apprentices in the workplace a manager's perspective', *Journal of Work-Applied Management*, 9(2), pp. 185-199. Available at: DOI 10.1108/JWAM-07-2017-0021

Rowe, L. (2018) 'Managing degree apprenticeships through a work based learning framework: opportunities and challenges' in D. A. Morley (ed.) *Enhancing employability in higher education through work based learning*. Available at: DOI 10.1007/978-3-319-75166-5_4

Ryan, J.G. (1993) *Apprenticeship in Ireland: an historical analysis*. PhD thesis. Maynooth University, Ireland. Available at: https://mural.maynoothuniversity.ie/9397/1/John%20Gerald%20Ryan%20Thesis.pdf (Accessed: 09 May 2024).

Ryan, P. (2000) 'The institutional requirements of apprenticeship: evidence from smaller EU countries', *International Journal of Training & Development*, 4(1), pp. 42-65. Available at: DOI 10.1111/1468-2419.00095

Ryan, C., Faherty, D., Spillane, J.P., Bradley, J., Issa, M. and McMahon, E. (2022) 'The value proposition of construction apprenticeships in Ireland: a construction management university student perspective', *Higher Education, Skills and Work-Based Learning,* 13(1), pp. 80-96. Available at: DOI 10.1108/HESWBL-05-2022-0120

Sabatier, P. A. (1986) 'Top-down and bottom-up approaches to implementation research: a critical analysis and suggested synthesis', *Journal of Public Policy*, 6(1), pp. 21.48. Available at: https://www.jstor.org/stable/3998354 (Accessed: 09 May 2024).

Saunders, M. (2006) 'From 'organisms' to 'boundaries': the uneven development of theory narratives in education, learning and work connections', *Journal of Education and Work*, 19(1), pp. 1-27. Available at: DOI 10.1080/13639080500523026

Saunders, M. and Sin, C. (2015) 'Middle managers' experience of policy implementation and mediation in the context of the Scottish quality enhancement framework', *Assessment & Evaluation in Higher Education*, 40(1), pp. 135-150. Available at: DOI 10.1080/02602938.2014.892056

Šćepanović, V. and Martín Artiles, A. (2020) 'Dual training in Europe: a policy fad or a policy turn?', *Transfer: European Review of Labour and Research*, *26*(1), pp. 15- 26. Available at: DOI 10.1177/1024258919898317

Sefotho, M. M. (2015) 'A researcher's dilemma: philosophy in crafting dissertations and theses', *Journal of Social Sciences*, 42(1-2), pp. 23-36. Available at: https://repository.up.ac.za/bitstream/handle/2263/52044/Sefotho_Reseachers_2015.pdf;jsessionid=31CF76397D723331C598C10BD3AF7238?sequence=1 (Accessed: 09 May 2024).

Sevens, T. and Nightingale, J. (2019) 'Trailblazers: stakeholder motivations for developing degree apprenticeships for the radiography profession', *Radiography*, 26(1), pp. 15-21. Available at: DOI 10.1016/j.radi.2019.10.006

Sheerin, C. and Brittain, J. (2023) 'Irish apprenticeships in financial services: negotiating gender and navigating social justice', *Higher Education, Skills and Work-Based Learning*, 14(3), pp. 659-680. Available at: DOI 10.1108/HESWBL-07-2023-0183

Sheridan, I. and Linehan, M. (2011) *Roadmap for employment-academic partnerships. Report: work placement in third-level programmes*. Cork: CIT Press. Available at: https://arrow.tudublin.ie/reaprepo/6/ (Accessed: 09 May 2024).

Sheridan, I., Barry-Murphy, C. and Madden, H. (2013) 'Developing the external engagement process in higher education through effective change and technology', *Irish Business Journal*, 8(1), pp. 63-76. Available at: https://sword.cit.ie/irishbusinessjournal/vol8/iss1/5/ (Accessed: 09 May 2024).

Sheridan, I. and Fallon, D. (2018) 'University-industry collaboration: where to next?', *2018 University-Industry Interaction Conference*. London, United Kingdom, June 2018. Amsterdam, The Netherlands: UIIN, pp. 16-27. Available at: https://sword.cit.ie/cgi/viewcontent.cgi?article=1003&context=e3lcp (Accessed: 09 May 2024).

Skillnet Ireland (nd) *Skillnet Ireland*. Available at: https://www.skillnetireland.ie/about/ (Accessed: 09 May 2024).

Smith, E. (2010) 'Apprenticeships', in P. Peterson, E. Baker and B. McGaw (eds) *International encyclopaedia of education*. Elsevier Ltd. Available at: https://www.researchgate.net/publication/290170563_Apprenticeships (Accessed: 09 May 2024).

Smith, E. (2019) 'Apprenticeships and 'future work': are we ready?' *International Journal of Training and Development*, 32(1), pp. 69-88. Available at: DOI 10.1111/ijtd.12145

Smith, J.A. (2011) 'Evaluating the contribution of interpretative phenomenological analysis', *Health Psychology Review*, 5(1), pp. 9-27. Available at: DOI 10.1080/17437199.2010.510659

Smith, S., Caddell, M., Taylor-Smith, E., Smith, C. and Varey, A. (2021) 'Degree apprenticeships - a win-win model? A comparison of policy aims with the expectations and experiences of apprentices', *Journal of Vocational Education & Training*, 73(4), pp. 505-525. Available at: DOI 10.1080/13636820.2020.1744690

SOLAS (2017) *Barriers to further education and training with particular reference to long term unemployed persons and other vulnerable individuals*. Available at: https://www.solas.ie/f/70398/x/432b2fa3ba/barriers-to-fet-final-june-2017.pdf (Accessed: 09 May 2024).

SOLAS (2018) *Review of pathways to participation in apprenticeship.* Available at: https://www.solas.ie/f/70398/x/fb640012f5/pathwaysapprenticeshipreviewnov18.pdf (Accessed: 09 May 2024).

SOLAS (2020a) *Future FET: transforming learning - the national further education and training (FET) strategy*. Available at: https://www.solas.ie/f/70398/x/64d0718c9e/solas_fet_strategy_web.pdf (Accessed: 09 May 2024).

SOLAS (2020b) This is *FET facts and figures 2019*. Dublin: SOLAS. Available at: https://www.solas.ie/f/70398/x/1ba83e5971/15429_solas_facts_report_2019_web.pdf (Accessed: 09 May 2024).

SOLAS (2021a) *Annual report and accounts 2020*. Dublin: SOLAS. Available at: https://www.solas.ie/f/70398/x/47b9ba57fa/15514_solas_annual_report_2020_web.pdf (Accessed: 09 May 2024).

SOLAS (2021b) *Corporate plan 2021-2023*. Dublin: SOLAS. Available at:
https://www.solas.ie/f/70398/x/bf6d63a7fa/solas-corporate-plan-2021-2023.pdf
(Accessed: 09 May 2024).

SOLAS (2023) *Annual report and accounts 2022*. Dublin: SOLAS. Available at:
https://www.solas.ie/f/70398/x/0ba8eca526/solas_annual_report.pdf (Accessed: 09 May
2024).

SOLAS (2024) Monitoring Ireland's skills supply 2023. Available at:
https://www.solas.ie/f/70398/x/9345efd32c/monitoring-irelands-skills-supply-2023.pdf
(Accessed: 09 May 2024).

Stake, R.E. (1995) *The art of case study research*. Thousand Oaks, CA: SAGE.

Steedman, H. (2012) 'Overview of apprenticeship systems and issues ILO contribution to the
G20 Task Force on Employment', *SSRN Electronic Journal*. Available at: DOI
10.2139/ssrn.2283123

Strauss, A. and Corbin, J. (1998) *Basics of qualitative research: techniques and procedures for
developing grounded theory*. Thousand Oaks, CA: SAGE.

Strickland, A., Simons, M., Harris, R., Robertson, I. and Harford, M. (2001) 'On- and off-job
approaches to learning and assessment in apprenticeships and traineeships', in
N. Smart (ed.) *Australian apprenticeships: research readings*. Leabrook, S. Aust.: National
Centre for Vocational Education Research (Australia), pp. 199-219. Available at:
https://www.ncver.edu.au/research-and-statistics/publications/all-publications/australian-
apprenticeships-research-readings (Accessed: 09 May 2024).

Tanggaard, L. and Elmholdt, C. (2008) 'Assessment In practice: an inspiration from
apprenticeship', *Scandinavian Journal of Educational Research*, 52(1), pp. 97-116. Available
at: DOI 10.1080/00313830701786719

Taylor-Smith, E., Smith, S., Fabian, K. and Bratton, A. (2023) 'Apprentices' perspectives of the
tripartite collaboration at the heart of degree apprenticeships: a longitudinal study', *Journal
of Workplace Learning*, 35(8), pp. 779-795. Available at: DOI 10.1108/JWL-01-2023-0007

Technological Universities Research Network (2019) *Technological universities: connectedness and
collaboration through connectivity. Report of the Technological Universities Research
Network to the Department of Education and Skills*. Available at:
https://assets.gov.ie/39280/174b686cce5741a896c7264fed7edfd9.pdf (Accessed: 09 May
2024).

Teddlie, C. and Tashakkori, A. (2012) 'Common "core" characteristics of mixed methods research: a
review of critical issues and call for greater convergence', *American Behavioral Scientist*,
56(6), pp. 774-788. Available at: DOI 10.1177/0002764211433795

THEA (2018) *Press release: submission on Indecon review of the National Training Fund.* Available at:
http://www.thea.ie/press-releases/submission-on-indecon-review-of-the-national-training-
fund/ (Accessed: 09 May 2024).

THEA (2022) *Budget 2023 submission from the Technological Higher Education Association*. Available at: https://www.thea.ie/contentFiles/THEA_Budget_2023.pdf (Accessed: 09 May 2024).

THEA (2023) *Press release: the Technological Higher Education Association (THEA) offers a qualified welcome for the Higher Education Provisions within Budget 2024.* Available at: https://www.thea.ie/press-releases/the-technological-higher-education-association--thea--offers-a-qualified-welcome-for-the-higher-education-provisions-within-budget-2024/ (Accessed: 09 May 2024).

Thoma, B. (2016) *The Irish and the Japanese apprenticeship systems: a comparative study.* Doctoral thesis. Liverpool John Moores University, UK. Available at: http://researchonline.ljmu.ac.uk/5247/ (Accessed: 09 May 2024).

Thomas, G. and James, D. (2006) 'Reinventing grounded theory: some questions about theory, ground and discovery', *British Educational Research Journal*, 32(6), pp. 767-795. Available at: DOI 10.1080/01411920600989412

Thorn, R. (2018) *No artificial limits: Ireland's regional technical colleges*. Dublin: Institute of Public Administration.

Thorne, S., Stephens, J. and Truant, T. (2016) 'Building qualitative study design using nursing's disciplinary epistemology', *Journal of Advanced Nursing*, 72(2), pp. 451-460. Available at: DOI 10.1111/jan.12822

UCAS (nd) *Degree apprenticeships*. Available at: https://www.ucas.com/apprenticeships/what-you-need-know-about-apprenticeships/degree-apprenticeships-0 (Accessed: 09 May 2024).

Valiente, O. and Scandurra, R. (2017) 'Challenges to the implementation of dual apprenticeships in OECD countries: a literature review', in M. Pilz (ed.) *Vocational education and training in times of economic crisis: lessons from around the world.* Dordrecht: Springer. TVET series; No. 24, pp. 41-57. Available at: https://link.springer.com/chapter/10.1007/978-3-319-47856-2_3#Sec3 (Accessed: 09 May 2024).

Vanderhoven, E. (2023) 'Unpacking the global apprenticeship agenda: a comparative synthesis of literature from international organisations in the education policy field', *Globalisation, Societies and Education*, pp. 1-18. Available at: DOI 10.1080/14767724.2023.2252358

van Teijlingen, E. and Hundley, V. (2001) 'The importance of pilot studies', *Social Research Update, Winter*, ISSN: 1360-7898. Available at: https://sru.soc.surrey.ac.uk/SRU35.html (Accessed: 09 May 2024).

van Teijlingen, E. and Hundley, V. (2002) The importance of pilot studies. *Nursing Standard*, 16(40), pp. 33-36. Available at: DOI 10.7748/ns2002.06.16.40.33.c3214

Vaismoradi, M., Turunen, H. and Bondas, T. (2013) 'Content analysis and thematic analysis: implications for conducting a qualitative descriptive study', *Nursing and Health Sciences*, 15(3), pp. 398-405. Available at: DOI 10.1111/nhs.12048

von Prondzynski, F. (1992) 'Ireland between centralism and market', in A. Ferner and R. Hyman (eds) *Industrial relations in the new Europe*. Oxford: Blackwell.

