THE RHETORIC, POLICY, PRACTICE GAP: A Study of Online Learning in Irish Higher Education

A thesis presented to Dublin City University Institute of Education in fulfilment of the requirements for the degree of Doctor of Education (EdD)

By

Colum A. Foley B. Comm. MSc.

Research Supervisors

Professor Mark Brown

Dr. Martin Brown

May 2021

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:  (Candidate)

ID No.: 99100126

Date: May 2021

DEDICATION

To my wife Angela Lyons, for her unwavering support, encouragement, and love throughout this process.

To my three sons, Fionn, Oisín, and Ferdia, Carpe Diem.

To my late father, Gus Foley, and my mother Claire Foley, and Angela's late parents, Paddy and Eileen Lyons.

ACKNOWLEDGEMENTS

To my supervisors, Professor Mark Brown, and Dr Martin Brown, for their advice and guidance.

To my colleagues in Open Education and DCU Business School for their support.

To the wider team in NIDL, for their encouragement.

To the interviewees for this research, who gave generously of their time, thank you.

To the examiners of my thesis, Professor Joe O'Hara, Dr. Tom Farrelly, and Dr. Tony Murphy for their constructive and helpful suggestions

To Dr. Lorraine Delaney for her support and for acting as Chairperson of the examination process.

To my fellow Doctoral students who have made the journey an enjoyable one: Mark, Rachel, Sharon, Fiona, Catherine, Siobhan, Irene, Damien, Shelia, Eithne, John, Elaine, Rachael, Colette, Brian, Eileen, Nicola, Jeff, Yvonne, Jen, Colm, Hazel and Celine.

To everyone in DCU Institute of Education, for their help and assistance, during the last four years.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

BNS -Bachelor of Nursing Studies

BYOD- Bring your own device

CICE-Church of Ireland College of Education

CPD- Continuing professional development

CSO-Central Statistics Office

DCU-Dublin City University

DES-Department of Education & Skills

DOL-Digital and online learning

DSC-Digital skills and competence

DigiComp-Digital competence frameworks for citizens

DR Digital Roadmap

EADTU-European Association of Distance Teaching Universities

EDEN-European Distance Education Network

EC -European Commission

ECDL-European Computer Driving Licence

EICT-Educational Information and Communication Technology

ECTS-European Credit Transfer and Accumulation System

EntreComp-Competence framework for entrepreneurship

EQF-European Qualifications Framework

ETF-European Training Foundation

EU -European Union

EY-Ernest and Young

GEP-Global Education Polices

HEI-Higher Education Institutes

HESPF-Higher Education System Performance Framework

ICDE-International Council for Open and Distance Education

ICT-Information and Communication Technology

IMS-Instructional Management System

IT-Information Technology

JRC-Joint Research Centre

LFS-Labour Force Survey

LLL-Life Long Learning

LMS-Learning Management System

MOOC-Massive Open Online Courses

MU-Maynooth University

NAP-National Access Plan

NGOs-Non-Governmental Organisations

NIDL-National Institute for Digital Learning

NIHE-National Institute for Higher Education

NUIG-National University of Ireland Galway

OCL-Open Content Learning

ODL-Open Distance Learning

OECD-Organisation for Economic Cooperation and Development

OER-Open Education Resources

OOFAT-Online Open Flexible and Technology-enhanced education.

OPL-Open Publication Licence

OUUK-Open University United Kingdom

PATH-The Programme for Access to Higher Education

PDF-Professional Development Framework

PISA-Programme for International Student Assessment (OECD)

PLE-Personal Learning Environment

PWC-Price, Waterhouse, Cooper

RPL-Recognition of Prior Learning

QNHS-Quarterly National Household Survey

RGAM-Recurrent Grant Allocation Model

RSS-Really Simple Syndication

SCORM-Shareable Content Object Reference Model

TCD-Trinity College Dublin

TEL-Technology Enhanced Learning

UCC-University College Cork

UCD-University College Dublin

UL-University of Limerick

UNESCO-United Nations Educational, Scientific and Cultural Organization

VLE-Virtual Learning Environment

VOLG-Virtual & Online Learning Group

ABSTRACT

The Rhetoric, Policy, Practice Gap: A Study of Online Learning in Irish Higher Education - Colum A. Foley, Dublin City University.

Online learning is an idea whose time has come. Even before the Covid-19 pandemic it was predicted that the global value of the online education market would reach €290 billion by 2025 (McCue, 2018). This figure is likely to have increased significantly in 2020 due to campus closures as teaching continued online. Thus, the demand for online learning is enormous and growing, even though it currently makes up less than 2% of the overall higher education market (HolonIQ, 2020).

The Covid-19 crisis has shown policy-makers and educational leaders that new models of online learning provide a means to widen access and participation in higher education. The debate surrounding the development of online learning in Ireland for promoting access and participation in lifelong learning more generally appears to be largely aspirational in the absence of a strong policy commitment and funding model to resource fully online programmes.

Set against this backdrop, this doctoral study aims to investigate a perceived gap between rhetoric, policy and practice in promoting wider access to higher education in Ireland. It involves three phases:

> Phase 1 (macro-level) consists of an analysis of relevant International policy texts;
> Phase 2 (meso-level) involves an analysis Irish policy texts and institutional online learning strategies and initiatives through publicly available documentation; and
> Phase 3 (micro-level) adopts a case study method to "tell the story of the development of online learning" at one Irish university.

The main research findings are:

- Defining online learning is problematic. The research demonstrates that a clear, universally agreed, definition of what constitutes online learning, understood by the sector and policy makers, does not exist.
- Economic factors are the most influential drivers (and barriers) in the adoption of online learning in policy texts. Social and vocational drivers have influence, however, the most important driver is economic. Notably the pedagogical drivers for online learning in policy texts are relatively weak.
- Good policy emanates from a collaborative process which is inclusive, transparent, and credible. In order for policy to be effective and successful, all relevant stakeholders must be encouraged to contribute in a meaningful way, through a clear process. Future development of policy for online learning in Ireland needs to be more cognisant of these requirements.

Keywords: Online Learning, Policy, Higher Education in Ireland

CHAPTER 1 INTRODUCTION

1.1 Introduction

Online learning is an idea whose time has come.

Throughout the world, even before the Covid-19 pandemic, online learning was experiencing phenomenal growth. In the US, while overall university attendance reduced for the fourth year in a row in 2017, off-campus student numbers increased for the 12th year in a row, reaching 6.3 million learners in the Autumn of 2016 (Seaman, Allen and Seaman, 2018). The value of online learning globally is expected to reach €290 billion by 2025 (McCue, 2018). MOOC's alone attracted almost 500 million visits from learners around the world in the thirty days prior to June 2020, up 2.5 times on the month of January 2020 (HolonIQ, 2020). "The borderless digital market for 'just-in-time' skills and knowledge is highly competitive and represents a rapidly evolving part of the post-secondary education landscape" (ibid).

The growth in online learning is primarily because this mode of learning provides flexible access to higher education where students can engage with content and instruction at a time and place of their choosing. Students in many disciplines, including those in business, management, and education, continue to work while studying (Stoessel *et al.*, 2015). Students who study online have the flexibility to choose part-time and/or external modes of study increasing their options for interaction, participation, and ultimately the successful completion of their study programs (Broadbent and Poon, 2015).

In Ireland Hunt & Loxley (2020) found that little research has been conducted into part time and flexible learning in higher education. Indeed, the lack of a clear and continuing funding pathway for online learning has resulted in "[An] orientation towards upskilling and employability combined with the absence of resources and reduced funding meant participation depended on increasing the numbers of working adults who could pay fees for programmes" (Hunt and Loxley, 2020, p10).

Students worldwide have become accustomed to engaging with an increasing range of technologies in every aspect of daily life, albeit with significant inequities across

developed and developing countries. Many students consider digital environments, like the Internet, to be a way of life rather than just functional tools that can be used on demand (Henderson, Selwyn and Aston, 2017). The ubiquitous nature of digital technology is evident in the finding for example, that 91% of people living in Ireland have smart phones (Deloitte, 2019). It follows that vast majority of students in Ireland, are accustomed to mobile technology. If this is the case, the question arises as to whether Irish Higher Educational Institutions are maximizing the opportunities for learning on a lifelong basis that online learning provides? Are Irish Higher Education policymakers and educational leaders promoting innovative, new pedagogical models of teaching, or is the sector being dragged reluctantly into the 21st Century?

The overarching research aim of this study is to investigate a perceived gap between rhetoric, policy, and practice in promoting access to Irish higher education through new models of online learning. The focus is to establish if government education policy has been pro-active in initiating good policy to encourage adopting the array of new models of online learning now available to promote access to higher education, or if it has been largely reactive or even passive. The research seeks to decipher if the political expression around this topic is matched by action, identifying "good" and "bad" policy. The next sections expand on this aim, and the rationale for the study. The scope of the research is then outlined along with a brief discussion on the nature and definition of policy. Finally, this first chapter describes the expected outcomes of the study and concludes with an outline of the thesis structure.

1.2 Rationale for the study

In Ireland, participation rates in lifelong learning at 12.5% (EC, 2019), fall far below the leading performers in this area Switzerland at 31.2%, and Sweden at 30.4% (EC, 2018). Based on these figures, the conversation surrounding the potential of online learning in Ireland appears to be largely aspirational. New models of online learning and the advent of always connected devices, provide more flexibility in how, when, and where people learn, particularly for time-restricted lifelong learners and for students in less accessible environments (Becker et al., 2018). This study aims to investigate how policy matches up to ambitions and aims to consider how effectively policy is being formulated and implemented in the Irish higher education context, to address the growth of online

learning. While the term online learning is often used loosely and is poorly defined, the focus of this research is on educational provision, where online learning allows students to pursue further education from a distance (Singh and Thurman, 2019). It does not include emergency remote teaching online adopted in the Covid-19 crisis, but rather builds on the traditions of distance education to provide intentionally designed and delivered courses and programmes for diverse and geographically dispersed learners living throughout Ireland, and beyond. Importantly, for the purpose of this thesis, "online learning" is defined as:

> Education being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment (Singh and Thurman, 2019, p303).

When selecting a topic to research in the broad area of online learning, as defined in the above paragraph, there is a wide range of academic literature from which to choose. Much of this literature describes best practice, the management of learning at a distance, and new tools and techniques to enhance learning using technology, at different educational levels. As Zawacki-Richter (2009) established from a Delphi study, and Zawacki-Richter and Anderson (2014) expanded on in their book proposing a future research agenda, there is a gap in our understanding of policy and, in particular, the extent and effectiveness of national level initiatives. There are countless reports, government papers and journal articles advocating the development of government policies in Ireland which promote the use of new learning technologies to widen access to higher education, to facilitate disadvantaged learners, to promote lifelong learning and to enable continuous professional development in a flexible, user-friendly way. However, there appears to be a gap in the research in relation to analysing the formulation and implementation of online learning policy in Irish Higher Education. In setting out to review policy concerning online learning then, it is important to define what policy is and what definition is being adopted for the scope and purpose of this study.

1.3. What is educational policy

Defining policy is not a simple matter. Diggins-Mannion (2019) notes that "a single, all-inclusive definition of the term public policy does not exist in Ireland" (p.31). The term public policy also reflects a rather narrow view of policy. For example, Foucault (1970) proposes that policy determines how culture, subjectivity and objects of knowledge are constituted, organised and transformed through the interplay between debate and practices. He argues that policies provide the mechanism through which discussions are constructed and how they change and shape actual behaviour and practice.

In adopting a critical perspective on policy analysis, Apple (2019) maintains that education is a "site of crucial struggles over authority and identity, indeed over both the very meaning of being educated and who should control it" (p. 277). Therefore, in carrying out critical policy analysis, according to Apple (2019) researchers need to ask: Whose knowledge is this? How did it become "official"? Who benefits from these policies and who does not? What are the overt and hidden effects of educational reforms? In a similar vein, Hill (2014) describes the policy process as a complex political procedure in which there are many actors: politicians, pressure groups, civil servants, publicly employed professionals, and even sometimes those who see themselves as the passive recipients of policy. The key point to take from the above conceptions of policy and the policy formation process is that "policy" does not just refer to policy documents developed in a particular area. In an Irish context, Cunningham (1963) describes policy thus: "Policy is rather like the elephant – you recognise it when you see it but cannot easily define it" (p229). This analogy is taken as a useful starting point for this study, as policy in the context of online learning needs to be understood by going beyond what you see or read at face value through asking deeper questions.

1.3.1 Policy Texts and Policy Discourses

Ball (2015) makes a helpful distinction by stating that policy takes two forms: (i) policy texts and (ii) policy discourses. For the purpose of this study, "policy texts" are defined as official or public policy documents which relate to the general area of online learning. Importantly, this definition of policy texts includes key policies where there may be gaps or no explicit reference to online learning, as such omissions might be just as significant

as those included policies that endeavour to advance educational provision through new online delivery modes. In contrast, "policy discourses" for the purpose of this study are understood to reflect how we enact, respond and reshape policies and how they provide us with (or not) a channel or language to think and discuss our organisations with both internal and external stakeholders (Ball, 2015). In summary, these dual conceptions of policy will frame the present study and how policy is critically reviewed and analysed to help meet the research objectives.

As the idea that policy is about making choices is common to both an understanding of policy texts and policy discourses, it follows that how policy is developed is also an important aspect of the study. Many frameworks have been developed over the years to illuminate the policymaking process. In the middle of the last century Lasswell (1956) proposed the Policy Cycle Model, which broke policymaking into seven stages (see Table 1).