Vossiek, J. (2019) 'Political parties, organized interests and collective sill formation: lessons from liberal market economics', in B.E. Stalder and C. Nagele (eds) *Trends in vocational education and training research, Vol. II. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET),* pp. 429-437. Available at: DOI 10.5281/zenodo.3371621

Walker, W. (2005) 'The strengths and weaknesses of research design involving quantitative measures', *Journal of Research in Nursing*, 10(5), pp. 571-582. Available at: DOI 10.1177/136140960501000505

Walsh, J. (2018) *Higher education in Ireland, 1922-2016*. London: Palgrave Macmillan UK. Available at: DOI 10.1057/978-1-137-44673-2

Walsh, B. (ed.) (2022) *Education policy in Ireland since 1922*. London: Palgrave Macmillan UK. Available at: DOI 10.1007/978-3-030-91775-3

Watkins (2003) *Learning: a sense-maker's guide*. London: Association of Teachers and Lecturers. Available at: https://www.researchgate.net/publication/257931048_Learning_A_Sense-Maker's_Guide (Accessed: 09 May 2024).

Welbourn, J., Devins, D. and Reynolds, M. (2019) 'Degree apprenticeships: reflecting on university-employer partnership practice to improve workforce development in the United Kingdom', *Industry and Higher Education*, 33(6), pp. 403-413. Available at: DOI 10.1177/0950422219877594

White, T. (2001) *Higher education in Ireland from 1960 to 2000*. Dublin: Institute of Public Administration.

Winberg, C., Finn, F., Sheridan, I., Engel-Hills, P., Jacobs, H., and Kent, E. (2022) 'Enhancing work-integrated learning through south-north collaboration: a comparative contextual analysis', *International Journal of Work-Integrated Learning*, 23 (4), pp. 463-479. Available at: https://www.ijwil.org/files/IJWIL_23_4_463_479.pdf (Accessed: 09 May 2024).

Yin, R. K. (1984) *Case study research: design and methods*. Beverly Hills, CA: SAGE.

Yin, R.K. (2018) *Case study research and applications: design and methods*. 6th edn. Los Angeles: SAGE.

Appendix A Milestones, main stakeholders, and HEIs in new apprenticeship

A1.1 Introduction

In the past 50 years or so the national apprenticeship system in Ireland has gone through several formal national-level reviews that have led to major changes in the way in which apprenticeship is designed, developed, and delivered. These include a formal review of apprenticeship training in Ireland in 2013, and the subsequent introduction of the new consortium-led model of apprenticeship in 2015. Further details of milestones in the development of the consortium-led model of apprenticeship are provided below, as well as main stakeholders and their roles, HEI coordinating providers involved in consortium-led apprenticeship, and apprenticeship in a unified tertiary education system.

A1.2 Milestones and features of the consortium-led model of apprenticeship

Key milestones in the recent development of apprenticeship policy and practice in Ireland are presented in Table A1.1. These include the review of apprenticeship training in Ireland and publication of a review report in 2013 (DES, 2013a), subsequent publication of an Apprenticeship Implementation Plan in 2014 (DES, 2014a), implementation of a new consortium-led model of apprenticeship in 2016, publication of an Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020 in 2017 (DES, 2017a), and a consultation process to inform the creation of an Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2020a) which was published in April 2021 (DFHERIS, 2021a).

Table A1.1: A decade of developments: recent milestones in apprenticeship policy and practice in Ireland 2013-2023		
Date		**Milestone**
Review of Apprenticeship Training in Ireland and introduction of new consortium-led model of apprenticeship		
2013	May	Ministerial announcement of a review of apprenticeship training in Ireland Publication of 'Background Issues Paper' by Technical Group
	June	Development of consultation framework by Review Group: written invitation issued to 128 named organisations and public advertisement placed in national newspapers inviting submissions
	October	Receipt of written submissions
	October to December	Panel of representatives of Review Group and Technical Group meet with 25 named organisations
	December	Publication of Review of Apprenticeship Training in Ireland report
2014	June	**Publication of Apprenticeship Implementation Plan** announcing imminent introduction of new model of apprenticeship
	November	Establishment of Apprenticeship Council
2015	January	**First public call for new apprenticeship proposals issued**
	June	Report from Apprenticeship Council to the Minister of Education and Skills on new apprenticeship proposals
	July	**Announcement of Ministerial approval of development funding for 25 specified new apprenticeship proposals**

Implementation of new consortium-led model of apprenticeship		
2016	September and November	**Commencement of first two new apprenticeships** (Insurance Practitioner, and Industrial Electrical Engineer, both in the higher education sector)
2017	January	**Publication of Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020**, including 10-step path for development of new apprenticeships
	May	**Second public call for new apprenticeship proposals issued**
		Publication of handbook for Developing a National Apprenticeship
	December	**Announcement of Ministerial approval of development funding for 26 specified apprenticeship proposals**
	-	No further public calls for new apprenticeship proposals issued; instead, an 'initial proposal guidance document' was published in March 2020 and an 'initial proposal form' subsequently published 'for groups who wish to make a proposal' for a new apprenticeship (i.e. open initial proposal submission process)
Action Plan for Apprenticeship 2021-2025		
2020	July	**Publication of Consultation Paper** to inform proposed Action Plan 2021-2025, including 29 questions under seven headings: definition of apprenticeship; legislation; governance structures; development and delivery of apprenticeships; funding of apprenticeship; supports for employers; and increasing participation
	August	**Establishment of the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS)**
	September	**Written submissions received in response to Consultation Paper** to inform proposed Action Plan 2021-2025
	September	Consultation survey issued to employers (from Regional Skills Fora to members)
	October	Consultation survey issued to registered apprentices (from SOLAS)
	November	Information session on preliminary findings from consultation process hosted by DFHERIS; intention stated to follow up with some stakeholders for 'clarification meetings' regarding submissions
2021	April	**Publication of Action Plan for Apprenticeship 2021-2025** **Publication of written submissions in response to Consultation Paper**
Establishment of new national-level organisations and developments on the creation of a planned new single integrated apprenticeship system		
2022	January	**Establishment of National Apprenticeship Office (NAO)**
	March	**Establishment of National Apprenticeship Alliance (NAA, replacing the Apprenticeship Council)**
2023	January	**Publication of first NAO Annual Report (Progress Report 2022 and Plans 2023)** **Publication of updated handbook for Developing and Delivering National Apprenticeships in Ireland**
	July	**Publication of update on the creation of a single integrated national apprenticeship system**
	December	**73 'current apprenticeships'** listed on Generation Apprenticeship (apprenticeship.ie) website, including existing 25 craft apprenticeships and 48 new consortium-led apprenticeships **22 'apprenticeships in development'** listed on website
2024	January	**Publication of second NAO Annual Report (Progress Report 2023 and Plans 2024)**
	February	**Publication of call for input to initial phase of public consultation on creating a single integrated national apprenticeship system**

SOLAS is the national statutory and regulatory authority for all statutory apprenticeship.

SOLAS is also the coordinating provider - meaning the 'ultimately responsible' provider (QQI, 2016, p. 8) - for all craft apprenticeships. All craft apprenticeships lead to an advanced certificate which is awarded by QQI, the State agency responsible for the external quality assurance of further and higher education and training in Ireland (QQI, 2021c).

The off-the-job element of training on craft apprenticeships is delivered by both ETBs (operating in the FET sector) and the IoTs and TUs (in the higher education sector) on behalf of SOLAS in its role as the coordinating provider for craft apprenticeship. Off-the-job providers of craft apprenticeships are therefore de facto 'subcontractors' in the apprenticeship process, in the sense that they are

> provided with trainee apprentices by a State agency [currently SOLAS]
> either on block or day release for the classroom, workshop and
> laboratory-based components of their training, and [they teach].....a
> curriculum that was centrally designed. (Thorn, 2018, p. 143)

Although the IoTs and TUs in the higher education sector provide two of the three phases of off-the-job training in craft apprenticeships, this apprenticeship provision and its associated award - a level 6 advanced certificate known as the Advanced Certificate Craft - are categorised as 'further education and training' in the NFQ (QQI, 2022b). According to the International Standard Classification of Education (ISCED) coding, further education and training in Ireland, including craft apprenticeship, is classified as 'non-tertiary' education (see also Appendix B for further details).

The craft model of apprenticeship accounts for most statutory apprentice registrations to date as well as most of the targeted number of apprentice registrations in the Action Plan for Apprenticeship 2021-2025. Craft apprenticeships are focused mainly on construction-related occupations, they are of 4 years' duration, lead to an award at level 6 on the NFQ, and they contain a total of seven discrete phases, four of which are on-the-job and three off-the-job.

The new, consortium-led apprenticeships involve greater flexibility in terms of the sectors and occupations involved, as well as of the content, structure, duration, target groups, providers, and associated governance arrangements, and they lead to awards at levels 5 to 10 on the National Framework of Qualifications. Both the craft and consortium-led models of apprenticeship are currently in operation, with some employers and some TUs involved in both models.

At end 2023, some 73 statutory apprenticeship programmes were reported as current apprenticeships (Generation apprenticeship, 2024e), 25 of which were craft apprenticeships, and the remainder consortium-led apprenticeships. There is a commitment however to create 'a single apprenticeship system underpinned by a clear governance framework' during the lifetime of the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2021a, p.18). Other commitments in the plan include new supports for employers and apprentices, increased participation in apprenticeship by underrepresented groups, and a target of 10,000 new apprentice registrations per annum by 2025.

The reforms associated with the consortium-led model of apprenticeship, introduced in Ireland in 2015 and first implemented with the commencement of two new apprenticeships in 2016, apply to all new apprenticeships in both FET and higher education. Most of these reforms, and some additional ones, are expected to apply also to existing craft apprenticeships and any subsequent new apprenticeships following the planned 'migration' of craft apprenticeship and consortium-led apprenticeship to the single model of apprenticeship in 2024-2025 (DFHERIS, 2021a).

A1.3 Main stakeholders and their roles in the consortium-led model of apprenticeship

The main types of stakeholders involved in the development of an apprenticeship programme are identified in QQI guidelines as including 'prospective employers of apprentices, practitioners in the occupation concerned, providers of education and training services, occupational

associations, occupational regulators, State organisations responsible for funding and regulating apprenticeships, and prospective apprentices' (QQI, 2016, p. 5). Within this grouping there are four 'primary partners' in consortium-led apprenticeship

> all of which are likely to be represented in any consortium established to propose and develop an apprenticeship. These are: employers of apprentices; the Coordinating Provider; collaborating providers who may or may not be relevant providers [as defined in the Qualifications and Quality Assurance (Education and Training) 2012 Act] including off-the-job education and training providers and other providers; and apprentices (QQI, 2016, p. 8)

These key stakeholders' roles, and the apprenticeship consortium's role, are defined as follows:

> A **Consortium** is a group, normally led by employers and including providers, involved in the development and provision of an apprenticeship programme.
>
> A **Consortium Steering Group** is a governing entity that might be usefully constructed and established [as envisaged in the QQI Guidelines] and whose role would be to ensure that the apprenticeship programme conforms to, and evolves with, the requirements of the occupation. Its purpose would be to ensure that the apprenticeship programme is enterprise-led and meets labour market needs.
>
> A **Provider** is a person (an entity with legal personality) who provides, organises or procures a programme of education and training.
>
> A **Coordinating Provider** is a relevant or linked provider who is ultimately responsible for providing (as defined by the 2012 Act) an apprenticeship programme. Among its responsibilities are the development and maintenance of the curriculum and assessment procedures for the programme and leading the collaborating providers involved. To act as a Coordinating Provider for an apprenticeship programme, the entity must be a relevant or linked provider under the 2012 Act. This means, among other things, that it must be a legal entity and the provision of education and training must be one of its principal functions. If an entity is not already a relevant provider, it may become one through a QQI process.
>
> A **collaborating provider** is a provider who is formally involved in the provision of an apprenticeship programme and accountable in this respect to the Coordinating Provider.
>
> An **"off-the-job-provider"** is a collaborating provider involved in an apprenticeship programme with a responsibility for off-the-job education or training. It may be the Coordinating Provider [it may, for example be an industry body for whom the provision of education and training is one of its principal functions], but if it is not, it is expected to

be accountable to the Coordinating Provider for delivery of those
elements of the programme within its control. (QQI, 2016, pp. 8-9)

The above definitions of coordinating provider and collaborating provider mean that a coordinating provider in an individual apprenticeship need not necessarily be a further or higher education institution, but could, for example, be an industry representative or professional body or another organisation for whom the provision of education and training is one of its principal functions. In these instances, any further or higher education institution(s) involved would be considered a collaborating provider.