Table 1 The Policy Cycle Model

Stage	*Description*
Intelligence Gathering	Fact Finding at the outset
Promotion	Gathering support for the policy
Prescription	Determining the constituent parts constituent parts
Invocation	Seeking assistance
Application	Commencing operation
Termination	Ending the cycle
Appraisal	Assessing performance

Each of these stages, Lasswell suggests, must be navigated in order for the policy texts to emerge. Many subsequent frameworks were built on the work of Lasswell. His model has been resilient and is viewed as a touchstone framework in many texts in this area. Criticisms include that it does not take into account factors like political power, what motivates power actors, and the timing and sequencing of stages;(Penning's, 2019) but it nonetheless remains a significant model. These power factors determine not only if a policy is successful, they

determine if it is even attempted to be actioned. In a less linear model, Kingdon (1984) proposed the Multiple Streams Model. In his view, multiple streams or tributaries of occurrences, contributors, and decision-making opportunities coalesce to generate a flow of policy action. He sought to understand why phenomena such as "an idea whose time has come" existed, and wanted to know why "people in and around government attend, at any given time, to some subjects and not to others?" (Kingdon, 1984, p1). In this respect, another key idea underpinning this study is that the development of policy is not neutral.

Lasswell's approach sets out in a systematic way, the process of gathering intelligence, enlisting support, implementing policy and assessing the outcome. He took this approach to policy sciences from Dewey's conception of knowledge as problem-solving (Turnbull, 2008). Kingdon addresses the practicalities of making policy work by considering issues like the “window of opportunity”, the influence of people within and outside government, and three streams of influence; the problem stream, the policy stream and the political stream which, when they come together, can put a specific problem on to the agenda, and then policy change can happen (Kingdon, 1984). Other approaches and the countless variations they have spawned, have value and help explain the policy process and may be drawn on when relevant to the present study.

Table 2 Criteria for determining if a policy is enabling

Property	Requirements
In order for a policy to be deemed implementable it needs to:	Clearly define the HEI’s commitment to the policy area Have an implementation plan Be accompanied by policy instruments, such as procedures and clearly defined areas of responsibility
In order for a policy to be deemed situated in practice it needs to:	Be based on consultation Have been tested at operational level Facilitate innovation Be routinely monitored and reviewed for effectiveness
In order for a policy to be deemed reflective of the HEI’s priorities it needs to:	Be guided by the HEI’s vision Be in line with the HEI’s strategic vision Allow the HEI to meet its legal obligation

(Murphy,2018)

Finally, in Ireland, the National Forum for the Enhancement of Teaching and Learning in Higher Education is recognised as a key participant in the development of policy texts and

in shaping policy discourses. In the past the National Forum has acknowledged the need for enabling policies in the more general area of digital education, which it defines as policies which are implementable, situated in practice and reflective of the Higher Education Institution's (HEI) priorities. While it is unclear what definition or conception of policy is being referred to in this comment, the criteria developed by Murphy (2018, p. 10) and described in Table 2 will be used as a further tool to help guide the policy analysis undertaken in this research. These enabling requirements set out if a policy is pragmatic, operational and consistent with the strategic vision of that educational institution.

1.4 Expected outcomes of the study

This study will expand the body of knowledge concerning the development online learning in Irish Higher Education. More specifically, it will assist governments, policymakers and other interested parties in the formation and implementation of future "good" policies, mechanisms and resources required for harnessing the potential and successful implementation of online learning in Higher Education. In this respect, the research has three main objectives:

To investigate how Irish Government policy texts have responded to the emergence of new models of online learning.

To analyse through policy texts how the Irish University sector has responded to the opportunities and the challenges presented by the emergence of new models of online learning.

To explore how one Irish university has responded to government policy texts and policy discourses.

1.5 Structure of the thesis

For clarity of purpose, the research is divided into five distinct chapters:

Chapter 1- Introduction: introduces the research area and outlines the background and rationale for the present study. It briefly reviews and outlines how policy is formed and the context surrounding fully online learning in Irish Higher Education. The chapter subsequently provides the aims of the present study and outlines the perceived gap in the literature that it sets out to address.

Chapter 2 - Literature Review: reports more on this gap and provides an analysis of literature relating to the field of Distance and Online Education with a particular emphasis on the period from 2000 to 2020. The literature is reviewed using a Macro, Meso, Micro framework, as described by Dopfer (2004) and adopted by Zawacki-Richter (2009) and expanded upon by Zawacki-Richter and Anderson (2014).

Chapter 3 – Methodology: details the methodology employed in the study; a three-phase approach involving:

Phase 1: Analysis of European policy texts;
Phase 2: Analysis of Irish policy texts and institutional performance compacts and other publicly available policy texts along with a series of interviews with Policy Makers in Irish Higher Education;
Phase 3: Case study telling the story of Dublin City University (DCU) consisting of document analysis of key policy texts (e.g., Strategic Plans, Teaching and Learning Plans and other key documents) along with critical analysis of policy discourses.

Chapter 4: Analysis and Discussion of Findings: results of the research are presented based on the three phases of the research. The first section critically reviews policies influencing online learning internationally. The second section looks at Irish policy texts and performance compacts between the universities and the HEA. These are agreements, as recommended in the Hunt Report (2011), which commit HEI's to charting their strategic priorities. The HEA allocates a portion of their funding based on achieving those priorities. The third section presents a case study of online learning policy at DCU looking at both texts and discourses.

Chapter 5: Conclusions: discusses the main findings and presents a number of recommendations arising from the study. It reflects on each phase of the research and identifies the key lessons and central issues from both a policy and practice perspective. The chapter returns to the research problem and considers how successful the study has

been in answering each of the research questions. Finally, recommendations for further research and policy development in this area are identified.

1.6 Conclusion

This chapter has introduced the study and the importance of this research, the context the rapid growth of online learning. It has established the rationale for the study in the Irish Higher Education context and provided a definition of both “online learning” and “policy” in defining the scope of the study. The expected outcomes of the study have been described in listing three main research objectives and lastly the overall structure of the thesis was outlined. The next chapter offers a more detailed literature review which anchors the research that follows.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature relevant to the growth of online learning with a particular focus on the role, development and contribution of educational policy. As indicated in Chapter 1, "policy" has a number of different dimensions and operates at all levels of the higher education system. Accordingly, the chapter begins by establishing the macro, meso and micro organisational framework for the literature review and then reports on major macro-level developments from a whole of system perspective. It then proceeds to consider meso-level policy developments relating to leadership, organisational management and infrastructure. The third micro-level section reports literature relevant to how policy has been enacted and related policy discourses in efforts to successfully implement online learning at a local level. Finally, the chapter concludes with a brief synthesis of the research literature on online learning with particular relevance to policy development.

Before reporting on the macro-level literature, the chapter starts by describing how the literature review was undertaken. This section provides an account of what search strategies were adopted and library databases interrogated to locate relevant reports, articles and research publications. Across each level, the literature review is intended to help highlight important gaps between rhetoric, policy and practice in promoting access to higher education through new models of online learning. It also sets out to establish the relative dearth of published research specifically investigating the growth of online learning with a policy focus, particularly in the Irish Higher Education context.

2.2 Undertaking the literature review

This section provides a brief account of how the literature reviews was undertaken. The time frame specified was between 2000 and 2020, as this was the period where online learning emerged and began to grow. The initial search was completed to find literature directly relevant to online learning policy in Ireland. The search was conducted using all the databases listed on the DCU Library Education Subject guide: Educational Research Complete, SAGE Journals, SAGE Video Education, Springer Link, Taylor & Francis Journals, Scopus, and Google scholar. Topics searched included all higher education, administration, policy, funding, and related social issues.

2.2.1 Selection Criteria

The direct search included key terms like Online Learning in Ireland, e-Learning Policy in Ireland, e-Learning in Ireland, Digital Learning Policy in Ireland, Digital Learning in Ireland for the first search. The search was further extended to include keywords/phrases relevant to the research such as Models of Online Learning in Higher Education, Education policy, Leadership in online learning, Lifelong Learning policy, Online learning, and Quality in online learning. The additional criteria searched brought in some valuable pertinent readings which would not have been previously considered, giving insights into the formulation of education policy in Ireland. For example, McGarr & Ó Gallchóir (2020) looked at the attitudes of pre-service teachers to technology. Shea & O'Hara's (2020) review of Ireland's higher education system performance framework gave insights into that process which had not previously been found and papers by Butler, Shiel, Leahy & Cosgrove (2013) gave insight on Digital policy in schools while Hunt (2016) reflected on Part-Time and Flexible Learning in Irish Higher Education.

The initial sweep yielded 650 relevant documents. Removing duplicates brought this down to 600 documents with all of the abstracts from these publications were reviewed. After this initial review, documents were categorised into 12 folders, for further evaluation. The final filter was to separate interesting documents from relevant documents. Two hundred and fifty publications were read in full with a final 40 publications selected.

Table 3 Systematic Literature Review

Systematic Literature Review Process	**Process Description**	**Number of Publications**
DCU Library Databases	Databases searched using Search Educational Research Complete, SAGE Journals, SAGE Video Education, Springer Link, Taylor & Francis Journals, Scopus	400
Other Sources	Publications collated from Google Scholar and referred publications reviewed	250
Filter 1	Duplicate Publications Removed from the selection	50
Filter 2	Abstracts for all publications Read to filter the selection	600
Filter 3	Selected publications read in full	250
Filter 4	Publications filtered into Relevant Vs Interesting Retaining Relevant for review	40

To help frame the literature review a macro, meso and micro organisational structure is adopted drawing on the agenda described by Zawacki-Richter and Anderson (2014) for future research in the area of online distance education.

Phase 1 Macro-level*:* this phase considers factors influencing online learning policy at an international level.

Phase 2 Meso-level: in this phase the factors that influence online learning policy at a National level are examined.

Phase 3 Micro-level: this phase provides an analysis of factors influencing online learning policy at a local level.

Table 4: Macro, Meso, Micro

Macro-level: **Influences International Level**	***Meso level:*** **Influences at National level**	***Micro level:*** **Influences at a Local level**
The Evolution of Online Learning Internationally	Leadership	Learner characteristics
Drivers of Online Learning Policy	Management and organization	Learning communities
International influences on Education Policy: Access, Collaboration, and Equity	Educational technology	Distance teaching systems
Globalization as a driver of education policy	Innovation and change	Learner support services
Theories and models	Professional Development and faculty support	Areas of Research in distance education
Research methods in distance education	Quality assurance	Exploring Irish Policy

The following discussion explores this research agenda as presented in Table 4.

2.2.1.1 Macro level - International

This section considers the influences on online learning policy at a macro-level, initially tracing the evolution of online learning. It next considers the factors that drive online learning policy. International influences on education policy like access, collaboration and equity are considered in the next section. The globalisation of education and global influences on education and how they influence the shaping of policy, are reviewed in the next section. Finally, a number of internationally recognised examples of these new models of online education are reviewed

2.2.1.2 Meso level - National

In this section policy texts and policy discourses are explored in terms of national impact in the areas of leadership, organisational management and infrastructure in online learning. Technological developments in online learning since 2000 are assessed, such as the role of Virtual Learning environments (VLE's), Learning Management Systems(LMS), the evolution of the MOOC and the wider ecology of digital tools.

2.2.1.3 Micro Level- Local

This section looks at the impact of policy at a local level in the day–to-day teaching environment in online learning. It considers Irish policy texts in relation to education particularly focussed on online learning. It reviews discourses in distance and online education systems and theories, learning communities, and the influence of learning characteristics, and types are considered. It then looks at how educational technology has evolved in recent times.

2.2.1.4 Defining Online Learning

In summary, while distance education has a long tradition, as established in Chapter 1 the term “online learning” is much harder to define. This research however, is directed at students who study fully online and are based off-campus. Choosing a definition that captures this cohort and positions it in the research, with widespread agreement, is not a straight forward task. Definitions are many and varied by academics writing in this area,

however, a more a recent set of definitions by Singh and Thurman (2019) offer a range of options:

> Online learning is defined as learning experienced through the internet/online computers synchronous classroom where students interact with instructors and other students and are not dependent on their physical location for participating in this online learning experience.
>
> or
>
> Online learning is defined as learning experienced through the internet in an asynchronous environment where students engage with instructors and fellow students at a time of their convenience and they do not need to be co-present online or in a physical space.
>
> or
>
> Online education is defined as education being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment.

In this research the preferred definition is the more inclusive third option, as this includes both synchronous and asynchronous learning which facilitates, for example, those who may be located in different time zones. This inclusive definition was selected as it encapsulates the strengths of online learning as a contemporary tool in the global educational landscape. It provides the flexibility for students to learn from anywhere at any time and on a life-long basis. It exploits the ever evolving technological solutions which continue to grow in sophistication and in particular during the COVID-19 pandemic, have gone some way to overcoming the fear factor in using online learning technology. Educators who were previously reticent to engage fully with these tools have overnight been forced into their use. The very act of changing the transmission medium of educators has opened up the opportunities that online learning can present. Opportunities like the presentation of material asynchronously, and facilitating considered debate on discussion forums. The opportunity for international collaboration in real time without the requirement for travel. The opportunity to build communities of learning which will be discussed later in this chapter. This definition clearly signposts where online learning is headed and therefore provides a definition for the future.

2.3 PHASE 1 MACRO LEVEL – INTERNATIONAL INFLUENCES ON POLICY

2.3.1. The Evolution of Online learning

The earliest universally accepted manifestation of distance learning is correspondence study (Anderson and Dron, 2011) (Keegan, 2013) (Taylor, 2001). In this initial offering, distance learning students were sent paper-based study materials by post and returned their written assignments for assessment, marking, and written feedback (Holmberg, 2005). In 1728, Caleb Phillips taught his system of shorthand to people living outside the city of Boston by sending lessons to their homes (ibid). In 1833, the Lund University in Sweden offered the opportunity to study composition via the postal service. In the 1840s Isaac Pitman adapted his system of shorthand to fit on postcards, which were then mailed to students using the penny stamp in the UK. Students used the postcards to transcribe passages of the bible and sent them back to Pitman for correction (Bower and Hardy, 2004). This is recognised as the first generation of distance learning.

Thomas J. Foster realised that working people needed an opportunity to better their life prospects. He set up correspondence courses to enable miners to study engineering through what became the International Correspondence School (ICS) in Scranton, Pennsylvania. ICS enrolled more than a quarter of a million students in the 1890's, offering courses to students in Mexico, America, and Australia (Bower and Hardy, 2004).