In all apprenticeships in higher education between end 2016 and mid-2023, however, the coordinating provider was a higher education institution. Later in 2023, for the first time, new apprenticeships leading to 'higher education awards' (QQI, 2022b), at level 6 (higher certificate) and level 7 (ordinary bachelor's degree) on the NFQ, were launched without any HEI involved as either a coordinating or collaborating provider. Rather, Teagasc, the State agency providing research, advisory and education in agriculture, horticulture, food and rural development in Ireland, is the coordinating provider for these apprenticeships. No other providers, either in higher education or FET, are involved as coordinating or collaborating providers in these apprenticeships, and the awarding body is Quality and Qualifications Ireland.

Apprenticeships in which the coordinating provider is a HEI are referred to as 'HEI-led apprenticeships', or 'apprenticeships led by a HEI', in parts of this thesis, as and where appropriate.

A1.4 HEI coordinating providers in consortium-led apprenticeship

At mid-2023, eight HEIs were involved as coordinating providers in the design, development, and delivery of 27 new consortium-led apprenticeships in Ireland (Table A1.2). Seven of these (88%) participated in this research, including four of the five TUs involved in new apprenticeship in higher education, the only university involved, and the only two independent providers involved. Some of these eight HEIs operated as a coordinating provider in only one apprenticeship and some in more than one. In addition, some had previous and current experience of statutory apprenticeship in the form of craft apprenticeship, and some did not.

Each TU involved as coordinating provider also either had other TUs involved as collaborating provider(s) in one or more apprenticeship programmes, and/or the TU itself was involved as a collaborating provider in one or more apprenticeship programme(s) led by other technological universities.

None of the other coordinating providers - university or independent providers - had other HEIs involved as collaborating provider(s) and none was involved as a collaborating provider in apprenticeship programme(s) led by other higher education institutions.

Table A1.2: HEI coordinating providers of new apprenticeships May 2023								
HEI Provider	**TU Dublin**	**South East TU**	**TU of the Shannon: Midlands Midwest**	**Munster TU**	**Atlantic TU**	**University of Limerick**	**National College of Ireland**	**Griffith College**
Type of HEI	Technological university (TU)					University	'Independent' (not-for-profit) college	'Independent' (private) college
'HEA designated'	Yes					Yes	No	No
Designated awarding body	Yes					Yes	No	No
Previous experience of (craft) apprenticeship	Yes					No	No	No
Other ('collaborating') providers involved in this HEI's-led apprenticeship programme(s)	Yes	No	Yes	Yes	Yes	No	No	No
This HEI also involved as 'collaborating' provider in other HEIs'-led apprenticeship programme(s)	Yes	Yes	Yes	Yes	Yes	No	No	No
New consortium-led apprenticeships at May 2023 (NFQ level and name)	Gra.: L8 CGI Tech; Aun.: L6 Log.; Tall.: L6 Tel., L6 Lab. Tec., L7 Lab. Alys.	Carlow campus: L6 Geo Driller	Limerick Campus: L7 Industrial Electrical Engineer; Athlone Campus: L7 Polymer Proc. Tech.	Cork campus: L7 Eng. Services Mgt.; Kerry Campus: L7 Chef de Partie, L8 Sous Chef	Galway campus: L6 Man. Tech., L7 Man. Engineer; Sligo Campus: L6 Transport Ops., L8 Insurance Practitioner	L6 Supply Chain Assoc., L8 Supply Chain Spec., L9 Supply Chain Mgr., L8 Cybersecurity, L9 Eq. Systems Eng., L9 Lean Sigma Mgr., L10 Principal Engineer	L6 IFS Associate, L8 IFS Specialist, L8 Recruitment Exec.	L6 Adv. Healthcare Ass. Practitioner, L7 Bar Manager
No. of new (HEI-led) apprenticeships at May 2023	5	1	2	3	4	7	3	2
	15					27		

Although part of the coordinating provider role in new apprenticeship may also involve working with others in their role as collaborating providers in individual apprenticeship programmes, therefore, in most current apprenticeships in higher education, and, as noted, in all apprenticeships outside the TU sector in higher education, there is only one provider, the coordinating provider, involved in the delivery of the apprenticeship. It is in this context - one provider - that understanding and experiences of apprenticeship reforms in higher education are examined, and it is this aspect of the coordinating provider role that is focused on in this research.

A1.5 Apprenticeship in a 'unified tertiary education system'

The demarcation between FET and higher education is increasingly being challenged at policy level in Ireland. The National FET Strategy 2020-2024, for example, proposed not only a more integrated FET system itself, but also greater contribution from FET to the development of a more 'collaborative and cohesive tertiary education system' involving FET and higher education, as well as a more coordinated and seamless approach to transitions between the two (SOLAS, 2020a). In

addition, in 2022 DFHERIS announced several initiatives to support the realisation of Government commitments to develop 'a more unified tertiary education system', including, *inter alia*, creation of a Strategy for Tertiary Education (DFHERIS, 2022a) and a National Tertiary Office (NTO) to support the development of joint further and higher education degree programmes and progression pathways across and between different institutions in further and higher education. The NTO was established in 2023 and several 'joint tertiary degrees' have been launched since then, operating outside the traditional CAO applications process, with more tertiary degrees in development and planned.

Appendix B Key features of current apprenticeship in Ireland including data on HEI-led apprenticeships at end 2023

B1.1 Introduction

The current apprenticeship system in Ireland is a statutory, regulated part of the formal tertiary education system. It includes a standards-based model of apprenticeship that was introduced in 1993 to replace the then existing time served model, now also known as 'craft' or 'pre-2016' apprenticeship. The national apprenticeship system also includes a new (consortium-led or '2016+') model introduced in 2015 and first implemented with the launch of two new apprenticeships (Insurance Practitioner and Industrial Electrical Engineering) in 2016. Between 2016 and 2020 some 34 new apprenticeships were developed and came into operation, along with the existing 25 craft apprenticeships (SOLAS, 2021a, p. 16). At end 2023 an additional 14 new apprenticeships were reported to be in operation (NAO, 2023, 2024), giving a total of 73 apprenticeships, 25 craft and 48 consortium-led at this time.

Further details of the key features of the national apprenticeship system, of the current and in-development apprenticeships leading to higher education awards in that system, and of recent and prospective changes in the national apprenticeship infrastructure, are provided below.

B1.2 Key features of craft and consortium-led apprenticeship in Ireland

The current key features of apprenticeship in Ireland in 2023 are summarised in Table B1.1. These largely reflect the situation that pertained also at end 2020 just before publication of the Action Plan for Apprenticeship 2021-2025 and in advance of establishment of the National Apprenticeship Office (NAO) and the National Apprenticeship Alliance (NAA) in 2022.

Table B1.1: Key features of statutory apprenticeship in Ireland end 2023		
Key Features	**Craft apprenticeship ('pre-2016')**	**Consortium-led apprenticeship (since 2016 - also referred to as '2016+' or 'new')**
Duration	4 years	2-4 years
Structure / main providers	7 'phases' Phase 1, 3, 5 and 7 on-the-job Phase 2, 4 and 6 off-the-job Phase 2 provided by education and training board (FET sector) Phases 4 and 6 by institute of technology/technological university (HE sector)	Various structures involving a range of providers - public and 'independent' (including not-for-profit and private), FET and HE, providers

Governance	SOLAS, in its role as coordinating provider has responsibility for the programme; key stakeholders represented on the National Apprenticeship Advisory Committee which reports into the SOLAS Board (Generation apprenticeship, 2024a)		Consortium of key stakeholders, including coordinating provider appointed by consortium, has responsibility for the apprenticeship; occupational profile approved by the National Apprenticeship Alliance, formerly the Apprenticeship Council
	SOLAS in its role as statutory and regulatory authority has responsibility for creation of statutory instrument (Industrial Training Order) and approval of apprenticeship, and approval of employers and registration of apprentices		
Award on successful completion	Advanced Certificate Craft (Quality and Qualifications Ireland (QQI))		Various (QQI and others, including institutes of technology, technological universities and universities)
Award Level on National Framework of Qualifications	Level 6		Levels 5-10
Target or predominant group	Mainly young people / school-leavers		Including career changers and those already in employment
Occupations	Mainly construction-related occupations		Potentially all occupations
Payment of apprentice	Employer pays apprentice for on-the-job element of apprenticeship; State pays training allowance (and potentially other allowance(s)) for off-the-job element		Employer pays apprentice throughout the entire apprenticeship
Off-the-job provision	SOLAS is coordinating (responsible) provider; education and training boards (FET) and institutes of technology/technological universities (HE) deliver on its behalf		Coordinating provider is appointed by consortium of key stakeholders; collaborating provider(s), if any, may subsequently be involved
On-the-job provision	Involves on-site supervisor / trainer who has completed the relevant apprenticeship (or has specified experience in this occupation)		Involves supervisor / trainer and/or 'mentor' with specified qualifications and experience
System in operation since	1990s		2016
Academic research	Limited and largely focused on reform in 1980s-1990s		Very limited / almost non-existent
Procedures and guidelines	Relatively clearly defined, one apprenticeship structure, etc.		Range of structures; QQI's Statutory Quality Assurance Guidelines for Providers of Statutory Apprenticeship published in 2016

Number of programmes	25 (27 listed in Action Plan to Expand Apprenticeship and Traineeship in Ireland 2016-2020, but subsequently rationalised over the 2016-2020 period to 25)	**2016**	**2020**	**2023**
		2	34	48

Apprentice registrations (newly registered apprentices annually) (NAO, 2024)			
Year	**Total**	**Craft apprenticeship**	**Consortium-led apprenticeship**
2014	**2,698**	2,698 (100%)	-
2020	**5,326**	4,377 (82%)	949 (18%)
2023	**8,712**	6,588 (76%)	2,124 (24%)

Apprentice population (total number of apprentices registered) (NAO, 2024)			
Year	**Total**	**Craft apprenticeship**	**Consortium-led apprenticeship**
2014	**6,913**	6,913 (100%)	-
2020	**19,630***	17,183 (88%)	2,447 (12%)
2022	**26,325****	22,429 (85%)	3,896 (15%)
2023	**27,470**	na	na

Plans for future programmes	No plans for new programmes using this model, but existing 25 to continue and be updated, subject to demand		Apprenticeships currently in development following two public calls for proposals (2015 and 2017) and subsequent open process for new proposals on an ongoing basis
	Commitment in Action Plan for Apprenticeship 2021-2025 to create one single integrated national apprenticeship system for all statutory apprenticeship - work ongoing		

* Source: SOLAS (2021a)
** Source: SOLAS (2023)

The overall annual apprentice population for 2022 and 2023 is 26,325 and 27,470 respectively. The respective number of apprentices participating in craft and consortium-led apprenticeships is provided for 2022, which is 22,429 (85%) craft and 3,896 (15%) consortium-led.

The most detailed and up-to-date publicly available data on apprenticeship activity, particularly annual apprentice registrations, are sourced from the national Apprenticeship Client Services System (ACSS) and published by the NAO in its 2022 and 2023 Progress Reports (NAO, 2023, 2024). The published data relate only to activity in 2019 and onwards. Forecasts of apprentice registrations for 2024 for each current apprenticeship are also provided. The official source of up-to-date information on apprenticeship programmes (current and in-development) and providers is in the Directory of Apprenticeship on the national apprenticeship website (Generation apprenticeship, 2024g).

Data relating to programmes and new apprentice registrations and apprenticeship populations for craft and new consortium-led apprenticeships between 2015 and 2019, and data relating to targets and actual numbers of programmes and new apprentice registrations between 2016 and 2020 (actual to June in 2020), are reported in the 2020 Consultation Paper to inform the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2020a). These show targets for new apprentice registrations on craft apprenticeships being exceeded in each year between 2016 and 2019, and significant underachievement of registration targets for consortium-led apprenticeships in these years.

New apprenticeship registration figures for 2023 show a total of 8,712 apprentice registrations, an increase of 2,535 from 6,177 in 2019 (NAO, 2024). In 2019, craft apprenticeship accounted for 5,271 (85%) of all new apprentice registrations. In 2023, craft apprenticeship accounted for 6,588 (76%) of all new apprentice registrations. What these data show is the relatively large scale of activity in craft compared with consortium-led apprenticeship as well as increasing apprentice registrations overall and relatively small but incremental increases in consortium-led apprentice registrations over time.

Of the 2,124 new apprentice registrations in consortium-led apprenticeships in 2023 reported by the NAO, some 904 of these (43%) are in apprenticeship programmes delivered by HEIs (NAO, 2024). A further 68 (3%) are in four apprenticeship programmes leading to 'higher education awards' (QQI, 2022b) but not delivered by a HEI, at levels 6 and 7 on the National Framework of Qualifications (NFQ), categorised under 'Agriculture and Horticulture' and managed and delivered by the State agency Teagasc.