Radio came next with nearly 200 radio stations in the US, delivering distance courses to the masses in the 1920s (Simonson, Smaldino and Zvacek, 2014). Some steps into student/teacher interaction took place with the use of telephone communication, but this was limited. The shift to TV was slow to evolve, and although many pilots were tested, it was not until 1960 that Western Reserve University (now Case Western Reserve) in the US offered the first regular TV courses (Bower et al. 2004). In China, Shanghai Open University was founded as Shanghai TV University(STVU) in 1960 offering undergraduate education for adults (SOU, 2020). The next major step forward in Europe, came with the establishment of the Open University in the United Kingdom, in 1969. This heralded the start of the modern movement in distance education. The Open University offered full degree programs, sophisticated courses, new media and systematic systems evaluation for similar programs worldwide, and conferred credibility on distance education qualifications (Holmberg, 2005). While the UK Open University did encourage the establishment of off-

campus specialist distance learning universities worldwide, it did not provide a stimulus to campus-based universities to engage in distance learning (Daniel, 2016).

Programmes became more targeted as distance educators reached a wider audience and began to understand the changing needs of its learners. In the early eighties, professionalism and institutional consolidation were the main concerns of distance education researchers as institutional providers sought to consolidate its reputation as a legitimate means of teaching and learning (Zawacki-Richter and Naidu, 2016) and (Henderson, Selwyn and Aston, 2017). In the late nineteen-eighties, educators explored how they could design online material more effectively and began to explore the use of technology in teaching and learning. The early nineteen-nineties saw the assurance of quality as the central preoccupation of researchers in this field. (ibid). As the world embraced Tim Berners-Lee's World Wide Web, distance learning took a paradigm shift in the late nineteen-nineties and went online. “I imagined the web as an open platform that would allow everyone, everywhere to share information, access opportunities and collaborate across geographic and cultural boundaries” (Berners-Lee, 2017).

The knowledge society now had a communication medium which would, within a few short years, reach into the pockets of men, women and children right across the western world. This has been described as the Fourth Industrial revolution: “The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country” (Schwab, 2016). The speed, quality, flexibility, dependability and cost of access to information is now greater than at any time in the past. Crafting policy to maximise its use in education, in the context of competing drivers is the topic of the next section.

2.3.2 Drivers of Policy

Having defined online learning in this context we next look to investigate the deeper underlying drivers of online learning, which are many and varied**.** These drivers determine the thrust and direction of policy.

Plomp and Pelgrum (1993) addressed the issue of what drives the use of technology in education. The drivers were outlined as: vocational; social; economic; commercial;

marketing; cost-effectiveness; transformation; and, pedagogical. Technology enhances the prospects of students gaining employment by filling the requirements of industry in a competitive labour market, this constitutes the vocational driver. Learners should be prepared for the new real-world facing them, students require the information and communication skills needed to survive in this new world, this is the social driver. The economic commodity of the future is "information" and countries need to create tech-savvy graduates capable of adapting to the requirements of this new internationally competitive environment, this is an economic driver. Current students will be consumers of the new information and communication technologies of the future. Commercial groups benefit from the growing provision of technology and the development of a large number of technology-literate graduates, therefore this generates a commercial driver. The use of technology as a tool to enable institutions to attract students produces a marketing driver. Cost is always a factor, while information and communication technologies can overcome problems of distance and isolation, this driver was based on the idea that technology can substantially reduce the cost of education. This is disputed but can be valid in particular circumstances, e.g. where a student has difficulty travelling to college. The use of technology can act as a catalyst for change and the dispersion of new ideas. This produces a transformation driver. Technology provides the unprecedented potential to enhance learning. The learning tools that technology provides present new opportunities for social and cognitive development (e.g. interaction with colleagues in different geographical locations). This generates a pedagogical driver.

These rationales, which promote different policy discourses, do not operate in isolation. Each represents the interests of particular stakeholder groups, which can be in conflict. Discussion of technology in education should be conscious of the competing rationales, hence policy discourses. No one single rationale provides a justification for the use of technology in education. A combination of those drivers concurrently makes the use of technology desirable, however, they do not all work in unison, but exist in a state of tension, and compete to gain prominence. The challenge for policy makers is to grapple with these competing tensions and establish a coherent pathway.

2.3.2.1 Competing Models for Online Learning

The previous section established that there are competing rationale for the growth of online learning. This section extends the theme of policy tensions by demonstrating that there are competing business models and frameworks which reflect quite different outcomes in terms of how policy in online learning can contribute to educational provision both now and in the future.

2.3.3 Discussion on International Drivers of Policy: access, collaboration, and equity

A common principle underpinning the distance education movement leading policy development in online learning, has been the commitment to increasing access to education. In 1948, education was accepted as a fundamental human right in the Universal Declaration of Human Rights. Article 26 further outlines that:

> Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit. *(UN, 1948, [no pagination]).*

This right is at the core of how educational policy is formulated, not just in Ireland, but worldwide. However, as we will discuss later, the requirement of the knowledge economy and the growing prevalence of neo-liberalism presents a different perspective.

2.3.3.1 Access

Access is the removal of barriers to education. These barriers may be geographic, social, economic, or gender-based, depending on individual circumstances (Tait and O'Rourke, 2014). In the best traditions of distance education, online learning can facilitate overcoming these barriers with many providers incorporating a social justice dimension to their mission, enabling groups of learners to navigate challenges like disability, refugee status, social exclusion or incomplete prior education. Prinsloo (2015) has suggested that learning must empower graduates to critique, to formulate their own opinions, to question conventional ways of seeing the world, (ontologies) and accepted canons of knowledge (epistemologies). The ability to access that education off-campus, online, at more

affordable fees, without the cost of accommodation or transport, can open the door for students who would not otherwise be able to afford to go to university. Online learning allows students to have access to high-quality education, good teachers, and innovative delivery methods, without having to travel long distances to receive it. Financial restrictions since the global recession 2007/2008 have recalled Giroux's (2003) view that:

> In an age of money and profit, academic disciplines gain stature almost exclusively through their exchange value on the market, and students now rush to take courses and receive professional credentials that provide them with the cache they need to sell themselves to the higher bidder (cited in, Anderson and Zawacki-Richter 2014, p59).

This highlights a tension that exists between the equity and social justice mission and the economic driver. This economic driver is reinforced in *Digital Education Policies in Europe and Beyond. Key Design Principles for More Effective Policies* which outlines that the rationale for. promoting the innovative use of digital technologies in education is to "support learner's competence to achieve in the knowledge economy, allowing European states to remain competitive and integrated with the global economy" (Conrads *et al.*, 2017).

2.3.3.2. Collaboration

Policy must take account the advent of Open Educational Resources (OER) and MOOCs which can help to ease the tension between the social and the economic drivers of online learning, through collaboration. Online learning can, when effectively designed and implemented, increase the potential for international cooperation. Education and knowledge travel easily across borders. Educators and institutions can reach millions of learners, not just those who can attend face-to-face campus-based classes. Successful multi-institutional collaborations of distance education providers, can attract new student cohorts, share the costs of course development, enhance flexibility, develop high-quality support infrastructure, enable richer programs, and strengthen the financial basis of participating institutions (Guri-Rosenblit, Šebková and Teichler, 2007). Cooperation with other institutions can enable teachers and learners to share and discuss content with peers from all over the world. Sharing and re-using resources and facilitating large groups through online learning can make education more viable. In this context, the open access movement is an important step forward. The availability of OER resources can influence

how educational policy is shaped in the future. In the US, for example, Government emergency funds in the aftermath of the COVID -19 pandemic, Coronavirus Aid, Relief and Economic Security Fund (CARES) Act can be channelled into using open text books or training teachers in how open resources can best be used (Prescott, 2020).

2.3.3.3. Equity

Influencing government policy, which has the ambition to prepare people for the new economy, can present the possibility of promoting equity, by using online learning to offer new opportunities. The political nature of education and the privilege it confers is directly responsible for how power is exercised in society (Jarvis, 2004), and how policy is shaped. This power, he argues, is increasingly driven by those who control both economic institutions and information technology. The central question is, how can education be provided, at what level, to whom and by whom? These questions are similar to those raised in Chapter 1 by Apple (2019) where policy analysis needs to consider bigger questions about power and privilege. This equity impact requires sustained investment in educational infrastructures and human resources. Education must respond more flexibly to cultural diversity and changing labour market expectations (Gijsbers and Schoonhoven, 2012). This approach makes sense in locations like Africa, where twenty times more people connect to the internet through mobile phones than through fixed line computers. In Colombia, mobile devices are being used instead of desktop or laptop computers to address an illiteracy crisis in rural areas. In 2012, the Colombian government purchased 250,000 mobile devices equipped with interactive educational software and delivered them to illiterate young people and adults (Luna Scott, 2015c). As is the case in Ireland, many of these young people would hope to gain employment in one of the multinational companies based in Colombia where:

> Multinational companies are important motors for economic development in Colombia because they are the most competent actors to identify the niches that Colombian actors can play in global value chains and thus help the national economy in its process of integrating in the global economy (Bleckmann, 2018).

Even though they operate against a contemporary backdrop of globalisation Governments, through policy formation, retain the ability to “nudge” multinational companies towards

socioeconomic development priorities like human capital development (Idemudia and Amaeshi, 2019).

2.3.4 Globalization as a driver of education policy

In the twenty-first century, the influence of globalization and the interconnectivity of global supply chains, is an influential driver of educational policy. The role of the state in this context through the policies it creates and implements, can be portrayed as providing the conditions, laws and institutions necessary for its effective functioning. Embracing new technology as the medium to foster this knowledge economy and communicate its requirements provides universities with global opportunities. Many authors argue that universities occupy a special place and need to operate outside of the economic forces that drive commercial organisations, with the assistance of public support (Pister, 1999), (Scott, 1998). The emergence of for-profit universities and online providers in a neoliberal climate means that university administrators must ensure value in order to gain and retain that public support. This compels them to examine how value is created and retained by their institution (Elloumi, 2004). This approach is not without its critics. Ball argues:

> Neoliberalism requires and enacts a new type of individual, that is a new type of teacher and head-teacher formed within the logic of competition. The apparatuses of neoliberalism are seductive, enthralling and overbearingly necessary (Ball 2010, p74).

He continues that performativity, the concentration of effort on measuring and improving performance based on particular metrics, conflicts with liberal values traditionally respected by educators. The challenge is to incorporate local culture and values into the offering and to avoid the imposition of what is perceived as “Western” neoliberal values and cultures on a worldwide audience. This tension between the neo-liberal and the traditional view of education is ongoing. Brown (2016) argues that this tension is rooted in:

> Crisis, disruption, democratization and re-imagination in the age of the MOOCs reflects a kaleidoscope of competing and coexisting perspectives with different images of the past, present and future. In order to critically read these images and help shape our preferred learning futures, a type of double vision is required, combining both political and pedagogical perspectives (p 31).

While disparate interest groups apply pressures to compete for limited resources, and the demands on education are ever increasing. Brown, argues that balancing conflicting demands requires consideration of a range of viewpoints anchored in two core perspectives:

> The HE system is made from a colour palette with conflicting ideological, epistemological and pedagogical assumptions. Although overly simplistic, at the root of these assumptions are two primary colours or basic worldviews: (i) the tradition of the Learning Society, and (ii) the influence of the Knowledge economy (p 35).

The balancing of these divergent stances, provides the backdrop against which new models of distance learning are emerging. New institutions to cater for this growing demand have powerful backing. Under the surface an ongoing ideological battle as to what form policy takes continues, with Global capitalism and Neo-Liberalism competing with the Learning society tradition, while the influence and power of the small nation-state continues to decline.

2.3.5 Macro Summary

In summary, this section traced the evolution of online learning considering the factors that drive policy to successfully adopt online learning, and enable that policy to be successful. Policies require more than a clear vision and expression to be effective. The importance of organisational culture in mediating policy implementation was considered. The tensions that exist in policy discourses between the Learning community view of education versus the demands of the Knowledge society, were discussed. Globalisation and its influence on policy formation were reviewed in a world where the influence of multinational corporations grows while that of nation states diminish. How that impacts in a national setting is the subject of the next section.

2.4 PHASE 2 MESO LEVEL – THE INFLUENCES ON POLICY AT NATIONAL LEVEL

This section details the factors that enable enacted policy to be successful and that drive successful adoption of online learning at a national level. Factors such as leadership, educational technology, innovation and change, quality assurance, professional

development and faculty support are considered. It also reflects on the possible barriers to successful adoption of online learning.

2.4.1 Leadership

With the advent of the internet, the demand for online learning has grown exponentially. The task of higher education leadership at a national level, in this environment is to determine how students learn best, how institutions can best present programmes, how services are structured most appropriately in response to this new environment. It must seek to encourage players in their organisations to adopt new best practices and to feed this back into the policy formation process. As noted by ICDE, the online and distance education sector has experience of rising to the opportunities and challenges currently facing the education sector, and is well prepared to show leadership in many areas (Ossiannilsson, Williams and Brown, 2015).