B1.3 Legislation underpinning apprenticeship in Ireland

B1.3.1 Industrial Training Act 1967 and Higher Education Authority Act 2022

One fundamental difference between apprenticeship and all other programmes leading to awards on the NFQ is that the learner must firstly be employed as a statutory apprentice on a

specified apprenticeship by an employer who has been approved, by the statutory and regulatory authority for apprenticeship (SOLAS), to provide the on-the-job element of training in that specified apprenticeship. The learner must also be assessed as suitable and registered as an apprentice on that apprenticeship by SOLAS. Statutory apprenticeship is underpinned by legislation, primarily as laid out in the Industrial Training Act 1967 (Ireland. *Industrial Training Act 1967*) and subsequent associated legislation, meaning that there can be only one national apprenticeship for a particular occupation and that new apprenticeships must be designated as a statutory apprenticeship by SOLAS. Part of this process involves SOLAS's creation of a new Industrial Training Order - or application of an existing Order, depending on the occupational profile for the proposed new apprenticeship - which is a statutory instrument that specifies industrial activities deemed to be 'designated' - or covered by the legislation - in a particular apprenticeship(s).

Under this primary legislation that still underpins statutory apprenticeship in Ireland, therefore, apprenticeship is permitted only in designated areas of 'activity of industry', to be declared over time by order under the Act. Until recently, however, certain areas of activity were specifically excluded, including 'an activity of agriculture, horticulture or fishing which is an activity of primary production, or any activity of a professional occupation' (Ireland. *Industrial Training Act 1967,* Part 1, Section 2 (1)). This exclusion was removed in the Higher Education Authority Act 2022 by substitution of the definition of 'activity of industry' to include 'any activity of commerce or of a trade or occupation' and 'any activity of a distinct branch of an industry, of commerce or of a trade or occupation' (Ireland. *Higher Education Authority Act 2022,* Part 16, Section 137).

Furthermore, Section 23(2) of the Industrial Training Act 1967 was amended in Section 138 of the Higher Education Authority Act to state that 'where the activity of industry relates to a regulated profession, the appropriate competent authority or authorities in the State shall be consulted'. This is in addition to the requirement for the said statutory and regulatory authority for apprenticeship (SOLAS) to consult with organisations or associations of organisations that appear to it to be representative of a substantial number of employers and those that appear to it to be representative of a substantial number of employees in an area of activity, before making an Order permitting an apprenticeship in that area.

These amendments in the Higher Education Authority Act 2022 had not been incorporated into legislation when the apprenticeships listed as current apprenticeships at end 2023 in the official directory of apprenticeships received initial Ministerial approval for further development (Generation apprenticeship, 2024e). In principle, however, statutory apprenticeship is now potentially open to any 'trade or occupation' including any 'regulated profession'. This is a significant

change in, and with potentially significant implications for, the apprenticeship and education systems in Ireland.

B1.3.2 Qualifications and Quality Assurance Act 2012

The 2012 Qualifications and Quality Assurance Act (Ireland. *Qualifications and Quality Assurance (Education and Training) Act 2012*) also underpins statutory apprenticeship, supporting validation and external quality assurance arrangements for programmes nationally (Generation apprenticeship, 2024a).

The NFQ, established in 2003, is a single framework, 10-level system used to describe qualifications in the Irish education system. Its development, promotion, maintenance, and review is overseen by QQI (QQI, 2021c). Key components of the framework are summarised in QQI's 'NFQ fan diagram' (Figure B1.1). According to QQI this representation of the framework 'depicts a rainbow that can be traversed rather than a ladder that must be scaled' (QQI, 2023b), meaning that learners should be able to travel in many directions - upwards, downwards, and sideways - in their lifelong learning journey, not just from lower to higher levels.

Figure B1.1: The National Framework of Qualifications
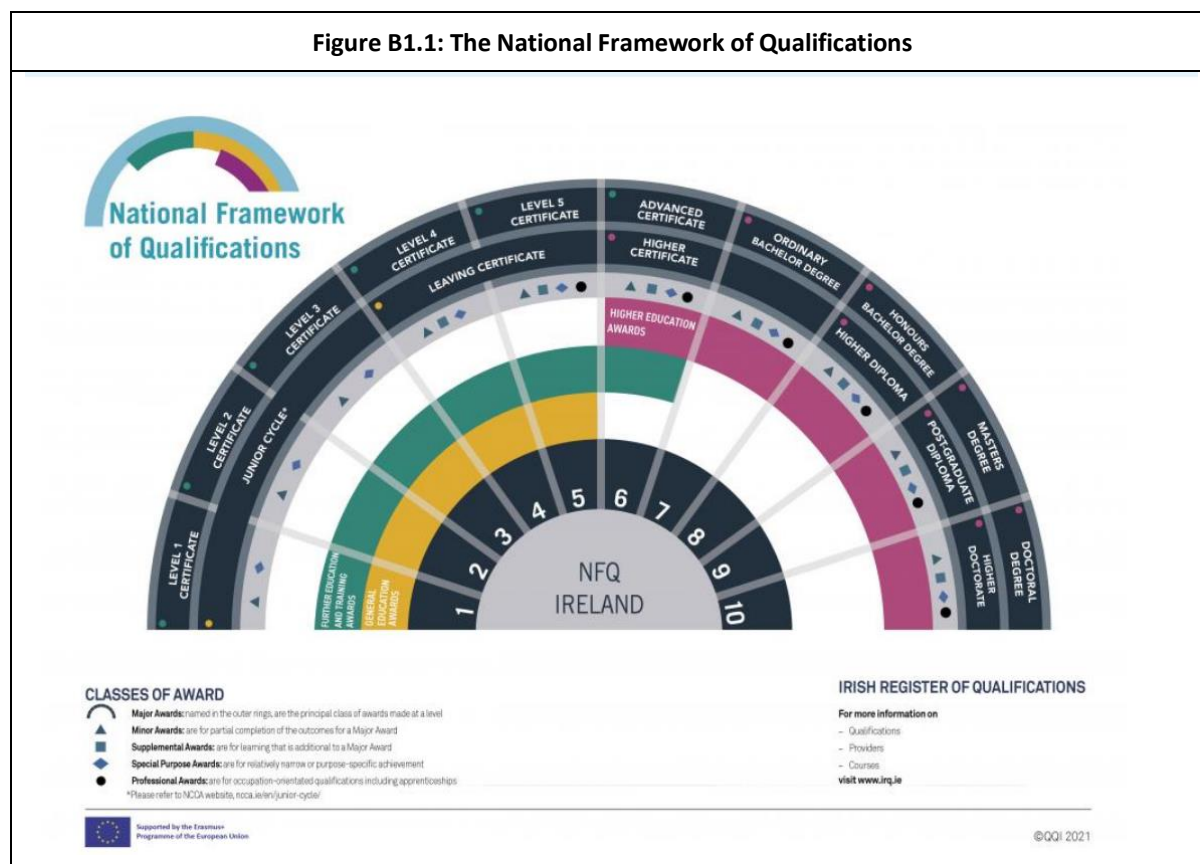
Source: QQI, 2022b

'General education awards' are made at levels 1 to 5 including those available at secondary education level; FET awards are made at levels 1 to 6 including an advanced certificate at level 6; and higher education awards are made at levels 6 to 10 including a higher certificate at level 6. In addition, professional awards for 'occupation-oriented qualifications including apprenticeships' can be made at levels 5 to 10 (QQI, 2022b).

B1.4 Irish apprenticeship in the national and international formal education systems

Apart from its alignment at a national level with the NFQ, the formal education system including apprenticeship can be aligned internationally with reference to the International Standard Classification of Education (ISCED) coding, as outlined in the 2021 OECD Education at a Glance Indicators report and the Country Profile for Ireland (DES, 2021). The key components of ISCED, how they relate to the NFQ, and how apprenticeship relates to both, are summarised in Table B1.2.

Table B1.2: Irish apprenticeship in a national and international context						
ISCED Coding as applied to Ireland (DES, 2021)			National Framework of Qualifications (NFQ)			
ISCED-2011 level	Level of education	OECD description	NFQ level	NFQ awards	Statutory apprenticeship and award levels 5-10 on the NFQ	
					Craft apprenticeships	Consortium-led apprenticeships
ISCED 8	Tertiary	NFQ level 10 - Doctoral Degree	10	Higher education + professional	-	level 10
ISCED 7	Tertiary	NFQ level 9 - Master's Degree, Postgraduate Diploma	9	Higher education + professional	-	level 9
ISCED 6	Tertiary	NFQ levels 7 and 8 - Bachelor's Degree (Ordinary and Honours, respectively), Postgraduate Diploma	8+7	Higher education + professional	-	level 8+7
ISCED 5	Tertiary	NFQ level 6 - Higher Certificate	6	Higher education + professional	-	level 6 (Higher Certificate)
ISCED 4	Post-secondary, non-tertiary	Post-Leaving Certificate, some further education and training NFQ level 5 and 6 (Advanced Certificate) provision, and apprenticeships	6+5	Further education and training + professional	level 6 (Advanced Certificate Craft)	level 6 (Advanced Certificate) + level 5
				General	-	
ISCED 3	Upper Secondary	Senior Cycle including Leaving Certificate (LC), LC Applied, and LC Vocational plus some further education and training NFQ level 4 and 5 provision including Vocational Training Opportunities Scheme	5+4	Further education and training + General	-	
ISCED 2	Lower Secondary	Junior Cycle NFQ and some NFQ level 2 courses	3+2+1		-	

ISCED 1	Primary	All classes in National Schools including Junior and Senior Infant classes plus 1st to 6th class (1st to 6th Class are six years of compulsory education in primary education)	-
ISCED 0	Pre-primary	The Early Childhood Care and Education (ECCE) Scheme; Early Start classes in primary schools	-

According to the ISCED classification, FET in Ireland, including craft apprenticeship, is classified as 'non-tertiary' education.

Work was commissioned by QQI in 2019 to evaluate the overall comparability of the two main awards at level 6, namely the advanced certificate and the higher certificate, and to 'review their effectiveness in differentiating further education and training (FET) from higher education and training (HET) as was their original purpose' (Office of Government Procurement, 2019). Few differences and many similarities were reported between the two, and it was concluded that both qualifications are appropriately aligned to level 6 on the NFQ with respect to learner outcomes (QQI, 2021d). QQI subsequently proposed that on the basis of the findings, further consideration should be given 'in this contested space at level 6' to whether both awards should continue to be offered or whether the creation of a single major award at level 6 would now be timely (QQI, 2023b). This, and other related issues, are being considered by the relevant parties.

This demarcation between FET and higher education is increasingly being challenged at policy level in Ireland. This is reflected in the dissolution of the Department of Education and Skills in 2020 and the subsequent creation of a specific Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) and a separate Department of Education. The subsequent establishment by DFHERIS of a National Tertiary Office in 2022 that is jointly managed by the HEA and SOLAS (NTO, 2024) is also notable in this regard, as are references in the Department's Statement of Strategy 2021-2023 to 'the Higher and Further Education & Training sector' (singular) and the term 'tertiary' for that sector (DFHERIS, 2021b, p. 18) as well as recent policy documents regarding the creation of a unified tertiary education system (DFHERIS, 2022a).

The earlier introduction in 2015 of the new consortium-led model of apprenticeship, leading to awards at levels 5 to 10 on the NFQ, as well as delivery by both FET and higher education of off-the-job training in craft apprenticeships, are alluded to by the HEA in its submission to the development of the DFHERIS Statement of Strategy 2021-2023 as further examples of an emerging 'unified' tertiary sector. In its submission it states that 'apprenticeship is the one true vehicle of

further and higher education collaboration and should be governed as such and promoted as a mode of learning that spans both further and higher education' (DFHERIS, 2021d, p. 171).

In terms of the relative scale of apprenticeship in comparison with other elements of the education system, in its submission in April 2021 to the Joint Oireachtas Committee discussing reform in the apprenticeship model, SOLAS reported that at the start of that year, 'for the first time', the total apprentice population had reached 20,000, and the female apprentice population had passed a milestone of 1,000, representing approximately 5% of the total (Joint Committee on Education, Further and Higher Education, Research, Innovation and Science, 2021b). While the female population was indeed the largest ever reported, it is likely that the reference to the overall apprentice population of 20,000 refers to the period since the introduction of the new consortium-led model of apprenticeship in 2015. In a paper prepared to inform the 2013 review of apprenticeship training in Ireland, and after the introduction in the early 1990s of the standards-based craft model of apprenticeship, the overall apprentice population participating in standards-based (and not time served) apprenticeship had been reported to have reached over 20,000 in each of the years between 1999 and 2008, and almost 30,000 in each of the years between 2005 and 2007 when registration on craft apprenticeships were particularly high due to the boom in construction during the 'Celtic tiger' era (Figure B1.2).

Figure B1.2: Standards-based craft apprenticeship population 1994 - 2012

Source: DES, 2013b

236
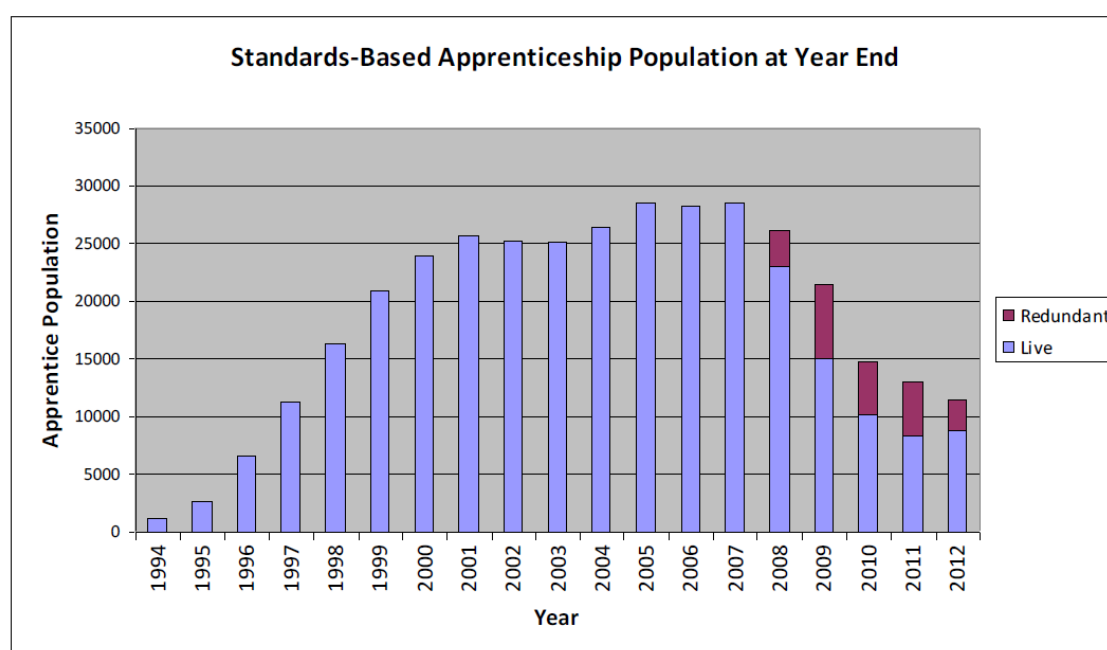
As noted in Table B1.1, in 2022 the apprentice population had reached over 26,000, with 85% of this accounted for by apprentices participating in craft apprenticeships and 15% by apprentices participating in consortium-led apprenticeships.

The apprenticeship population figure of 17,829 reported in the DFHERIS Statement of Strategy 2021-2023 (DFHERIS, 2021b, p.15; DFHERIS 2021c, p. 4) is the population figure for 2019. Total new apprentice registrations in 2019 were 6,177 (NAO, 2024), which represents 1.5% of the total 414,755 (full-time and part-time) enrolments in FET and higher education reported for 2019-2020 in the Statement of Strategy.

The off-the-job element of apprenticeship is recorded as part-time study however, meaning that the 6,177 apprentice registrations in 2019 represent approximately 4% of the 147,856 part-time enrolments in FET and higher education (102,063 in FET and 45,793 in higher education), with the majority of these (5,271 (85%)) in craft apprenticeships.

The data on FET enrolments included in the Statement of Strategy do not include apprentice registrations. This is because the Programme and Learner Support System (PLSS), which is the source of this data and most other FET-related data published by SOLAS, does not include apprenticeship, even though apprenticeships in FET are funded by SOLAS (SOLAS, 2020b). This apparent anomaly to some extent reflects SOLAS's distinct roles as the further education and training authority for which the PLSS was developed to record FET data, and its separate roles as the statutory and regulatory authority for apprenticeship and as provider for craft apprenticeship, for which the national apprenticeship database, the ACSS, was initially developed to record craft apprenticeship data. The source of the higher education data in the Statement of Strategy 2021-2023 also does not specifically refer to apprenticeship and the HEA does not routinely report on apprenticeship activity in higher education in its reports. This situation also to some extent reflects the fact that enrolment data on all apprenticeships, in both FET and higher education, are recorded at a national level on the Apprenticeship Client Services System.

B1.5 Analysis of data on HEI-led apprenticeships at end 2023

B1.5.1 Current apprenticeships

At end 2023 a total of 73 apprenticeships are listed as 'current' apprenticeships, including 48 consortium-led apprenticeships (Generation apprenticeship, 2024e). This means that 48 consortium-led apprenticeships progressed through the 10 steps in the national apprenticeship development process between 2016 and 2023, and, at least in principle, are officially 'operational' in the sense of having been designated as a statutory apprenticeship by the statutory and regulatory authority for apprenticeship in Ireland, SOLAS, and therefore open for statutory employer approval and statutory

apprentice registration by SOLAS. The 10-step process published in 2017, and a revised process published in 2023, are presented in Figure B1.3 (Generation apprenticeship, 2024b, 2024c).

Figure B1.3: National apprenticeship development process	
10-step development process May 2017	10-step development process January 2023
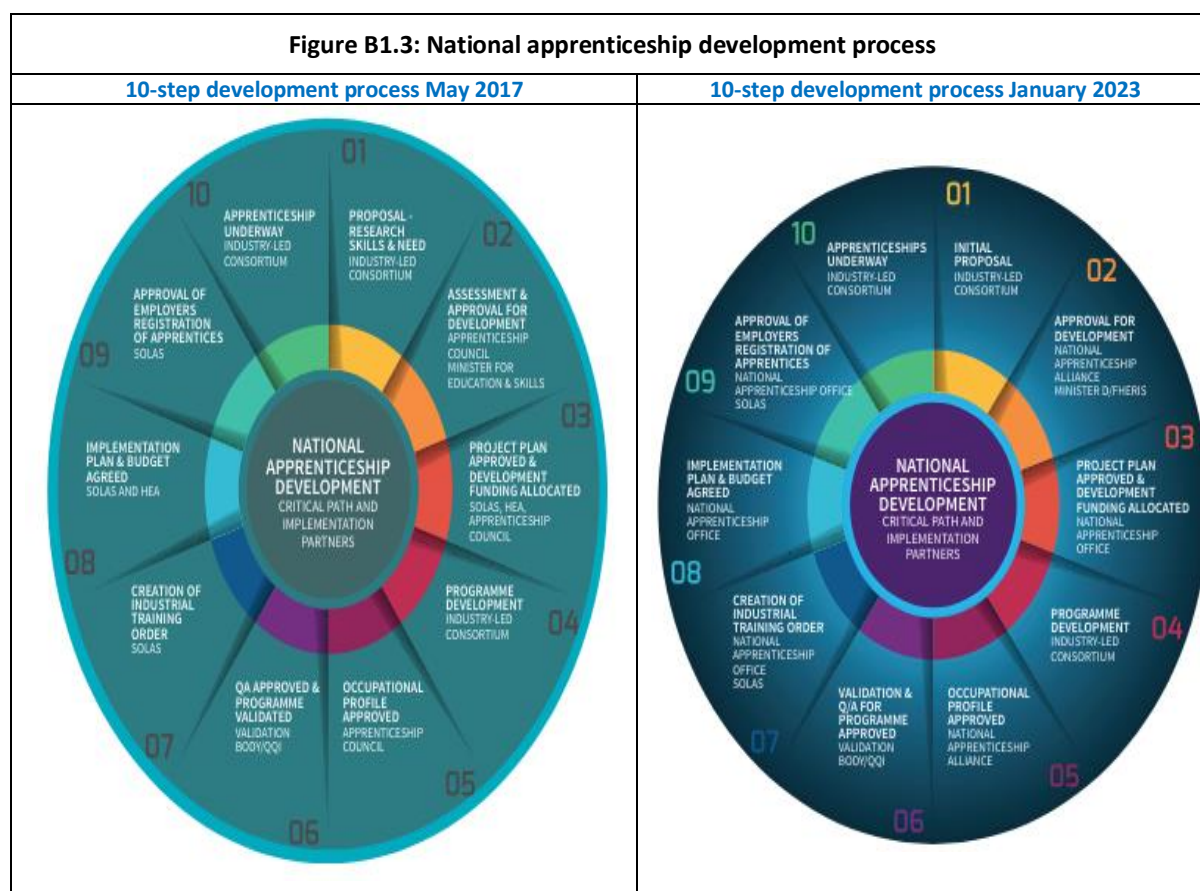
Source: Generation apprenticeship, 2024b, 2024c

The main differences between the two processes are that, firstly, the NAA has replaced the Apprenticeship Council in approving apprenticeship proposals for further development and approving occupational profiles (Steps 2 and 4), but unlike the Council is not involved in approving project plans (Step 3). Secondly, the NAO - set up in 2022 and jointly managed by SOLAS and the HEA - is identified as (potentially, subject to legislative changes) having responsibility - along with SOLAS itself - for SOLAS's existing statutory functions in formally designating new statutory apprenticeships (Step 7) and statutory approval of employers and registration of apprentices in those apprenticeships (Step 9).

According to the official list of apprenticeships (Generation apprenticeship, 2024e), at end 2023 some 34 of the 48 consortium-led apprenticeships lead to higher education awards, and 30 of these are led by eight higher education institutions. Five are led by TUs, one by a university, and two by 'independent' (one not-for-profit and one private) HEIs (Table B1.3).

Table B1.3: Coordinating providers of new apprenticeships leading to higher education awards May 2023 and December 2023									
Coordinating provider	**TU Dublin**	**South East TU**	**TU of the Shannon: Midlands Midwest**	**Munster TU**	**Atlantic TU**	**University of Limerick**	**National College of Ireland**	**Griffith College**	**Teagasc**
Type of organisation	Higher education institution								**Other**
	Technological university (TU)					**University**	**Independent (not-for-profit) college**	**Independent (private) college**	**Other** (State agency for research, advisory and education in agriculture, horticulture, food and rural development)
No. of new apprenticeships at May 2023	5	1	2	3	4	**7**	3	2	-
	27								-
No. of new apprenticeships at December 2023	5	1	3	3	6	**7**	3	2	4
	18						5		
	30								4
	34								

Source: Generation apprenticeship, 2024e

Apart from these 30 HEI-led apprenticeships, one other apprenticeship leading to an award at level 7 on the NFQ and three others leading to level 6 higher certificates are being led by the State agency Teagasc, categorised under 'Agriculture and Horticulture'. With respect to current new apprenticeships, the 30 HEI-led apprenticeships are in a range of 'families' or categories, leading to awards at levels 6 to 10 on the NFQ, as presented in the official list of apprenticeships (Generation apprenticeship, 2024e) and summarised in Table B1.4.

Table B1.4: Current new apprenticeships led by HEIs December 2023							
Assigned category or 'family' of occupations	**Number of apprenticeships leading to award at NFQ levels**					**Total in assigned category**	**Type of HEI** (and no. of apprenticeships) Technological university (TU) University (Uni.) Independent (Ind. not-for-profit) Independent (Ind. private)
	Level 6	**Level 7**	**Level 8**	**Level 9**	**Level 10**		
Biopharma	1	1				**2** (6.6%)	1 TU (2 apprenticeships)
Construction	1			1		**2** (6.6%)	2 TUs (2 apprenticeships)
Electrical		1				**1** (3.3%)	1 TU (1 apprenticeship)
Engineering	2	4		2	1	**9** (30.0%)	3 TUs (6 apprenticeships) 1 Uni. (3 apprenticeships)
Finance	1		1			**2** (6.6%)	1 Ind. n-f-p (2 apprenticeships)
Healthcare	1					**1** (3.3%)	1 Ind. private (1 apprenticeship)
Hospitality & Food		2	1			**3** (10.0%)	1 TU (2 apprenticeships) 1 Ind. private (1 apprenticeship)
ICT	1		2			**3** (10.0%)	1 TU (2 apprenticeships) 1 Uni. (1 apprenticeship)
Insurance			1			**1** (3.3%)	1 TU (1 apprenticeship)
Logistics	2	1	1	1		**5** (16.6%)	2 TUs (2 apprenticeships) 1 Uni. (3 apprenticeships)
Recruitment			1			**1** (3.3%)	1 Ind. n-f-p (1 apprenticeship)
Total at NFQ levels	**9** (30.0%)	**9** (30.0%)	**7** (23.3%)	**4** (13.3%)	**1** (3.3%)	**30** (100%)	5 TUs (**18 apprenticeships 60.0%**) 1 Uni. (**7 apprenticeships 23.2%**) 1 Ind. (n-f-p) (**3 apprenticeships 10.0%**) 1 Ind. (private) (**2 apprenticeships 6.5%**)

Source: Generation apprenticeship, 2024e

Almost half of the current 30 HEI-led apprenticeships are categorised under either 'Engineering' or 'Logistics', and most of these lead to awards at levels 6, 7, or 8 on the National Framework of Qualifications. They also account for three of the four apprenticeships that lead to level 9 awards, and the (one) apprenticeship that leads to level 10 award on the National Framework of Qualifications. All the (three) Engineering apprenticeships that lead to level 9 or 10 awards and the (one) Logistics apprenticeship that leads to a level 9 award are delivered by the one university involved in consortium-led apprenticeship. The other (one) apprenticeship that leads to a level 9 award is delivered by a technological university.