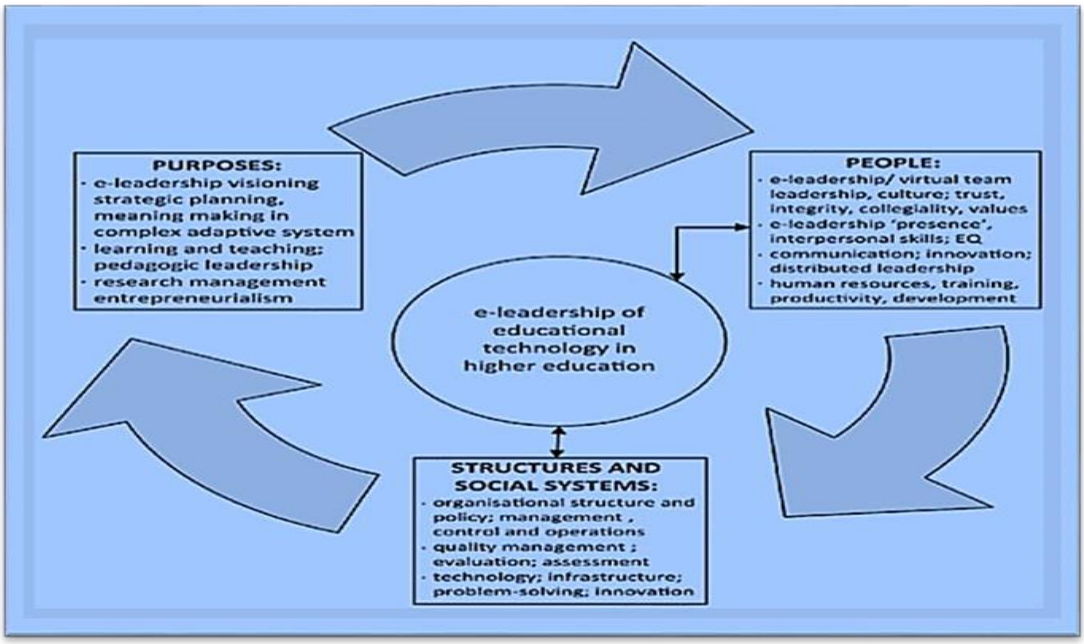


Figure 1. e-Learning Leadership characteristics (Jameson, 2013)

Prominent change management theorists like Lewin (1947), Kotter (1995) and (Hiatt (2006) emphasise the importance of leadership to the success of a change process and later we will see how leadership was influential in adopting online learning in a case study presentation.

Jameson (2013), identified ten groups of e-learning characteristics. These characteristics are necessary for effective strategic and operational e-leadership in higher education in order that collegial and high trust environments can emerge through the development of technological innovations, facilitated by good communication and leadership. The framework proposed by Jameson (2013, p911) as shown in Figure 1., outlines the leadership qualities valued in an e-learning environment under three headings: Purpose, People and Structures and Social Systems.

Purpose, at high-level leadership, attempts to create a vision, establish a strategic plan, and convey the meaning of the plan in a way that makes sense. This high-level leadership is vital to successful engagement. In the case study section DCU Fuse, a novel online consultation process that was employed by DCU to foster engagement, is outlined. Pedagogical leadership is leadership in teaching and learning methods and practices best suited to the online environment. Research and enterprise management is required to lead this critical function.

People are engaged to provide what Kotter (1995) described as a "guiding coalition". Here it is called creating a team spirit of collegiality, organisational values, behaviours and a culture of trust, academic freedom, and equal opportunities. Jameson invites that this is achieved with the support of e-Leadership presence which consists of interpersonal skills, emotional intelligence, and empowering others. This is made operational through communication skills and organisational relations including, innovation, risk-taking, distributed leadership and ownership. Structures and social systems consists of managing and monitoring quality, particularly as it relates to assessment and evaluation. This requires providing support for infrastructure, problem-solving skills, information technology skills and innovation and risk-taking. It is arguable that universities by their very nature are reluctant to take on risk, let alone encourage it. Organisational structure and policy consists of management, finance and operations including, speed of response and change management skills. The bureaucratic nature of many higher education institutions restricts this speed of response.

Arnold and Sangrà (2018), in their meta-analysis of literature in e-leadership, identify three clusters of research in the area of leadership for technology-enhanced learning in higher

education. *Governance and senior leaders, Non-governance stakeholder's Holistic multi-stakeholder approaches at different levels.* Governance and senior leader's studies represented top down leadership focussing on leadership from the perspective of formal leaders: (faculty governance, university administrators, senior leaders, online education administrators), or through the mobilisation of local and international experts. Non-governance stakeholder's they propose consist of teachers, lecturers, students, and instructional designers who we will show later, often lead bottom up initiatives in this area. Holistic multi-stakeholder approaches at different levels represent projects or pilots and individual faculties, (single institution and multiple institutions) and can demonstrate how participatory practices can empower stakeholders. The down side of such initiatives is that in the absence of top level support they can falter when confronted with early hurdles, nonetheless successful initiatives can lead the way for more general adoption of innovative new practises.

Tools that enable users (both students and teachers) to generate their content are now available. These technologies can enable collective aggregation on a global scale, with initiatives now emerging, from communities of practice (Wenger, 1998) and informal networks (Anderson and Dron, 2011). This approach recognises that leadership can emerge from particular groups within the online learning community through formal, informal or expertise-based factors. In this research the authors build on the earlier work of Jameson (2013) and identifies transactional leadership, distributed leadership and e-leadership as the leadership theories most cited in the literature in this field during the period analysed. Distributed Leadership was identified by (1995) where systems that are "larger than an individual may have cognitive properties in their own right that cannot be reduced to the cognitive properties of individual persons" (Hutchins ,1995, p266).

In contrast Bryman (2007) argues that in an academic context because of the internal motivation and professionalism of academics, leadership is less important than in other environments. He contends that leadership may be of influence more by its negative effects than by its positive effects. In others words leadership might cause more problems in this context, than it solves. In academic contexts, leadership may sometimes be as significant (if not more significant) for the damage it causes as for the benefits it brings in its wake (Bryman, 2007). While this may in some circumstances be true, the construction

of a vision, the articulation of a mission and the assembly of a powerful guiding coalition can have a major influence on policy formation and implementation.

2.4.2 Educational Technology

What are the changes in educational technology that have occurred in the period of rapid expansion over the last twenty years? These innovations have created the environment in which policy must be created and adapted.

Martin Weller has chronicled developments from 1998 to 2018 (Weller, 2018). He highlighted that wikis emerged in 1998, these are web pages that anyone can edit. They provide a dynamic, shared space where people can potentially source knowledge, in a co-operative participative way. The use of Wikipedia as a default first reference source is a powerful tool in education**.** Weller identified that the term e-learning started becoming mainstream around 1999, with the prefix "e" becoming attached to many titles. The belief at this time was that e-learning could constitute a cost-saving measure. The reality was that, although the use of physical resources was reduced and material could be re-used, support and updating costs rose with the increased use of online resources. Many concepts are taught in similar programmes at institutions across the world. The idea behind learning objects was that a technology based object could be used and re-used to teach the same concept in multiple locations. Weller argues that they did not take off because of a lack of support from educators. As online learning was becoming more accepted as valid, the emphasis shifted around 2001, to assuring quality standards and setting industry norms which could be transferable. The IMS (Instructional Management System) introduced global quality standards for content that could be used by VLE's (Virtual Learning Environments). The most significant was SCORM (Sharable Content Object Reference Model). Wiley initiated a licencing system called OCL (Open Content Licence) in 2002 followed by OPL (Open Publication Licence) which educators could use to share educational content, creating a context in which Open Educational Resources (OER) could flourish.

Blogging developed as a method for writers to publish their online diaries or journals and updated resources. The streamlining and filtering of such blogs is facilitated by RSS (Really Simple Syndication) feeds. These are specialised computer programs that automatically

access web sites the user cares about on their behalf and they notify users of updates (RSS feeds, and aggregators are also sometimes called RSS channels and RSS readers). Learning Management Systems provided a package of tools to enable institutions to facilitate the enterprise-wide solution to e-learning needs. The downside was that it locked institutions into one provider who may introduce restrictive practices. YouTube was founded as internet access and compression techniques improved. It opened the possibility for anyone to present video sharing services online. Most colleges in 2020 do not assess students on their use of video but its use as a resource in academic work is increasing.

Web 2.0 constituted the gathering together of user-generated content with an emphasis on its social and open aspects The term was popularised by O'Reilly (2006) who set out seven guiding principles. Web 2.0 morphed into social media. Colleges and universities developed courses presented through virtual second lives around 2007. They were often used to re-create online lectures and had a nerdy image which failed to take off. E-Portfolios provide a receptacle for learners to store evidence of their learning. One criticism is that they take an institutional rather than a user approach.

The possibilities of networked learning were explored by connectives, which were problem-based and resource-based. They provided the basis for MOOC's which were to follow. Personal Learning Environments (PLE) proposed that each learner could have a particular set of tools based on their requirements. The issue surrounding sharing data shifted the focus from personalised tools to personalised resources. Massive Open Online Courses (MOOC's) took off in 2012, and with hundreds of thousands of participants accessing high-quality material, investment flooded in. The possibility of global providers taking over the education market has long-term consequences but has not lived up to the initial hype. Open Textbooks provide openly licenced versions of bespoke textbooks, free for the digital version. They moved the cost-focus from production to purchase. Learning Analytics can be used to analyse the online behaviour of individuals. Educators can adjust their material accordingly. The downside is that students can be reduced to data.

A method of recognising learning at all levels emerged when Digital Badge awarding came to prominence around 2016. The challenge is to have the badges accepted by employers, learners and institutions. The use of artificial intelligent tutoring systems has returned as the power of computation has increased. Block chain provides a secure ledger for record-

keeping of bitcoin. It may provide a portable means to record qualifications. This era of technological development was accompanied by a period of innovation and change which will be addressed in the next section.

2.4.3 Innovation and change

Over the last two decades, digital technology has become faster, smaller, more affordable, more efficient, and more accessible to a higher number of people globally. The challenge of striving to keep policy up to date in such an ever changing environment is a demanding one. Moore observed in 1965 that manufacturers had been doubling the density of components per integrated circuit every two years and they would continue to do for the foreseeable future. This became known as Moore's law, and it illustrated the speed of innovation and change in the digital landscape (Moore, 1965).

This unremitting cycle of new technologies and scientific breakthroughs has continued to the current day. The task of keeping policy current in this environment is challenging. Universities have until now, proven incredibly resistant to change (Salmon *et al.*, 2015). They have survived barely impacted by television, mobile phones and many more technological devices, but do now employ "new technologies" to provide information or practice for learners. They have yet to embrace the potential strengths of digital in areas like connecting with others, the ability to prepare students for the five careers that they may follow over their long lives, the development of wisdom and the realisation of what seems impossible today. People's needs and expectations of learning are shifting (Salmon et al., 2015). This provides both a challenge and an opportunity.

Sharples *et al.*, (2016) describe some of the more recent innovations in online learning: A viable source of informal learning is provided by social media. Twitter, Facebook and other sites are used to source information, share ideas and engage in discussion. Productive failure is a method of teaching where students are tasked with complex problems and asked to solve them collaboratively using prior learning before they are given instruction. The aim is for students, working together, to use their prior knowledge to consider possible solutions. Using Teachback students learn by explaining to others the subject matter at issue. An expert explains the topic to a learner. That learner tries to "teach-back", what

they have understood. This enables learners to understand the issue by reframing it in their own words and by explaining it in terms that they understand.

Design thinking solves problems using the methods and thinking processes used by designers including include creative processes like experimenting, creating and prototyping models, seeking feedback, and redesigning. Learning through video games can make learning fun, interactive, and stimulating. It has spawned an industry that includes serious games, gamification and game-infused learning. Learning analytics can measure and predict the learning processes of students by tracking their activity and inferring their thinking processes. Analytics can track time spent learning online and can help identify at-risk students. Learners need to acquire skills and resilience to cope with uncertainty and the complexity of future work environments. Learning for the future involves acquiring skills to learn, unlearn and relearn on a lifelong basis. In a globalised world, trans-languaging involves moving flexibly and fluidly between languages. This can include organising international collaboration, searching the internet in a range of languages and accessing online communities and resources in multiple languages. The acquisition of these new skill requires professional development, and this is the subject of the next section.

2.4.4 Professional Development and faculty support

Professional development in higher education constitutes an emerging area in academia with increasing research internationally (Gosling, 2008; Hicks & Hicks, 2006). This is developing through both formal and informal channels (Hicks& Hicks, 2006). The Higher education environment is rapidly changing with greater diversity in the student population, increased use of technology, competition from private educators, and increased external accountability. As accountability and standardization become an increasing part of higher education, the ability to demonstrate the impact of professional development initiatives and interventions also attracts considerable attention The Sloan Consortium conducted a survey of over 10,000 faculty members from American colleges and universities in 2008 (Picciano and Seaman, 2009). This survey specifically sought the views and experiences of faculty concerning online teaching. The survey was targeted to all faculty members

regardless of if they were teaching entirely online or not. Although only one-third of respondents had taught a fully online course, the responses concluded that all sectors of faculty are engaged in some level of online instruction, regardless of age or if they were employed full- time or part-time. This confirms some of the assumptions raised earlier, but also suggests that we need a more nuanced understanding of the profile and needs of faculty and their online engagement.

From an institutional perspective, Tynan and Lee (2009) completed in-depth interviews with a range of stakeholders across their university, related to professional development and the integration of technologies in teaching and learning. They concluded with three propositions: (1) Staff need to be afforded better access to information and strategies to raise their awareness of how to use ICT to enhance student learning. (2) Academics must be encouraged and empowered to approach the use of ICT to enhance student learning with creativity and innovation. (3) Institutional frameworks are still needed to provide academics with sufficient guidance and direction in the use of ICT to enhance student learning. Underlying each of these propositions are the importance of institutional commitment, the need for a clear framework, and institutional support for change.

2.4.5. Quality assurance

When outlining the issue of quality control in online education Parker pointed out that there is a conflict of values in business modelling (The Knowledge Economy) and the public service model (Learning Society) of educational provision (Parker as cited in Elloumi and Anderson, 2004). In the intervening years, this tension has grown with the prodigious growth of private providers operating in the online sector. In the area of quality control, the full range incorporates state licensing, voluntary accreditation, and market-driven seals of approval. Conflicting priorities can expose tensions between externally driven compliance and internally driven improvements. Parker proposed that four factors should be included in any such framework. 1) provide clear statements of educational goals 2) sustain the institutional commitment to support learners 3) engage in a collaborative process of discovery and 4) improve the teaching and learning environment (Parker as cited in Elloumi and Anderson, 2004). Bates takes the view that for online learning, nine

steps should be undertaken to ensure high quality is achieved (Bates, 2012) Step 1: Decide how you want to teach, Step 2: Decide on mode of delivery; Step 3: Work in a Team, Step 4: Build on existing resources, Step 5: Master the technology, Step 6: Set appropriate learning goals, Step 7: Design course structure and learning activities, Step 8: Communicate, communicate, communicate. Step 9: Evaluate and innovate.