There is some discrepancy between information provided in the official list (Directory of Apprenticeships) on the national apprenticeship website regarding current apprenticeships at end 2023 (Generation apprenticeship, 2024e) and that provided in the 2023 Progress Report (NAO, 2024). The former includes reference to an Advanced Quantity Surveyor apprenticeship (under 'Construction', level 9 on the NFQ, with TUS as the coordinating provider) but the latter does not. In addition, the Directory refers to only two Associate apprenticeships under 'ICT' (Computer Networking Associate and Software Development Associate, both in the FET sector), whereas the 2023 Progress Report also refers to an additional apprenticeship called 'Network Engineer Associate', with 46 new registrations reported in 2023. While the total number of apprenticeships in each publication is 73, therefore, these are not the same 73, as the status of two of these is reported differently in each publication.

B1.5.2 Apprenticeships in development

A further 22 new apprenticeships are listed in the Directory as being 'in development' at end 2023 - that is, at various stages of development and not yet open for employer approval and apprentice registration by the statutory and regulatory authority for apprenticeship - and in 13 of these the proposed coordinating provider is a higher education institution. These are summarised in Table B1.5 with reference to HEI type, assigned categorisation, and award levels, and they include both apprenticeships that are at a relatively advanced stage in the apprenticeship approval process (occupational profile approved) and those at a relatively early stage in that process (occupational profile not yet approved).

Table B1.5: New apprenticeships in development with proposed HEI coordinating provider (all in-development apprenticeships - Occupational Profile approved and not yet approved) December 2023							
Assigned category or 'family' of occupations	Number of apprenticeships leading to award at NFQ levels					Total in assigned category	Type of HEI (and no. of apprenticeships) Technological university (TU) University (Uni.)
	Level 6	Level 7	Level 8	Level 9	Level 10		
Engineering	2		2	1		5	3 TUs (5 apprenticeships)
Finance		1	1			2	1 TU (1 apprenticeship) 1 Uni. (1 apprenticeship)
Hospitality & Food				1		1	1 TU (1 apprenticeship)
ICT				1		1	1 TU (1 apprenticeship)
Logistics		1				1	1 Uni. (1 apprenticeship)
To be decided			2	1		3	2 Unis. (3 apprenticeships)
Total at NFQ levels	2 (15.3%)	2 (15.3%)	5 (38.4%)	4 (30.7%)	-	13 (100%)	3 TUs (8 apprenticeships 61.5%) 3 Unis. (5 apprenticeships 38.5%)

Source: Generation apprenticeship, 2024e

Over 60% of the 13 apprenticeships in development with a HEI as proposed coordinating provider will be led by three TUs, and almost 40 % (five apprenticeships) will be led by three universities. There are no independent HEIs involved as proposed coordinating providers in the apprenticeships in development.

Most of the 13 in-development apprenticeships with a HEI as proposed coordinating provider are categorised under 'Engineering', 'Finance', or in areas 'to be decided', and most are expected to lead to awards at levels 8 or 9 on the National Framework of Qualifications. Those that have not yet been assigned to a category are in areas in which statutory apprenticeships have not previously been created (for example, Social Care, Paramedic, Firefighter). One other proposed apprenticeship leading to an award at level 7 on the NFQ has been proposed by the State agency providing research, advisory and education in agriculture, horticulture, food and rural development, Teagasc, and is categorised under a category titled 'Equine'.

There has been no public call for proposals for new apprenticeships since 2017, rather 'the National Apprenticeship Office and the National Apprenticeship Alliance welcome proposals in new occupational areas from industry-led groups' on an ongoing basis, and some guidance material has been provided to facilitate this (Generation apprenticeship, 2024d, 2024h). Some €80,000 is currently available to consortia that are approved to develop a new apprenticeship. Most of the apprenticeships in development with a proposed HEI coordinating provider have been approved under this new system. Some of the proposed apprenticeships that have an occupational profile approved (Table B1.6) have been listed in the official list of apprenticeships as 'in development' for several years - for example, Precision Machinist and Quality Control, and Executive Chef.

Among the proposers of the 13 new apprenticeships in development are employers' and employees' representatives, including, *inter alia*, national and sector-level employer associations,

and professional bodies such as Accounting Technicians Ireland. Two have also been proposed by individual private consulting companies (proposed 'Customer Compliance Associate' and 'Professional Procurement and Purchasing Associate' apprenticeships).

Further summary details relating to the 13 apprenticeships in development with a proposed HEI coordinating provider at end 2023 are provided in Tables B1.6 and B1.7.

Table B1.6: New apprenticeships in development with proposed HEI coordinating provider - Occupational Profile approved December 2023							
Assigned category and apprenticeship title	**Number of apprenticeships leading to award at NFQ levels**					**Total in assigned category**	**Type of HEI** (and no. of apprenticeships) Technological university (TU) University (Uni.)
	Level 6	Level 7	Level 8	Level 9	Level 10		
Engineering Precision Machinist and Quality Control	1					**1**	**1 TU** (1 apprenticeships)
Finance Accounting Technologist			1			**1**	**1 TU** (1 apprenticeship)
Hospitality & Food Executive Chef				1		**1**	**1 TU** (1 apprenticeship)
ICT Software Solutions Architect				1		**1**	**1 TU** (1 apprenticeship)
To be decided Social Work				1		**1**	**1 Uni.** (1 apprenticeship)
Total	**1** (20%)	**0** (0%)	**1** (20%)	**3** (60%)	**0** (0%)	**5** (100%)	**4** TUs (**4 apprenticeships** 80.0%) **1** Uni. (**1 apprenticeships** 20.0%)

Source: Generation apprenticeship, 2024e

Table B1.7: New apprenticeships in development with proposed HEI coordinating provider - Occupational Profile not yet approved December 2023							
Assigned category and apprenticeship title	**Number of apprenticeships leading to award at NFQ levels**					**Total in assigned category**	**Type of HEI** (and no. of apprenticeships) Technological University (TU) University (Uni.)
	Level 6	Level 7	Level 8	Level 9	Level 10		
Engineering Advanced Manufacturing Engineer Civil Engineering Civil Engineering Geospatial Survey Technician	1		1 1	1		**4**	**2 TUs** (4 apprenticeships)
Finance Professional Procurement and Purchasing Associate		1				**1**	**1 Uni.** (1 apprenticeship)
Logistics Customs Compliance Associate		1				**1**	**1 Uni.** (1 apprenticeship)
To be decided Firefighter EMS Paramedic			1 1			**2**	**2 Unis.** (2 apprenticeships)
Total	**1** (12.5%)	**2** (25.0%)	**4** (50.0%)	**1** (12.5%)	**-**	**8** (100%)	**2** TUs (**4 apprenticeships** 50.0%) **3** Unis. (**4 apprenticeships** 50.0%)

Source: Generation apprenticeship, 2024e

As noted, at end 2023 three universities are listed as the proposed coordinating provider for five (38%) of these 13 apprenticeships in development. These are University of Limerick (Professional Procurement and Purchasing Associate, Customs Compliance Associate), University

College Cork (Paramedic, Social Work) and RCSI University of Medicine and Health Sciences (Firefighter). In May 2024 DFHERIS announced the launch of the Social Work apprenticeship, leading to a master's degree in social work (DFHERIS, 2024a).

B1.6 The changing infrastructure in apprenticeship in Ireland

The changing representations of the 'key partners and stakeholders' involved in the consortium-led model of apprenticeship, and changing descriptions of the role of the consortium in that model as it has evolved, are presented in Figure B1.4 (Generation apprenticeship, 2024b, 2024c; bold added in explanatory text).

Figure B1.4: Key stakeholders in the national apprenticeship system - consortium-led model in 2017 and 2023

'Key partners and stakeholders' in the May 2017 Handbook for Developing a National Apprenticeship	'Key partners and stakeholders' in the January 2023 Handbook for Developing a National Apprenticeship
'The consortium is the name given to the **industry-led group which develops an apprenticeship programme and oversees its roll out and ongoing relevance to the needs of industry**. The consortium includes education and training providers.'	The apprenticeship consortium steering group 'is industry-led, with an industry chairperson of the steering group and a number of employer representatives, one or more employee representatives, education and training provider(s), one of whom intends to act as the 'coordinating provider' for the apprenticeship, and other key stakeholders in the region/nationally. A consortium generally has between 7-12 members. **The consortium steering group oversees development of the apprenticeship programme**.'

Source: Generation apprenticeship, 2024b, 2024c

The main differences between the two representations are that, firstly, and as noted, the NAO - jointly managed by SOLAS and the HEA - is identified as having joint responsibility for operation of aspects of the apprenticeship system, although the exact nature of these and how they

relate to SOLAS's existing statutory and regulatory responsibilities, including those of the (currently SOLAS's) Authorised Officers, have not been specified.

Secondly, QQI is no longer named as a distinct stakeholder, demonstrating that quality assurance roles and responsibilities in the national apprenticeship system 'are organic and continue to evolve', particularly in light of the planned single apprenticeship system, as also referenced in the January 2024 meeting of the NAA (Generation apprenticeship, 2024f) and in the most recent (proposed) iteration of 'governance bodies' in the national apprenticeship system in Figure B1.5 (Generation apprenticeship, 2024i; bold added in explanatory text).

Thirdly, a distinction has been made between employer representatives and employers of apprentices, highlighting the critical role of employer representatives in the operation of the consortium as well as the critical but separate role of individual employers in the employment of apprentices during and after the period of apprenticeship.

Figure B1.5: Key stakeholders in the national apprenticeship system - proposed single integrated model 2024
'Governance bodies' in the February 2024 'integration update' public consultation document on the creation of a single integrated apprenticeship system
'The integrated system will be organised around industry-led 'consortia' or oversight groups which have broad stakeholder representation.....' 'Under the new arrangements apprenticeship programmes will be grouped together into families, **with each family overseen by a consortium**. It is envisaged that groupings will be made based on a combination of industry/sector, programme similarity, and apprentice population. Future flexibility will be required so that groupings can evolve based on new programme development, change in programme population, and operational experience.'

Source: Generation apprenticeship, 2024i

A formal distinction has also been made between the coordinating and collaborating provider roles, demonstrating an acknowledgement of the importance of expressly naming and taking account of these two provider roles separately.

The proposed single integrated model also includes reference to a consortium overseeing each 'family' of apprenticeships (e.g. Electrical, ICT, Finance) rather than a consortium overseeing each individual apprenticeship, as is the case at present.

Appendix C Summary of key findings from thematic analysis

1. Demand for new apprenticeship	What did the research find?	What does this mean? / Why does this matter?
Purpose of policy and reforms	The findings show a high level of agreement overall in terms of interviewees' **stated understanding of the various reasons why a new model of apprenticeship was introduced in Ireland** and the issues the associated reforms in higher education are intended to address at a national level. Most of these reasons relate to meeting actual and anticipated work-related educational needs, involving a wider profile of participants in this, and putting in place a new more flexible and industry-led [enterprise-/employer-led] way of doing things to facilitate this,	General agreement about the purpose of the national policy and associated reforms.
Reasons for HEIs' involvement in new apprenticeship	The reasons given for individual HEIs deciding to take on a coordinating provider role in new apprenticeship were largely framed in the context of **a stated desire to have a positive impact at different levels while also operating in a competitive higher education environment.**	General agreement about the need for change.
	The reasons given include those that involve what might be termed **'pull' factors,** such as a desire to be involved in and influence the new apprenticeship initiative at a national level from the start as well as what might be termed **'push' factors** such as a fear that if this HEI didn't lead an apprenticeship in a particular area of perceived strength some other HEI would do so and potentially affect its existing provision in that area, a fear of not being 'left behind' or of being perceived in a negative light by important stakeholders.	Different reasons, different motivations for involvement, 'push' and 'pull' factors at play; potentially affects nature of engagement and impact of that engagement.
	In some cases, some of the stated reasons for a HEI's involvement in new apprenticeship were reportedly **more considered within the HEI or based on a greater understanding of the requirements associated with the consortium-led model of apprenticeship, than others.**	Different decision-making processes; potentially affects nature of engagement and impact of that engagement.
Perceived reasons for HEIs' non-involvement in new apprenticeship	**Perceived reasons as to why some HEIs, particularly universities, have not engaged to a greater extent** in new apprenticeship were frequently framed in the context of a **perceived distinction between the universities and other institutions,** particularly the more recently created technological universities.	Perceptions of apprenticeship being more appropriate, more acceptable in some parts of higher education sector; potentially affects nature of engagement and impact of that engagement.
	Reasons given for this relate to perceptions **of distinct histories, missions, and status** *vis à vis* **statutory apprenticeship,** as well as **perceived concerns in some HEIs about the new apprenticeship model** itself, and the relative **newness of the model** ('wait and see').	
	Perceived **concerns about the model** itself included that apprenticeship programmes are required to be 'national' programmes, but that there is some **uncertainty or 'unease' regarding the exact meaning of what a national programme is,** of what it involves with respect to involvement of other providers, and associated concerns about 'ownership' and 'control', that are perceived to be factors in some HEIs' decisions on their involvement or non-involvement, and the extent of their involvement, in new apprenticeship.	
Demand for new apprenticeship in different occupations	**Statutory apprenticeships** are reported to be **perceived to be likely to be more suitable, successful, and sustainable in some occupations than in others.**	Not all occupations are perceived to be suitable for apprenticeship, both by industry and higher education; potentially affects nature of engagement - by industry and higher education - and impact of that engagement.
	Reasons given for this relate to **industry demand** and include those related to the nature of the industry or sector and demand for an apprenticeship in that industry or sector including norms associated with the development of existing and potential workforce.	
	Reasons given for this also relate to **perceptions of suitability for** apprenticeship and associated **demand in the higher education sector,** including those related to whether the occupation is considered to be a 'trade', or a 'profession' or in a 'professional' area, and to the perceived potential impact of an apprenticeship in a particular occupation on existing provision and reputations, in individual HEIs, in the higher education sector generally, and in defined parts of that sector.	

2. implementation of new apprenticeship	What did the research find?	What does this mean? / Why does this matter?
Two key roles	A HEI's participation in an individual apprenticeship may be viewed as potentially **involving two key roles: as a member of the apprenticeship consortium** and as the **coordinating provider** in the development and delivery of the apprenticeship programme.	Separate but related roles.
HEI as consortium member	HEIs' experiences as a consortium member reportedly differ to some extent in different apprenticeships, and in some cases HEIs' responsibilities in that role differ in practice compared to what they initially understood their role and responsibilities would be. **Some new apprenticeships have therefore reportedly worked better than others with respect to the consortium**, and some of the reasons for this are attributed to consortium members' - including the HEI's own - **levels of understanding of the requirements as well as levels of engagement in a consortium**.	Levels of understanding of the requirements differ, levels of engagement differ; potentially affects nature of engagement - by industry and higher education - and impact of that engagement.
HEI as coordinating provider	With respect to the coordinating provider role in the HEI, **HEIs experienced some challenges and associated changes needed**, to a greater or less degree, internally in terms of **introducing and/or implementing new apprenticeship into the HEI, and many of these relate to alignment, or not, with existing systems and supports in the higher education institution.** **Different degrees of alignment or non-alignment** with existing systems and supports were reported, as were the **different degrees of change that were deemed to be needed** in those systems and supports to facilitate implementation and delivery of new apprenticeship.	Levels of changes needed in HEIs differ, depending on extent of alignment, or not, with existing systems and supports in the higher education institution.
Differences compared with HEIs' other provision	The many ways in which new apprenticeship is reported to have been **experienced as different** compared with HEIs' other provision include those related to **teaching and learning; assessment of learning; the number and nature of stakeholders involved; the level of complexity involved; the level of flexibility allowed; the level of control the stakeholders have; and the level and type of additional resources needed, including some new roles and new ways of operating for HEI staff**.	New apprenticeship is different in many respects to HEIs' existing provision and is more complex and resource intensive. Associated issues for HEIs relate to the extent to which they have or can have control over aspects of apprenticeship, including learning and assessment of learning acquired in the off-the-job element of apprenticeship.
Uncertainty about core concepts	There is **some uncertainty around the meaning of core concepts according to which the new model of apprenticeship is variously described in official documentation** including 'enterprise-led', 'consortium-led' or 'employer-led', about the feasibility of these concepts being implemented, in practice, as intended, and about the institutional arrangements and other factors that might best support their more widespread application in the new model of apprenticeship, including the potential role of representative professional bodies in this.	Levels of understanding of the core concepts differ; potentially affects nature of engagement, impact of that engagement, and potential for 'mainstreaming' in industry and higher education.

3. Success of apprenticeship	What did the research find?	What does this mean? / Why does this matter?
National level	In general, and notwithstanding some reservations expressed, particularly relating to the availability of adequate data systems, changes that have been implemented at a **national level** relating to the national apprenticeship infrastructure are **perceived as indications of significant progress**.	General sense of progress being made at national level, albeit need for data systems to inform policy and activity including identification and addressing of skills needs.
Sector level	At **higher education sector level**, apprenticeship reform in higher education to date, along with prospective reforms involving craft apprenticeship, are reported to have already had **significant impact, and the potential for significant further impact**, in the sector and on the evolution of a reportedly emerging 'unified' or 'integrated' tertiary education sector in Ireland.	General sense of progress being made at higher education sector level and potential for further impact at higher education sector level and beyond (incl. FET, tertiary education system).
HEI level	At **HEI level**, HEIs use a variety of metrics, to differing degrees in different HEIs, to provide insight into and evidence of the success or otherwise of their individual apprenticeships, using metrics such as **participation rates** on apprenticeships and **apprentices' performance** including **achievement of learning outcomes, grades, and awards**, and **less tangible metrics** such as engagement with industry, alignment with existing systems and supports in the HEI, and the introduction of new systems and support including new roles and responsibilities for their own staff. HEIs' reported experiences of individual apprenticeships indicate that, **using these metrics and for various reasons outlined in this research, including in this summary and in Chapter 5, some new apprenticeships can be deemed to have been more successful to date, and potentially more sustainable in the longer term, than others**.	Progress being made at HEI level with respect to specific metrics; some apprenticeships more successful than others with reference to these metrics.
Future of apprenticeship in higher education	With respect to the **future of apprenticeship in higher education**, issues identified as needing particular consideration to ensure longer term success and sustainability of apprenticeship relate to concepts of scale and mainstreaming of apprenticeship in HEIs and throughout the higher education sector. Considerations related to the **management and governance of the national apprenticeship system and associated questions related to the concepts of ownership of and control over aspects of apprenticeship, are considered critical**.	Considerations related to the management and governance of the national apprenticeship system and associated questions related to the concepts of ownership of and control over aspects of apprenticeship, are considered critical.

Appendix D Interview protocol

Dublin City University Doctor of Education programme
Doctoral research on apprenticeship
Breda McNally

Interview Protocol

May 2023

Print Plain Language Statement (PLS), Informed Consent Form and outline of areas for discussion during interview in advance of interview

Re-send PLS, Informed Consent Form and outline of areas for discussion during interview to cover before start of interview; ask to read, sign and return Informed Consent Form (in-person, email, etc.); bring hard copy of PLS and Informed Consent Form to in-person interview

Information about the interview
Date
Time
Location
Interviewer
Interviewee
File name for digital copy of interview

_____

Introduction
Introduce self
State purpose of research (from Plain Language Statement)
My focus - new/not craft, interviewees at three levels (macro, meso, micro)
Ref. policy documents, reports, consultation submissions
Confirm informed consent:
- Emphasise voluntary participation, confidentiality and data protection
- Note how individual and organisation will be referred to in the research - interviewee confirm agreement with this
- Explain why audio recording - aware of advantages and disadvantages, want to focus on conversation, will transcribe
- **In-person interview**: Save immediately to DCU-designated cloud student account, delete from recording device
- **Online interview**: Explain why and how DCU-designated Zoom account is being used [DCU issues Zoom (only) accounts for staff and students, using DCU-supported drive and cloud storage]; option to turn off video and audio record only [ask if interviewee would prefer to leave video on, will delete video, save audio only] - will be saved securely to DCU-supported platform
- Save immediately to DCU-designated cloud student account
- *Confirm signed copy of Informed Consent Form received by researcher*

Outline structure of interview - number and focus of questions, duration (interviewee has this in advance)
Indicate will take some notes
Note 'apprenticeship' means 'statutory apprenticeship' unless otherwise stated or implied
Ask interviewee if s/he has any questions before starting

Check audio recording technology working

_____

Start audio recording

_____

Outline of areas for discussion during interview

1. Brief outline of your role(s) in relation to apprenticeship in Ireland since 2016
2. Your understanding of the Government's high-level policy on apprenticeship involving a new 'consortium-led' model of apprenticeship since 2016 - e.g. Its purpose? / What is it for? Who is it for? Why? Why now?
3. Your understanding of what this policy involving the new consortium-led model of apprenticeship means for higher education in Ireland*?
4. With respect to your role/your organisation's role, your view of how the policy on apprenticeship and these associated apprenticeship reforms have been implemented in higher education in Ireland* since 2016 - e.g. Why some occupations, sectors, stakeholders, higher education institutions/types of institutions, roles (coordinating or collaborating providers), NFQ levels, professional qualifications, and not others, and how does new apprenticeship in higher education differ from and compare with other existing work-based learning initiatives and practices in higher education?*
5. Challenges, difficulties or problems you have experienced/observed/become aware of in relation to these apprenticeship reforms in higher education in Ireland* since 2016 - e.g. What challenges, for whom, why, and how were they dealt with?
6. Things working well, opportunities or possibilities you have experienced/observed/become aware of in relation to these apprenticeship reforms in higher education in Ireland* since 2016 - e.g. What, for whom, why?
7. Your view of implications to date of the decisions made (Q4) and the challenges and opportunities encountered (Q5 & Q6) in relation to these apprenticeship reforms, for higher education in Ireland*?
8. Your view regarding the future development of apprenticeship in higher education in Ireland*?
9. Any other issues you wish to raise/comment on? / any questions you wish to raise?
10. In summary:
    What is the value of / what and whose needs are being met by apprenticeship in higher education in Ireland?
    What is the value of / what and whose needs are being met by higher education in apprenticeship in Ireland?

    * and/or your higher education institution specifically, where relevant

Probes

Tell me more about that? [more information]
Explain that further? / what does that mean? [explanation/clarification]

_____

Stop audio recording

_____

Closing instructions

Thank interviewee for time and thoughts
Remind again about confidentiality and data protection
Offer to send abstract/summary findings from final report/thesis

Appendix E Plain language statement

Dublin City University Doctor of Education programme
Doctoral research on apprenticeship
Breda McNally

Plain Language Statement

April 2023

Breda McNally, a doctoral research student in the School of Policy and Practice at Dublin City University's Institute of Education, is undertaking research on apprenticeship in Ireland.

The title of the research is 'Expansion of statutory apprenticeship in higher education in Ireland since 2016: an exploration of experiences'.

The aim of the research is to examine elements of the expansion of statutory apprenticeship in Ireland, particularly as related to apprenticeship in higher education during a time of significant reform.

The research includes undertaking semi-structured interviews with key stakeholders in organisations involved in the development of statutory apprenticeship in Ireland.

Interviewees will be invited to take part in an in-person interview of approximately 1 hour's duration which will focus on experiences of apprenticeship reform in Ireland, and which will be audio recorded. An online interview via Zoom can be arranged if preferred.

Participation in the research is entirely voluntary, and participants may choose not to respond to individual questions or to withdraw from the research study at any point. If an interviewee chooses to withdraw from the research, participation in the research will end at this point, meaning that no further data collection will take place and data previously provided will not be used in the research analysis or report.

In order to protect confidentiality, the research report will refer in summary form only to the nature of the organisations in which participants were or are employed - for example, 'Government department', 'agency of Government department', or 'higher education institution', etc. - and codes will be assigned to individual interviewees (e.g. Int1, Int2) to ensure anonymity in reporting. In addition, every effort will be made in the reporting of quotes from interviewees to ensure that individuals' work positions or organisations are not identifiable or inferred. Notwithstanding this, it should be noted that confidentiality of information can only be protected within the limitations of the law - i.e. it is possible for data to be subject to subpoena, freedom of information claim, or mandated reporting by some professions.

The study is being undertaken ultimately with a view to increasing knowledge about statutory apprenticeship in Ireland. It will potentially inform and enhance good practice in the design, development, and delivery of apprenticeship, and the findings may also be potentially applicable to those involved in other models of apprenticeship and other forms of work-integrated learning. The findings will be provided in summary form by the researcher to interviewees. Any queries on the research can be directed to the researcher (Breda McNally) at brigid.mcnally6@mail.dcu.ie).