The ICDE studied an extensive range of quality models worldwide in the context of the emerging movement of opening up education through developments like OER and MOOCs (Ossiannilsson, Williams and Brown, 2015). They recommended such systems should be: multifaceted, dynamic, mainstreamed, representative, multifunctional. They proposed a comprehensive range of requirements that often need to be implemented on a phased basis. Their suggestions to stakeholders for future action are: mainstream e-learning quality into traditional institutional quality assurance. Support the contextualisation of quality systems. Support professional development, in particular through documentation of best practice and exchange of information. Communicate and promote general principles. Assist institutions in designing a personalised quality management systems. Address unbundling and the emergence of non-traditional educational providers. Address quality issues around credentialisation through qualifications frameworks. Support knowledge transfer from open and distance learning to traditional quality systems. Encourage, facilitate and support research. (Ossiannilsson, Williams and Brown, 2015, p10)

2.4.6 Meso Level Summary

This section considered how online learning can be successfully delivered at a national level. It looked at the need for leadership, changing educational technology, the influence of innovation and change, and the challenge of creating policies to accommodate that change. It discussed why quality assurance matters in the growth of online learning and the need for ongoing professional development, and faculty support.

2.5 PHASE 3 MICRO LEVEL – FACTORS INFLUENCING POLICY AT A LOCAL LEVEL

This section considers the impact of policy on online learning at the teaching level. The section looks at distance teaching systems, interaction and communication in learning communities, the influence of learning characteristics and types, the 5-step model, and. how the implementation of online learning in the virtual classroom has evolved. The section considers developments in research in online learning relevant to policy making and finally, Irish policy literature in relation to online learning is considered.

2.5.1 Online Teaching Systems

Synchronous and asynchronous learning has been facilitated by new electronic technologies. These technologies gave birth to many new distance education providers, some of which are operated by conventional universities, and many are new type ventures. The blurring of boundaries between conventional and distance education has created an identity crisis as to what constitutes distance education (Guri-Rosenblit, Šebková and Teichler, 2007).

2.5.2 Open Learning

Open education strives to make education available to the broadest possible audience. Coffey suggested that an open learning system *'i*s the one in which the restrictions placed on students are under constant review and removed wherever possible' (Coffey, 1977, p11). Online learning is increasingly the medium through which that open learning can be achieved. Cronin and MacLaren (2018) suggest that "Open education often carries the weight of describing not just policy, practices, resources, curricula and pedagogy, but also the values inherent within these, as well as relationships between teachers and learners" (p127).

Anderson (2004) proposes that the ability of the learner to control or shift the time and place of the learning event is the main difference that open learning provides. In addition, he considers that the online environment can support learning materials presented in different formats, including multimedia, video, and text. The internet can facilitate access to vast repositories of content, including content created by the teacher and fellow

students. Costello, Farrelly and Murphy (2020) describe open access as “a model of academic publishing where readers have access to published works without cost” (p17).

Modular programmes, micro-credentials, and credit-bearing MOOC's, increasingly enable students to study at a pace that suits their lifestyle, their family circumstances and changing or uncertain work schedule. New groups of students can be accommodated when learning is not restricted by location, timetable or method and can be personalised. Teachers can share and create content with colleagues and learners from different countries; and a much more extensive range of educational resources can be accessed. Open technologies enable people to learn ‘anywhere, anytime, through any device, with the support of anyone’ (European Commission, 2013, p3).

2.5.3 MOOC’s

The introduction of MOOC’s has made open access a reality for millions of learners in recent years. The acronym Massive Open Online Course (MOOC) was first used in 2007 by Cormier and Alexander to define an open online course developed at the University of Manitoba by Siemens and Downes (Nkuyubwatsi, 2014). These courses are free of charge and accept students without entry requirements. Stanford University launched three MOOC’s in 2011 and soon major universities all over the world were launching MOOC’s of their own. Providers like Coursera, Udacity and edX were enrolling millions of learners from across the globe, on their MOOC offerings (ibid). By the end of 2018, over 900 universities had launched over eleven thousand MOOC’s. (Shah, 2018). However, in Ireland, there was little appetite within higher education for discussion of the potential of MOOCs as highlighted by Brown & Costello (2016): “The Draft Digital Roadmap: Phase 1 released in May 2014 (National Forum for the Enhancement of Teaching and Learning in Higher Education, 2014), with the aim of building digital capacity in Irish higher education, made no explicit reference to MOOCs “(ibid.)

Initially micro credentials were awarded for some of these courses, however providers like FutureLearn, who will be discussed later in the research, are now providing degree earning MOOC’s (Shah, 2018). The shape of MOOC’s in the future, and the credentials they award, will be influenced by how people learn which will be considered in the next section.

2.6 New Models of Learning

2.6.1 What are the New Models of Online Learning which help to shape policy?

In this section some of the models of online learning available for teaching and learning are reviewed. The purpose of this review is to introduce to the reader some of the models central to our discussion, which have emerged.

Twig (2003), describes five models for online learning: The supplemental model has the same classroom structure as a traditional course, adding technology-based, out-of-class activities to encourage greater student engagement with course content. The replacement model reduces class-meeting time, replacing face-to-face classes with online, interactive learning activities for students. This is based on the contention that some activities can be better accomplished online, either individually or in small groups, rather than on campus. In some examples, out-of-class activities take place in computer labs on campus, in others, they occur asynchronously online so that students can participate from anywhere, at any time. The emporium model is based on the concept that mathematics is taught most effectively at a time when the student wants to learn rather than when the teacher wants to teach. This model allows students to decide when to access course materials and learning materials to use depending on their preferences, and the speed at which they wish to progress. In the fully online model the instructor is responsible for all interactions, personally answering every query, question, or comment. This results in faculty members spending more time interacting with students online than they would teaching face to face in classroom teaching. The buffet model offers the opportunity to customize the learning environment for each student. Through treating students like individuals, rather than homogenous groups, these institutions aim to achieve greater learning successes.

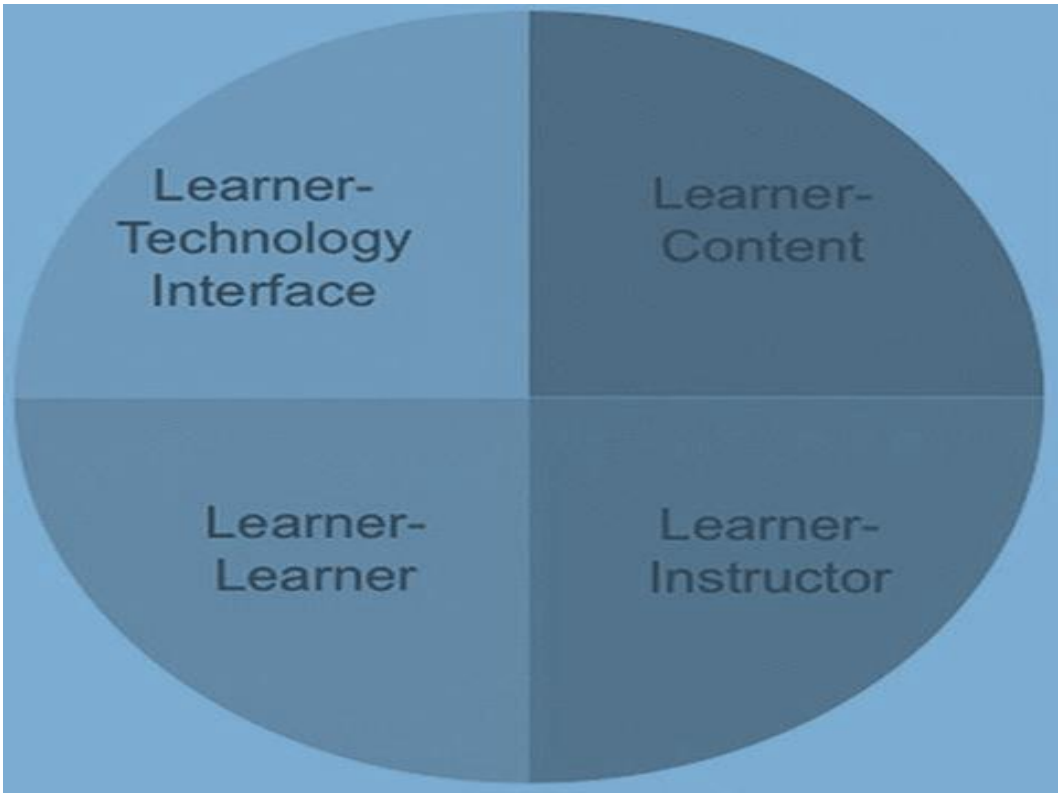


Figure 2 Transactional Distance Model

Moore (1993) presented the Transaction Distance Theory as illustrated in Figure 2. He identified that the transactional space between teacher and student in a distance learning environment presented 'a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs on instructor and those of the learner' (Moore, 1993, p. 23). Chen identifies that "distance is pedagogical, not geographic" (Chen, 2001bp. 327). Transaction Distance Theory rests on three on three features: structure, dialogue, and autonomy. Structure refers to the flexibility of course design and incorporates course objectives, activities, media choices, and content for individualization. Dialogue refers to the communication medium through which the programme is presented, which Moore maintains, plays a central role in achieving online learning outcomes. Students need an interactive constructive environment to allow for co-construction of knowledge. Autonomy refers to a student's ability to guide their own learning. This is particularly important for mature learners.

Moore identified three types of learner interaction, learner-learner where learners interact with each other. Learner-content where learners interact with learning materials and learner

instructor, where learners interact with the teacher (Moore, 2007). This was expanded by Anderson and Garrison who added teacher –teacher where teachers in different institutions shared resources. Teacher – content where teachers interacted dynamically with material by say adding a link which updates to resources, and content –content where content interacts with other content and updates (Anderson and Garrison, 1998). The discussion was advanced by Conrad who concluded that for online learners, the community is an integral part of their learning "tool kit," but also support in a humanistic and caring way (Conrad, 2005).

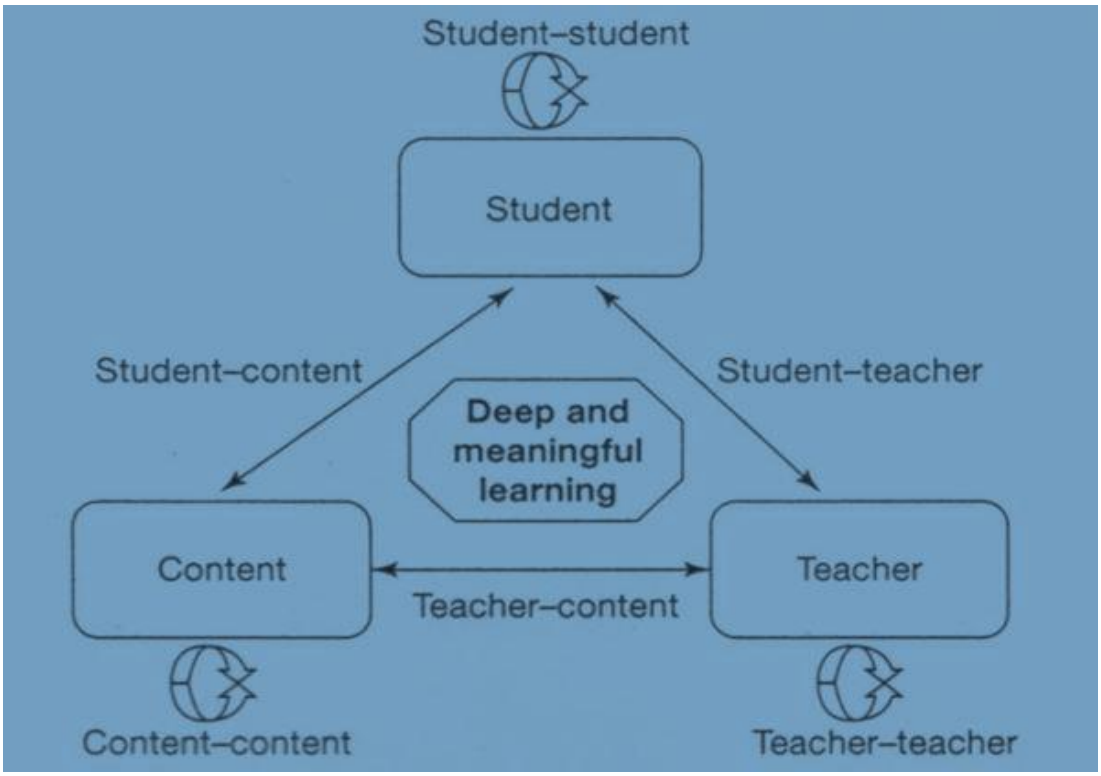


Figure 3 The Equivalency Theory Model

Keegan (1986) put forward the Theory of Equivalency as outlined in Figure 3. This theory proposes that Education at a distance should be built on the concept of equivalency of learning experiences. The learning experiences of distant learners should be as near as possible to the experience of campus-based learners. In this way the learning outcomes of the educational experiences would be similar for all learners. This approach proposes that learning experiences should be designed to be equivalent for distant and campus-based learners. The theory is based on a definition of distance education as, formal,

institutionally-based educational activities where the learner and teacher are separated from one another, and where two-way interactive telecommunication systems are used to connect them synchronously and asynchronously by sharing video, voice, and data-based instruction.

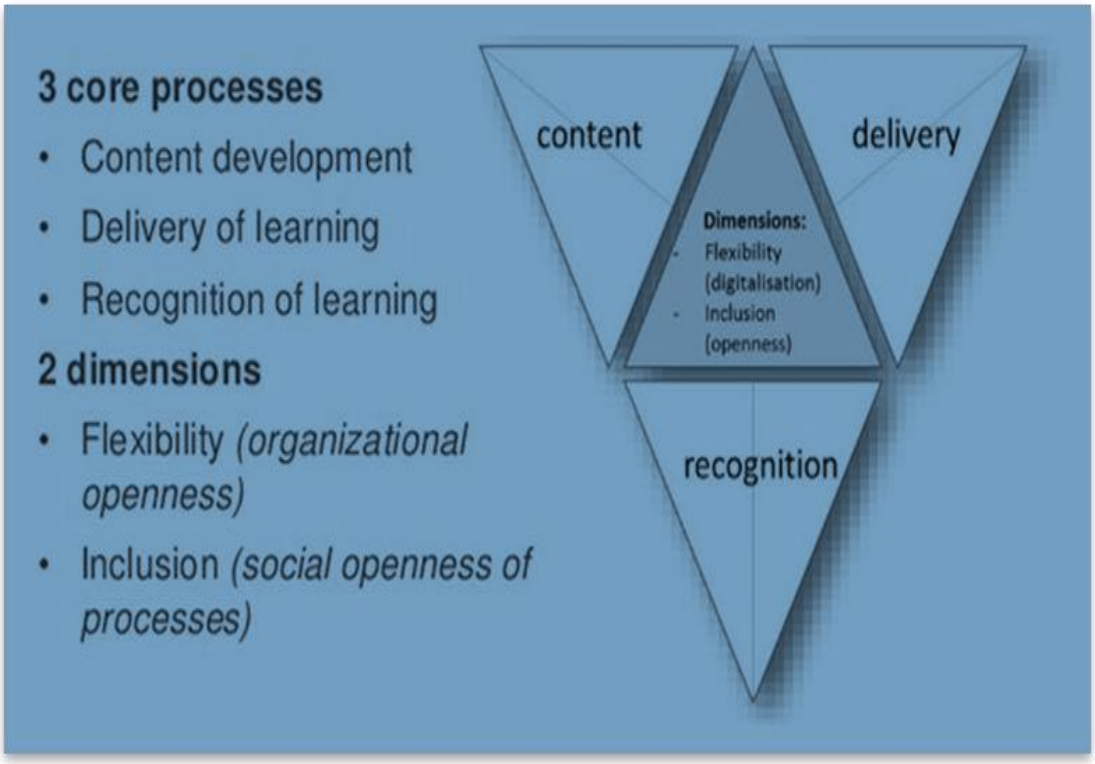


Figure 4 The OOFAT Conceptual Model

In the OOFAT Model (online open flexible and technology-enhanced education) featured in Figure 4 Orr, Weller (2018, p16) provide a framework to analyse emerging models of technology enhanced educational provision, in High-Education. Developed for the International Council for Open and Distance Education(ICDE) this model is based on three central processes: *Content* entails support and guidance, subject knowledge and learning analytics being provided to learners to promote learning. *Delivery* refers to the pace, place and timing of content delivery. How physical and online delivery is provided, and the timing of critical events. *Recognition* is the assessment and accreditation of learning. This provides the evaluation of learning and the endorsement of learning on completion of formal learning units. It provides a means for third parties to recognise the achievement of learners. There are two further dimensions to each process identified in the model: *Organisational flexibility* the central processes are assessed in terms of the extent to which

they are delivered flexibly using digital technology, i.e. online and technology enhanced methods. *Procedural openness* assesses who has access to content and who delivers or controls the content. Open enrolment can be enhanced by access to digitally connected peers who can develop content and assessment.

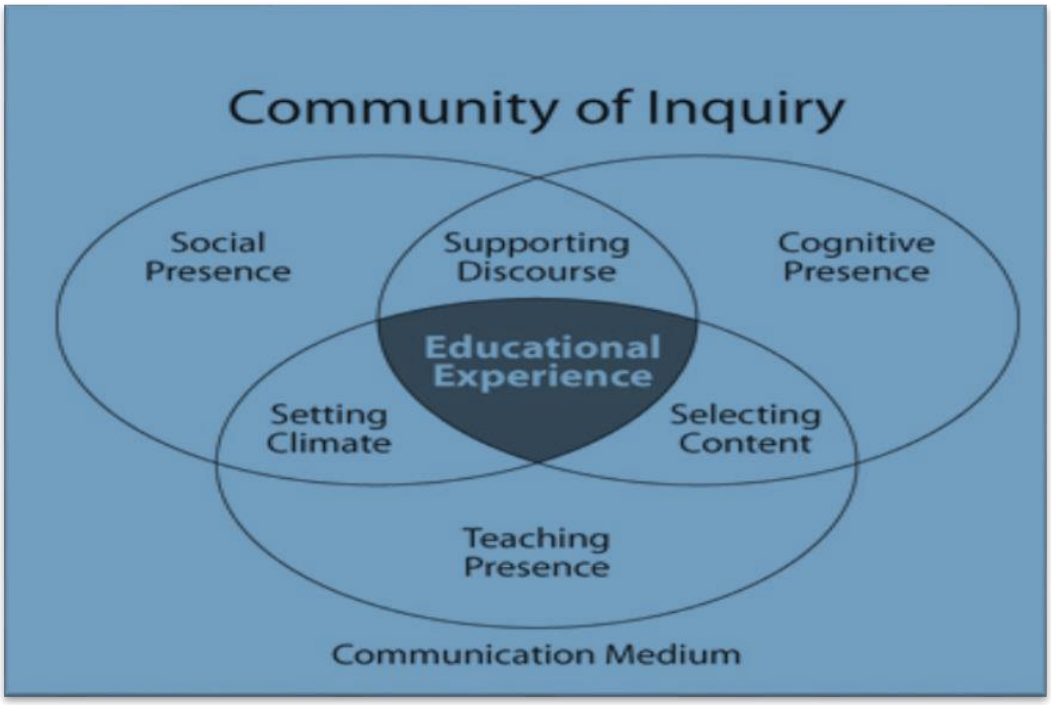


Figure 5 Community of Inquiry

The CoI Model (Community of Inquiry) illustrated in Figure 5, looks at online educational experience in the context of three domains: interaction – social presence (where students interact), cognitive presence, and teaching presence Garrison, Anderson and Archer (1999, p2). It is: "A collaborative-constructivist process model that describes the essential elements of a successful online higher education learning experience rooted in Dewey's educational philosophy and social constructivism" (Castellanos-Reyes, 2020). The domains attempt to convey that different dimensions need to be considered in the design of an educational experience. This theory has been in existence for over twenty years. A number of theorists have added additional dimensions in the intervening period. The CoI framework is used extensively for both research in online teaching, and design of online learning experiences. Castellanos-Reyes (2020) suggests the time has come to move from making sense of what is an efficient online experience, to designing such an experience. How people learn contributes to the educational experience of learners within this

framework. Educational policy must be fashioned to accommodate these contrasting theories of learning.

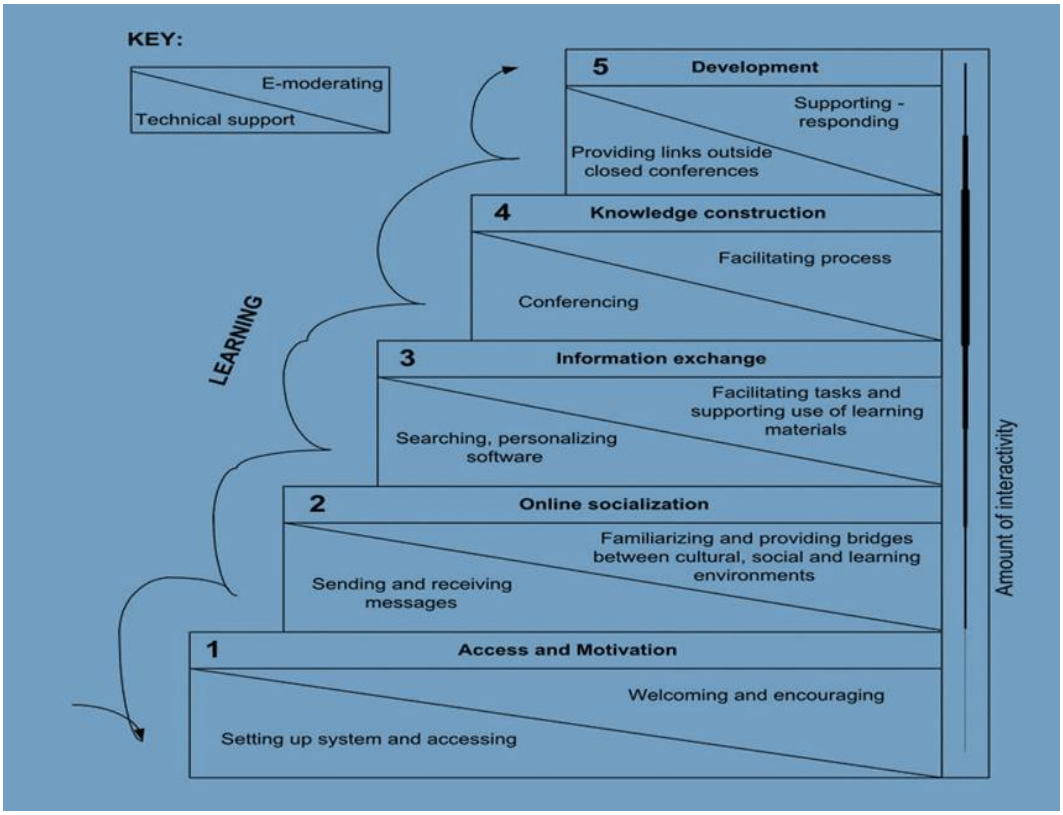


Figure 6 Five Stage Model for Online Learning

Salmons (2010) Five Stage Model for online learning is outlined in Figure 6. The model provides a stepped progression to scaffold learning in an online environment. Stage 1 is access and motivation, this stage sets the scene creating the system conditions for successful online learning, providing explicit motivation, and establishing the rhythm and pace carefully to enable the participants to find their way around the online learning platform. The participants might be nervous and unsure about how participants are expected to behave and who is online with them. Ice breaker activities should be designed to put them at ease. Stage 2 is socialization**.** This stage attempts to get participants interacting with one another with reasonable stretch tasks. These should provide ways of getting to know who is sharing the space. This is achieved by providing opportunities to practice, working together. Activities should be related to the traditions of the discipline because this provides the important cultural context for learning and makes later

knowledge construction easier to achieve. Stage 3 is Information Exchange**.** These activities have a strong task and action focus. In this stage content is prioritised enabling participants to impart information to each other and explain and clarify. They should be shown how to provide feedback to each other and explain and clarify. This should be done in the spirit of deepening understanding. Stage 3 may focus on exploring co-ordination and communication between the participants so that each participant can work towards his or her own objectives. Stage 4 is knowledge construction**.** The students should now be able to adopt to working online, managing their time and at working with each other. Objectives at stage 4 can be related to broadening understanding, providing different viewpoints, perspectives and examples. Instructors should avoid specifying in advance exactly what has to be learnt at this point, but should ground activates in real-world contexts. At stage 4 activity should move increasingly towards peer-directed activities and participant work teams. The group could provide its own goal and objectives in this stage, given directions on how to collaborate. Stage 5 is development. Activities here can be about gaining self-insight and on reflecting and making judgements on the experience and the knowledge acquired. Participants should be asked to demonstrate their ability to work with content and defend their own judgements. They should be encouraged to explore the metacognitive awareness of the positions they adopt. The next section outlines a variety of ways different types of students, learn. The next section considers what areas of research into online learning is relevant to contemporary policy making in this area.

2.7 Areas of Research in online education relevant to policy formation

Research into distance and online learning is relatively new, going through different phases of concentration. Weller groups research in this area over the last fifty years into clusters under a series of headings (Weller *et al.*, 2018). Zawacki-Richter and Naidu similarly identified waves of research in distance and online learning over 35 years to 2016 (Zawacki-Richter and Naidu, 2016).

Weller identifies open education in schools (or Open Classrooms) as his first research cluster with research peaking in the 1970s. The term emanated from the UK with a review of primary school education known as the Plowden report (Plowden, 1967). It was taken up in the US with “open” relating to physical classroom layout and educational task design. Zawacki-Richter and Naidu highlight quality assurance in distance learning as a wave

instigated by the need for distance education to be taken seriously as a mode of education. Sourcing the best forms of quality assurance and dissipating best practice was at the core of this phase. Weller contends that distance education as a research cluster emerged from 1980 onwards. There was a growing focus under this theme in the phenomenon of open and distance universities. Open learning was the next prominent cluster from the mid-1980s onwards. This indicated a move towards learner-centred pedagogy and removal of barriers to education

The growing prominence of the World Wide Web constituted the next wave for Weller, the growth in technological tools at the end of the eighties. E-learning and online education emerged as a cluster in the 1990s and early 2000s. During this period, open education moved more mainstream as e-learning became a topic of interest for campus-based universities and not just off-campus education providers. Technology enhanced learning was a term prominent in the UK, this became linked with the Internet and web-based technologies. Adapting teaching practices and creating a pedagogy suited to the new technological environment was also of growing interest. Zawacki-Richter and Naidu highlight student support and the early stages of online learning (1995-1999) next. They identified the isolation of distance learners as a barrier to retention and progression. This wave of research sought to establish best practice to support distance students, particularly in the early tentative stages of online learning,

Weller identifies the next cluster as Open access publishing towards the end of the 1990s. This focussed in on how open access compares to traditional scholarly publishing during the 2000's. This cluster concentrates on research activities and outputs of higher education in relation to digital scholarship. The Open Educational Resources (OER*)* cluster began around 2000, initially considering learning objects, open-source education, and open courseware. The debate in this cluster is centred around opening up quality educational resources and the exploration of open educational practices.