By participating in this research, you will be submitting your personal data to Breda McNally at DCU. As such, DCU is the Data Controller and must comply with data protection rules under the General Data Protection Regulation (GDPR) and the Data Protection Acts 1988 to 2018. The types of personal data which will be collected from you as part of this project are your name, work organisation and your responses during the interview with the researcher. The personal data you provide will be held for a period of two years after which it will be deleted in full. Personal data provided as part of this study will be held safely and securely in accordance with the DCU Data Privacy Policy. Under data protection rules, you have a number of rights (see www.dataprotection.ie). To exercise your rights, or if you have any questions in relation to your personal data, you may contact the DCU Data Protection Unit at: data.protection@dcu.ie. The DCU Data Protection Officer is Mr. Martin Ward (data.protection@dcu.ie 'Phone: 00-353-1-700 7476). You also have the right under data protection law to complain to the Data Protection Commission (see www.dataprotection.ie).

If participants have concerns about this study and wish to contact an independent person, please contact:

The Secretary, Dublin City University Research Ethics Committee,
c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

Appendix F Informed consent form

Dublin City University Doctor of Education programme
Doctoral research on apprenticeship
Breda McNally

Informed Consent Form

May 2023

Introduction

Breda McNally, a doctoral research student in the School of Policy and Practice at Dublin City University's Institute of Education, is undertaking research on apprenticeship in Ireland. The research supervisor is Dr Jane O'Kelly PhD, Assistant Professor at Dublin City University's Institute of Education.

The title of the proposed research is 'Expansion of statutory apprenticeship in higher education in Ireland since 2016: An exploration of experiences'.

The aim of the research is to examine elements of the expansion of statutory apprenticeship in Ireland, particularly as related to apprenticeship in higher education during a time of significant reform.

The research includes undertaking semi-structured interviews with key stakeholders in organisations previously and currently involved in the development of apprenticeship in Ireland.

_____

Please read the **Plain Language Statement (attached)** which provides further information on the research and your involvement in this.

Consent to participate in semi-structured interview

As a key stakeholder in an organisation involved in the development of apprenticeship in Ireland, I am being invited to take part in the research in the form of an in-person or online interview of approximately 1 hour's duration which will focus on my experiences and expectations of apprenticeship reform in Ireland. The types of personal data which will be collected from me as part of this project are my name, work organisation and my responses during the interview. The interview will be audio recorded. The personal data I provide will be held for a period of two years after which it will be deleted in full.

Participation in this research is entirely voluntary, and I may choose not to respond to individual questions or to withdraw from the research study at any point. If I choose to withdraw from the research, my participation in the research will end at this point, meaning that no further data will be collected from me and data I previously provided will not be used in the research analysis or report.

I am aware that confidentiality of information can only be protected within the limitations of the law - i.e. it is possible for my data to be subject to subpoena, freedom of information claim or mandated reporting by some professions.

By participating in this research, I will be submitting my personal data to Breda McNally at DCU. As such, DCU is the Data Controller and must comply with data protection rules under the General Data Protection Regulation (GDPR) and the Data Protection Acts 1988 to 2018.

Participant - please complete the following (Circle Yes or No for each question)

I have read the Plain Language Statement (or had it read to me)	_Yes/No_
I understand the information provided	_Yes/No_
I understand the information provided in relation to data protection	_Yes/No_
I have had an opportunity to ask questions and discuss this study	_Yes/No_
I have received satisfactory answers to all my questions	_Yes/No_
I am aware that my interview will be audiotaped	_Yes/No_

_I consent to the possibility that elements of the research may be published in
due course and I am aware that all commitments regarding confidentiality, storage,
security and disposal of data apply, including that all data will be safely disposed of,
either via confidential bin and/or deletion, after publication of research, if any,
within two years_   _Yes/No_

I consent to the use of my data within these parameters   _Yes/No_

Signature

I have read and understood the information in this consent form.

My questions and concerns have been answered by the researcher, and I have a copy of this consent form.

Therefore, I consent to take part in this research project.

Participant's Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____

Appendix G Sample entries to reflexive journal

Phase 2 Coding

I have such an amount of rich data - they're quite unique in terms of breath and depth, and the range of perspectives with respect to levels of engagement of interviewees in statutory apprenticeship - this is new, and it has not been done before.

So, this is really interesting, but it's also really daunting - How am I going to make sense of all these data? How am I going to ensure that I adequately interrogate and analyse it all, and allocate sufficient time to make sense of and present it in a meaningful, professional, and potentially impactful manner?

I am approaching coding with some sense of trepidation because, despite knowing that there is no 'right' way to code, and that coding as explicated by Braun and Clarke is seen as an iterative process that necessarily bears the mark of the researcher, I do nonetheless sometimes feel some disquiet with the uncertainty, the 'flexibility', the 'subjectivity' that are inherent in the process.

On occasion I feel a sense of overwhelm with the richness and possibilities of the data. Sometimes I think perhaps it would have been easier if I had chosen a clear theoretical framework at the start of the research process, but on reflection I always conclude that I am satisfied that the approach I am taking, although definitely challenging, is the way to go in terms of letting the data speak as such.

I am nonetheless also aware that the questions I posed and the way in which I posed them in advance of and during interviews, did suggest or set certain 'boundaries' around the interviews in terms of how and in what sequence questions were asked, the answers provided, how the interview conversations flowed, and the way in which the data collected can be, will be, and are being analysed.

On reflection, and as I was progressing with the coding, I realised that as I had previously progressed through the Familiarisation phase of the process, my reading of the transcripts and associated familiarisation notes contained not only primarily summary statements or critical questions that I posed to myself as I was familiarising myself with the data in the transcripts, but also more highlighting of what I considered to be particularly interesting or insightful comments from interviewees themselves. I'm not sure why that was, or whether it was a 'good' thing or not.

Phase 3: Generating initial themes

After having reviewed the codes and the associated coded data generated at the end of three rounds of initial coding (Phase 2), I believe the tentative themes now generated best capture the 'story' being generated by that data at this stage of the process. It is of course possible - and indeed likely - that every time I (or any researcher) would revisit the interview transcripts and the associated codes and coded data, I could make an argument for coding some of it differently. I believe, however, at this stage of the process - end of Phase 3 - it is time to concentrate on generating a picture, albeit perhaps a tentative picture, of the story the data are telling me now through allocating existing codes and coded data to the tentative themes that I believe are best telling that story at this point.

Appendix H 'Overarching' codes

Coding Round 3 - 20 'overarching' initial codes	Files	References
Name		
Apprenticeship as regulation of occupation	1	3
'Apprenticeship is different'	14	124
Autonomy, ownership, competition and control in new apprenticeship in HE	15	256
Complexity of governance in apprenticeship	4	12
Distinction between 'academic' and 'vocational' 'other'	10	23
Enablers of success of new apprenticeship in HE	8	55
HEI's previous or existing collaborations with industry, work-based learning	8	20
HE's engagement in statutory vs other forms of apprenticeship and other provision	16	128
Implications for and impact on HEIs involved in new apprenticeship	12	96
Industry-, enterprise-, employer-led apprenticeship - what does it mean	8	17
Metrtics of success - what and whose needs are being met	15	130
National and international level developments relevant to new apprenticeship in HE	8	122
Perception of apprenticeship often negative or inaccurate	12	40
'Pilot' to mainstream, continuous learning and improvement	11	56
'Professionalisation' of apprenticeship	9	49
Purpose of apprenticeship - what's the problem apprenticeship is trying to fix	13	67
Roles and responsibilities in apprenticeship in HE	12	92
Suitability for and sustainability of an apprenticeship	8	36
Tertiary education system - enablers	6	24
Theory vs practice	14	105
	204 files	**1,455 references**

Appendix I Thematic map

A story of apprenticeship reform in higher education: thematic map

'Narrative'	Themes	Sub-themes

Is there a / What's the problem(s) that needs to be fixed?

1. "Apprenticeisation' of higher education' Understanding and experiences in HE of demand for new apprenticeship in HE

- Purpose of reforms in apprenticeship in HE
- HEIs' involvement in new apprenticeship
- HEIs' non-involvement in new apprenticeship

Wider definition and scope - new industries, occupations, qualifications and award levels
More flexibility, more 'industry/enterprise-led'
More 'equity', access and progression opportunities for wider cohort of learners
HE and HEIs more involved, lead, take ownership, more engaged with key stakeholders
Value of work-based learning
A different way of learning, maybe more appropriate for a particular type of learner
Option to participate in an apprenticeship rather than 'go to university' (via CAO)

Aligned with the HEI's mission, the right thing to do, an opportunity
[Subject matter] Area of strength, reputation [in HEI] - build on this, protect this
Won't threaten the 'status quo' [in HEI]
Funding
Apprenticeship is national policy, be part of it, influence it, be seen to be embracing it

Institutions' history, mission, status vis à vis statutory apprenticeship - 'hierarchy' in HE
[Concerns about] The new apprenticeship model - 'national programme', roles and responsibilities, complexity of governance
Relative newness of the model…..'Wait and see'

2. "Apprenticeisation' of occupations' Understanding and experiences in HE of demand for and sustainability of new apprenticeship in specific occupations

- Industry demand for and sustainability of new apprenticeship in specific occupations
- HE demand for and sustainability of new apprenticeship in specific occupations

Aspects of the industry or sector
- Nature, capacity and involvement of industry rep. in apprenticeship consortium
- Culture and norms with respect to the development of existing or potential workforce

Area of strength (subject area or mode of delivery) in the HEI
Potential impact on existing provision and reputation (HEIs, HE sector and HE sub-sectors)
Is focused on occupation - specific job role - as opposed to broader disciplinary area
Whether considered to be a 'trade', in a 'professional' area, or a 'profession'

Can we / let's try to fix it with a new model of apprenticeship?

3. 'Apprenticeship is different' How new apprenticeship is experienced in HE compared with other provision in HE

- The HEI as consortium member in the development and consortium-level management of an apprenticeship
- The HEI as coordinating provider in the delivery and HEI-level management of an apprenticeship

Different experiences in different apprenticeships vis à vis engagement with industry and other stakeholders in the apprenticeship consortium
Roles and responsibilities: understanding and expectations vs reality, 'theory' vs 'practice'
Meaning of terms and implementation of concept: 'enterprise-led', 'consortium-led', 'employer-led'
How to 'scale up', mainstream the model

Some challenges internally introducing new apprenticeship into HEIs:
- Questions and concerns regarding appropriateness of the model for the HEI
- Alignment with and impact on existing systems and supports

Many ways in which new apprenticeship has been experienced as different compared with HEIs' other provision, including those related to:
- Teaching and learning
- Assessment of learning [on- and off-the-job]
- Level of control
- Number and nature of stakeholders
- Level of complexity, complexity of governance
- Level of flexibility
- Additional resources needed, including new roles and responsibilities for HEI's own staff

How are we doing?

Will we keep doing it?

4. 'Are we (getting) there yet?' 'Success' of new apprenticeship in HE

- The current status of apprenticeship in HE: metrics of success
- The future of apprenticeship in HE: key considerations

National level
- Significant achievements
- Data systems
HE sector level
- Intra- and inter-sector collaboration and impact
HEI level
- Apprenticeship programme-level criteria
- 'Work in progress', ongoing learning and continuous improvement

'Scaling up', mainstreaming the model
- Management and governance of apprenticeship: roles and responsibilities
  National programme
  Ownership and control

257

Appendix J DCU Research Ethics Committee approval

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Ms Breda McNally
School of Policy and Practice, Institute of Education

21st December 2022

REC Reference: DCUREC/2022/229

Proposal Title: Statutory apprenticeship in Ireland 2016-2022: An exploration of higher education stakeholders' experiences

Applicant(s):   Ms Breda McNally, Dr Jane O'Kelly

Dear Colleagues,

Thank you for your application to DCU Research Ethics Committee (REC). Further to notification review, DCU REC is pleased to issue approval for this research proposal.

DCU REC's consideration of all ethics applications is dependent upon the information supplied by the researcher. This information is expected to be truthful and accurate. Researchers are responsible for ensuring that their research is carried out in accordance with the information provided in their ethics application.

Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. Should substantial modifications to the research protocol be required at a later stage, a further amendment submission should be made to the REC.

Yours sincerely,

DCU
Research & Innovation

Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
Baile Átha Cliath, Éire

Research & Innovation Support
Dublin City University,
Dublin 9, Ireland

T +353 1 700 8000
F +353 1 700 8002
E research@dcu.ie
www.dcu.ie

Dr. Melrona Kirrane
Chairperson
DCU Research Ethics Committee

Note: Please retain this approval letter for future publication purposes (for research students, this includes incorporating the letter within their thesis appendices).