Collaborative learning and online interaction patterns (2005-2009) are identified by Zawacki-Richter and Naidu as seeking to maximize the strengths of learning in an online environment highlighting the potential for cross-cultural collaboration and student interaction across geographical boundaries. Interactive Learning, MOOC's and OERs (2010-2014) generated excitement concerning the educational access potential they present.

Weller also highlights the growing importance of social media in the mid-2000s. The increasing importance of online social networking tools in education was prominent, with research related to "Web 2.0" and social media tools like blogging also being featured. He also points to MOOC's which began to emerge around 2012 and continue to be of importance with some overlap with the OER theme. Open practices are a recent (2019) cluster for research in the field identified by Weller. It includes research focused upon digital scholarly practices, and open educational practices, and consists of papers relating to research and teaching in higher education. This has been an emerging area of development and research in more recent years.

2.8 Online Learning Policy in Ireland

In this section relevant Irish literature which links to online learning policy in Ireland, will be reviewed. As stated earlier, there is a dearth of literature directly in this area, nonetheless, in this section the relevant literature is reviewed.

Donnelly and O'Rourke (2007) found that at that time, many of the issues facing what was then termed e-learning were technical in nature. They argued that innovative approaches and developing the capacity to respond to innovation and rapid change, required staff engagement. They found that of staff attending an initial day-long introductory session to e-learning, on average less than half of those who attended employ it as part of their practice, citing time constraints as the main inhibiting factor. The other factors reported included difficulty in using the software, fears that the use of eLearning would inhibit attendance at regular classes, and fears that the technology would be used for surveillance.

MacKeogh and Fox (2009) raised the issue that competing tensions influence policy formation in relation to e-learning. Citing Hammond (2003), they advised that higher education institutions exist within political, cultural, and social contexts which shape policy and practice. They contended that the main drivers are enabling educational technologies, national economic policies and priorities, and social development beliefs and expectations in relation to the role of education, in supporting those priorities. They proposed that these three drivers are interdependent, and influence the adoption of learning technologies in institutions cautioning that the role of funding and support agencies can have major influence. They advised that contrary to expectations, e-learning may not widen

participation to off-campus students. They cite that an OECD report on the e-learning strategies adopted in thirteen countries, found that enhancing on-campus learning was the leading rationale for adopting e-learning, while distance learning did not feature as a strong rationale in more than half of the institutions surveyed (OECD 2005).

In their Delphi survey O'Neill, Scott, and Conboy (2009) found 17 factors impact on collaborative learning in distance education as considered by expert practitioners in the field. Instructor characteristics, and a learning community dynamic were considered very important. Group interpersonal skills were not signalled as significant but individual accountability was important. Student characteristics were not considered important but the role of technology was seen as crucial. Good design was a very important factor. Collaborative documents and tools are valuable however, the perceived usefulness of collaborative learning technology to enable collaborative learning over distance was not recognised, to the concern of the authors who recognised its huge potential.

Cosgrave et al (2011) looked at Virtual Learning Environments from a multi-institutional point of view. They found that adequate resourcing and training were required for the successful introduction of technology enhanced learning, but was often not available. They also found that the lack of a well-defined online-learning strategy hampered progress in some institutions.

Carroll (2013) was not an advocate of online learning, taking the view that the only advantage it confers is to improve the 'logistics' or distribution of educational material to a wider student population. He highlights a change in the emphasis of education, changing the focus to attaining a job, rather than to better oneself through the acquisition of knowledge, through a uniformed approach to e-learning. He fears the McDonaldization of education and thinks Connectivism within a virtual world could make students less capable of taking part in face-to-face debate and discussion. He concludes quoting Dante "The essential purpose of education is to bring the pupil face to face with something great, so that he experiences first awe and then curiosity". Carroll asks if online learning can achieve this.

Butler, Shiel, Leahy & Cosgrove (2013) discuss the complexity of developing a Digital Strategy for Schools in Ireland in *Building Towards a Learning Society: A National Digital*

Strategy for Schools. In this paper the authors recognise the tensions that exist between the Learning Society and the Knowledge Economy. They propose that school should give students the capacity to adapt to continual change. This is only possible if" we develop an educational system that is more enabling, empowering, supportive, and less prescriptive" (p9). To enable this to happen "a critical component of the Digital Strategy for Schools must therefore be how teacher professional learning is conceptualised, designed and sustained" (p10).

Farrelly (2014), recognised the hyperbole surrounding online learning in Higher Education "One needs to acknowledge that some of the arguments made in its support would appear to owe more to economic underpinnings rather than pedagogical" (p199). Nonetheless, the author agrees that online learning presents policymakers, educators, and students with significant possibilities to be creative and innovative in the provision of education. The issue of how we define online learning is raised:

> With many commonly used terms it is often possible to discern a number of meanings and understandings. Politicians, policymakers and opinion formers frequently refer to the need for the development of a culture of flexible learning opportunities (including e-learning), often without a clear understanding of what it is they are actually referring to. (p199).

This continues to be an issue today, with an agreed definition of what constitutes online learning, particularly off-campus online learning, remaining illusive in Irish policy texts. It continues to mean "different things to different people and different institutions" (p 208). The issue of the tension between the requirements of the information/knowledge society on the one side and the social responsibilities of Higher Education on the other side, is raised quoting Hargreaves:

> Like other forms of capitalism, the knowledge economy is in Joseph Schumpeter's terms, a force of creative destruction straining as it does to reconcile the distance between knowledge society's productive effects and the knowledge society's capitalistic potential for relentless pursuit of profit (Hargreaves, 2003, p.1).

and Fleming "the same neo-liberal agenda that suggests the withdrawal of public institutions from the active pursuit of social purposes, unless those social purposes are economic" (Fleming, 2008, p3). In the Irish HE sector, there had been little coordination and

cooperation due to factors such as lack of technical infrastructure and incompatibility between delivery systems and management information systems. The author points out that although e-learning may be proposed as a means of providing education anywhere and at any time, the ESRI's *Survey Assessments of the Information Society in Ireland* had cautioned that "given the observed variations in access and accessibility between the different socio-demographic groups, it is, unfortunately, unlikely that everyone will benefit equally from the information age" (Williams et al., 2004, pp.2–3).

This theme is addressed by Delaney & Farren (2016) who highlight that Higher education (HE) is regarded as a pathway to upward social mobility for those from lower socio-economic backgrounds. Social mobility is itself seen as important both for individual and national prosperity and is a key driver of government funding for HE. They found that while access to HE has increased in recent years, social inequalities continue to be reproduced, with working-class students more frequently accessing lower status institutions and courses. Distance graduates are likely to be from lower socio-economic backgrounds and have delayed participation in university education for reasons relating to social class.

Hunt (2016), highlights the difficulties surrounding definition in capturing part-time students in Irish Higher education. The definition of part time student has been ill defined "A recurring theme within public policy has been the blurring of part-time, so that it has become ill-defined and lately related to terms such as 'flexible'" (p.215). In terms of data collection, the author found part-time and flexible learning to be 'at the edges' (p.216). It has been" inadequately resourced, under-researched and marginalised in public policy and academic discourse". (p.233). The paper points out that flexibility of delivery and part-time learning have been recommended in the context of access and life-long learning however the issue of free fees for part-time students has not been addressed. Hunt recognises that the Springboard initiative provided as a temporary scheme, illustrated a real demand for part-time HE programmes albeit that they are mainly aimed at courses linked to labour market needs, however "The lack of parity regarding part-time student fees was identified consistently in policy documents and in the discourse, but it has been ignored by successive governments" (p.233).

Maguire and Murphy (2018) found that if institutions operate without a robust policy framework for digital teaching and learning, informal practices can emerge which are

inefficient, confusing or risky. They further, found that current policies failed to recognise the challenges and opportunities related to digital teaching and learning are not generally reflected in the language of existing policies. Many existing policies do not adequately recognise the practice context within which, they operate and many institutions are only in the process of developing policies for digital teaching and learning.

Diggins-Mannion (2019) found that in Ireland, unlike other countries, policy making in Educational Information and Communications Technology (EICT) is largely influenced by the general public policy-making process. The research points to the need for explicit public and institutional EICT policy-making in higher education in Ireland. Taking a generalised approach to policy in this area, together with a lack of process in relation to ICT policy in Higher Education, reduces sustainability and the power to innovate which in turn reduces the impact EICT has on the economy, society, and higher education in Ireland. The recent appointment of a full Minister for Higher Education and Research may be a first move to address this deficit

McGarr and Johnson (2019) analysed educational technology policy in Ireland from 1997 to 2017 in the school context. They highlight the importance of the economic agenda for technology integration in schools, set against a backdrop of neoliberal discourses. The study found that the challenge of integrating technology is not just a question of "integration", it represents a realignment of the existing education system toward a more student-centred experience. Most recent policy also recognizes that the accompanying change process is both complex and context driven. The importance of this process in implementing change, and choosing what change is addressed is discussed. The article highlights that there are competing rationales and their respective influence can be seen to reflect or prioritize the dominance of one particular rationale (namely the economic rationale) over others. In this context they cite Roumell and Salajan (2016) in their analysis of U.S. policy. They noted that

> E-learning policies are steeped in general rhetoric regarding global competition and the development of human resources as a means to the end of economic innovation and competition. E-learning and educational technology policy must be understood as rhetorical devices that promote education and technology as a means to compete within the complex context of competitive forces within the global knowledge economy. (p. 366)

Further they highlight that policy can have a number of functions. It can be used as a vehicle to address a perceived problem. How the policy is presented can address the problem through a lens presenting particular solutions as necessary and expected and in doing so "foreclose other interpretations of the problem and hence responses" (p17).

Equally important is the symbolic nature of policy. They cite Rizvi and Lingard (2010) who note that: 'Symbolic policies are often political responses to pressures and they frequently have little or no commitment to realizing the stated intentions but instead are primarily media spin. Thus, they play an important role in legitimizing particular views '(p. 20).

In the context of online learning in Higher Education, this use of policy appears to feature heavily. McGarr and Johnson suggest that further studies exploring the rhetorical function of educational technology policy should apply a more critical scrutiny of the role it plays for various stakeholders in the education landscape. In a later study McGarr & Ó Gallchóir (2020) looked at pre-service teacher's attitudes to technology. They were surprised to find the students had a techno-centric rather than a student centric view of technology. The suggested this was partly due to their lack of experience using technology to teach. They also considered that student teacher's views reflected existing dominant beliefs and practices within the educational system.

O'Shea & O'Hara (2020) reviewed Ireland's higher education system performance framework (HESPF), through its first 3-year cycle 2014–2017. They found that

> The framework articulates the expectations of the HE system, and PAs negotiated between individual HEIs and the HEA are integral to aligning HEI activities with key national priorities for higher education and to providing a mechanism for co-ordinating and steering the higher education system as a whole towards their achievement

While participants in their research considered the HESPF to be a good concept, it had not been successful in changing behaviour in the HEI's.

2.9 Micro Summary

In summary, this section has considered online learning from a learner perspective. It considers online teaching systems, online learning models, and areas of research in online

learning as it has evolved. Finally, it reviewed policy literature related to Irish online learning policy. Having completed the literature review the next section identifies a gap in the research which this project sets out to investigate.

2.9.1 The Research Problem or Gap in the Literature

It is clear from the above review of the literature that there is a need to study the role and impact that policy has on the successful implementation of online learning in Irish Higher Education. Little research has been completed in relation to fully online learning in Ireland, indeed establishing a universally, understood definition of online learning as defined in policy documents, is problematic.

Clusters of research have been undertaken in online learning which follow a pattern. Research moves from the search for acceptance and the efforts to establish credibility for off-campus education in the early days through understanding student requirements and the best pedagogical approaches. Next came the internet and the adoption of technology. This provoked on-campus interest with online learning moving more mainstream. The entrance of private providers followed, with open resources and practices still developing including MOOCs. However, the formation and implementation or lack of it, in the area of fully online learning in Higher Education and more specifically in Irish Higher Education has not been the subject of much research. More research is required that considers policy in online learning. Accordingly, this study sets out to address the problem that there appears to be a gap between rhetoric and reality in relation to Irish online learning policy, in Higher Education.

2.10 Conclusion

In conclusion, this chapter has presented a review of current literature in relation to policy in online learning. It has shown that the technology available to assist in teaching and learning has undergone a revolution in the last twenty years, in tandem with the growth of the knowledge economy. Information is now available at a click, from vast archives, and those archives are available globally.

In the first section of this chapter, Macro, the history of distance learning is traced and its evolution into online learning, with the advent of the internet. Online learning in this research is defined using the definition proposed by (Singh and Thurman, 2019).

> Education being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment.

Plomp and Pelgrum's (1991) framework is used to consider drivers of policy in relation to technology in education. It was outlined as: vocational, social, economic, commercial, marketing, cost-effectiveness, transformation, and pedagogical. The strengths of online learning and the policy opportunities it opens up, were considered in the Access, Collaboration, and Equity section. The formation of policy is subject to a tension between the equity and social justice drivers of educational policy and the economic drivers. This tension in the crafting of policy was explored. Globalisation offers both opportunities and threats to online learning. The impact it can have on policy was considered. Finally, some of the new models of online learning, around which policy is being created, were outlined.

In second section Meso, the importance of leadership to the successful creation and implementation of online learning policy was discussed: How educational technology, innovation, and change were impacting on the environment in which this policy resides, was outlined, detailing the major innovations in the sector. Finally, areas which require policy development to support online learning to enable it to thrive, notably quality assurance, professional development and faculty support were discussed.

The third section Micro, looks at online learning from the learners' perspective. It considers how learning communities best facilitate online learning. How different learning theories work in an online environment and how this can be facilitated in policy formation. Finally, areas of research in distance education and knowledge transfer are considered.

Having reviewed the literature relevant to this study, the next chapter describes the methodology that was developed to address the research problem or gap in the literature.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This Chapter describes the research methodology. It outlines the particular perspective underpinning the research, the methodology selected to investigate the research problem and related objectives, the methods used to collect relevant data, and the related techniques adopted to analyse the information collected. It also reports how ethical considerations were taken into account, researcher bias and the limitations of the research design (Pedersen, 2009). The study is cognisant of the need to ensure alignment between the overarching research question and the deeper underlying methodological paradigm in guiding decisions about on how to examine this particular problem (Denzin & Lincoln, 2018).

The study has three objectives:

> To investigate how the Irish policy environment has responded to new models of online learning.
>
> To analyse how the Irish University sector has responded to the opportunities and the challenges presented by the emergence of new models of online learning.
>
> To explore how one Irish university has responded to government policy texts and policy discourse**.**

3.2 Guiding definitions

The following three definitions serve to anchor the study and provide clear research boundaries.

> Online learning in the context of this study refers to the mode of delivery to students studying primarily off-campus. In this study, this definition does not include blended forms of learning for on-campus students
>
> Policy, in the context of the study, refers to Irish Government policy in relation to fully online, off-campus, higher education.
>
> The Irish University sector refers to the seven universities named in the Irish Universities Act (1997): Dublin City University (DCU), University of Limerick (UL),

Trinity College Dublin(TCD), University College Dublin (UCD), University College Cork (UCC), National University of Ireland Galway (NUIG), Maynooth University MU).

3.3 Organising Framework

The research is presented in three phases following a Macro, Meso, Micro framework adapted from Dopfer (2004) and the research agenda for online distance education proposed by (Anderson and Zawacki-Richter, 2014).

Phase 1 Macro-level Online Learning Policy at an International Level

This consists of a Content Analysis of major European and International policy on online learning at a global level.

Phase 2 Meso-level Online Learning Policy at a National Level

The first section of this phase consists of an analysis of relevant Irish Policy Documents. The second section of this phase is a content analysis of publicly available institutional compact agreements, institutional websites including information on institutional strategies and an interview with a key policy maker (Director at IUA).

Phase 3 Micro-level Online Learning Policy at a Local Level

The application of online learning policy on the ground is exhibited in a case Study "telling the story' of online learning at Dublin City University". This was researched through interviews with appropriate experts in the field: Head of Teaching & Learning at DCU; Retired Head of Open Education at DCU; Ex Vice-Dean of Teaching & Learning at DCU; Retired Head of IT at DCU.

3.4. Qualitative Research

The approach adopted in this study followed a predominantly qualitative tradition. Qualitative research is a set of complex interpretive practices where no one method or practice is given greater importance than another (Denzin and Lincoln, 2018). In this qualitative approach, the research is based around constructivist perspectives (i.e., the multiple meanings of individual experiences, socially and historically constructed to develop

a theory or pattern) and advocacy/participatory perspectives (i.e. political, issue-oriented, collaborative. or change oriented). It also used strategies of inquiry such as narratives, phenomenologies, and a case study. The researcher collected emerging data with the objective to develop themes from the data (Creswell and Creswell, 2017).

Qualitative research is an all-inclusive approach which considers the context in which the experiences take place and is concerned with learning from actual cases. Qualitative research seeks to access perception and meaning-making in order to understand, describe, and explain the social process from the perspective of the participants in the research. This approach did not involve testing a prior hypothesis, but rather it commenced with a focus of inquiry that took the researcher on a journey of discovery taking an inductive approach to data analysis. Research outcomes are contextual findings; qualitative researchers, therefore, refer to "transferability" (from context to context) rather than generalisability.

While qualitative research does not involve mathematical constructs, it was nonetheless systematic. Participants were encouraged to articulate their perceptions and experiences freely and spontaneously without judgement. In analysing data generated in this way, responses were grouped according to noticeable categories of meaning and relationships between categories rather than according to pre-defined categories and were derived from the data itself through a process of inductive reasoning. This method seeks to explain the social processes under study.

3.4.1 Case Selection

In this research, the interview process was designed to elicit multiple perspectives on the use of online learning in higher level teaching and learning, most notably in DCU as this institution provides an example of successful, early adoption of online learning. DCU was selected as the subject of the case study for the following reasons:

It is a purposive sample as the selected university has been engaged in fully online education for a significant length of time, nearly twenty years. This provides an established source, for a worthwhile study. As an insider in the environment, the researcher has access to participants and documents relevant to the case, that would otherwise not be easily accessed. While this is convenient, it facilitates looking more intimately at a specific case in rich detail, than would be possible without this connection. This research is what is described by Yin (2015) as revelatory case. The observation and analysis of a phenomenon

is explored; the impact of government policy in relation to fully online learning on one organisation, which might otherwise be inaccessible to scientific investigation. The research seeks to get "a description of an episode, a linkage, an explanation" (Stake, 1995, p65). This involves seeking ways of interpreting and making sense of the data collected to draw some conclusions from the research. Using the chosen university provides a lens through which to analyse the response of the Irish university sector to new models of online learning, which addressed this objective.

3.4.2 Theoretical Framework

At the outset, the researcher needs to outline the particular perspective from which the research emanates. Crotty (1998, p4) sets this out under four headings, as illustrated in Figure 7 and this sequence in expanded upon in the following section.

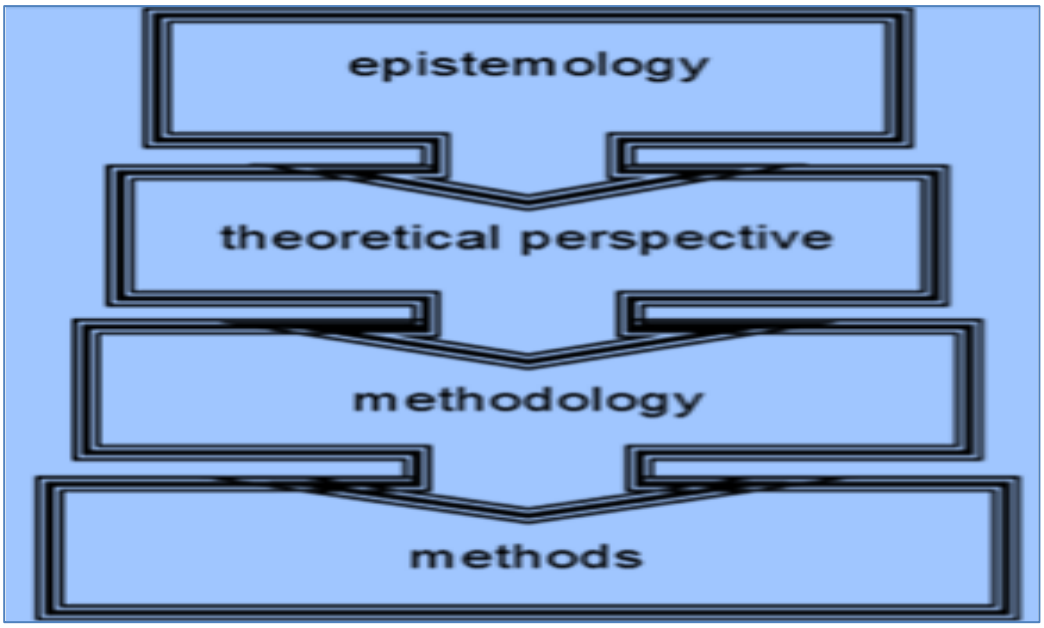


Figure 7 Theoretical Framework

3.5 Epistemology

Epistemology provides a philosophical grounding to understand "how we know what we know", (Crotty, 2003, p.3). Also, it frames knowledge in the context of "what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate"

(Maynard, 1994, p.10). The main approaches are constructivist, objectivist, and subjectivist theory.

3.5.1 Constructivism

The approach taken in this research is constructionist. Constructivism centres on the belief that social phenomena develop in particular social contexts. The concepts or practices in a particular context may seem obvious and natural, but are a function of that context. Individuals and groups participate in the creation of their perceived social reality, and this reality is ever evolving as social interactions occur. “There is no meaning without a mind. Meaning is not discovered but constructed” (Crotty,1998, p8-9).

This epistemology considers that “truth” emanates from engagement with the realities in our world. For constructionists, human beings construct knowledge as they engage with and interpret the world (Crotty, 1998). Constructivism's central idea is that human learning is constructed, that learners build new knowledge based on the foundation of previous learning. Dewy proposed that learning is a social activity that is done through interaction with each other rather than an abstract concept (Dewey, 1938). The African proverb “it takes a whole village to raise a child” is reflected in Vygotsky’s view that: “Community plays a central role in the process of making meaning” (Vygotsky,1978, p109).

This links back to our earlier discussion in Chapter 1, where for Foucault (1970), policy provides, the mechanism through which discourses are constructed and in addition how they change and shape actual behaviour and practice. Further, it reminds us of the contention of Apple, (2019) that education is the battleground for struggles over authority and identity and that policy analysis needs to consider bigger questions about power and privilege. Questions about who benefits from these policies and what the overt and hidden effects are of educational reforms or failure to reform, require consideration. This provokes deliberation around how a community constructs policy, what are the forces that shape how it is constructed, and how does that policy impact on different stakeholders, in that community.

This epistemological position assumes that different individuals may construct meaning in different ways; how an individual engages with and understands their world is based on their cultural, historical, and social perspectives with meaning emanating through the interaction with the human community (Crotty,1998). The research recognises multiple realities and captures these realities by investigating multiple forms of evidence from a range of perspectives and experiences.

3.5.2. Objectivists

The objectivists claim that the scientific method requires openly observable, replicable facts, and these are available only in the area of evident behaviour. Objectivism proposes that knowledge exists whether we are conscious of it or not. It is foundationalism and absolute (Hiller,2016). Objectivist epistemology advances that reality exists independently of the individual mind:

> [A] tree in the forest is a tree, regardless of whether anyone is aware of its existence or not When human beings recognize it as a tree, they are simply discovering a meaning that has been lying there in wait for them all along (Crotty 1998, p8).

Researchers with this position try to find causes, effects, and explanations. They try to predict events and test theories and hypotheses. Furthermore, this stands in opposition to the other two positions which seek to understand and describe rather than explain.

3.5.3 Subjectivist

In contrast, subjectivist epistemology proposes that how people perceive and understand reality is what comprises knowledge. People impose meaning and value on the world and interpret it in a way that makes sense to them (Crotty 1998; Pratt 1998). Subjectivism takes the view that comprehending human behaviour consists solely in reconstructing the understandings of the actors engaged in performing them. To comprehend others is to understand the meaning of what they do and to understand this meaning is to understand them in their terms. Meaning is imposed on the object by the subject (Crotty, 1998).
Ontology (what constitutes reality and what are its traits) is not identified in this framework as in Crotty's view ontology, and epistemology are intimately linked with one another and inseparable: to talk of meaning is to talk of meaningful reality (Crotty, 1998). This view is shared by Goldkuhl who suggests ontology and epistemology are intertwined in

interpretivism because knowledge (understanding, meanings) is so essential in the ontological assumptions of the constitution of the world (Goldkuhl, 2017).

3.6 Theoretical Perspectives

The theoretical perspective is the particular philosophical position which provides a context for the research, such as, interpretivism, positivism or pragmatism. This research takes a interpretivist approach because this approach emphasises that conditions are studied in their natural setting by attempting to make sense of, or interpret the meanings people bring to these settings, by searching for patterns embedded in the data source itself (Creswell and Creswell, 2017.

3.6.1 Interpretivism

To understand how the Irish policy environment is reacting to new models of online learning, it is useful to be immersed in the environment and through the interpretation of that reality, to understand it. The interpretivist approach recognises that the researchers own background and experience has an impact on the research. The interpretivist approach allows that there may be multiple interpretations. In the view of interpretivism, the meaning is created and negotiated by human actors and has the objective of understanding lived experience (Crotty, 1998). All interpretive research aims to understand how members of a social group, through their participation in social processes, enact their particular realities and endow them with meaning, and to show how these cognitive elements; meanings, beliefs and intentions of the members help to constitute their actions (Orlikowski and Baroudi, 1991, p13). In this research the manner in which the selected university has harnessed new models of online learning, based on ideas like the community of inquiry, is explored. Applied to educational research, this paradigm enables researchers to build rich local understandings of the life-world experiences of teachers and students and of the cultures of classrooms, schools and the communities they serve (Taylor and Medina, 2011). The main disadvantage of this approach is its subjective nature with the possibility of bias on behalf of the researcher. Primary data generated in interpretivist studies cannot be generalized as the data can be influenced by personal viewpoint and values. This can weaken the reliability and representativeness of the data.

3.6.2 Positivism

This research paradigm takes a "scientific" approach to investigate, confirm and predict law-like patterns of behaviour, and is used in research to test theories or hypotheses. This is best suited to natural science, physical science, especially where very large sample sizes are involved (Taylor and Medina, 2011). Generally, its focus is on the objectivity of the research process (Creswell, 2008). This approach is not appropriate in this case because although taking a quantitative approach was considered, it would not elicit the nuanced detail needed to understand the dynamics of this environment, and therefore would not add to the research.

3.6.3. Pragmatism

Pragmatists focus on the outcomes of the research. Their concern is with applications and solutions to problems (Patton, 1990). The critical part of this type of research is the problem being studied. Cherryholmes (1992) and Murphy (1990) use this method. Pragmatism is not committed to one philosophy or view of reality; researchers are free to choose those methods, techniques and procedures that suit their needs. The view of truth is what works at that time; it is not based on a reality independent of the mind or within the mind. Outcomes are not the main focus of this research. Investigating the policy process, the cultural influences, and drivers of change in this environment were also of interest, therefore this approach was not selected.

3.7 Methodology

This section outlines the methodology used in the research. The research takes a qualitative approach using content analysis where in phases 1 and 2 policy texts which contribute to the discussion of online learning in Ireland are analysed and critically reviewed.

In phase 3 a case study is used to utilises the researcher's insider view to gain rich insights into online learning in Irish higher education, and which takes an in depth look at how online learning developed in one university which adopted this approach early.

3.7.1. Content Analysis

Content analysis is a qualitative method employed to "systematically transform a large amount of text into a highly organised and concise summary of key results" (Erlingsson and Brysiewicz, 2017, p94). This involves identifying and consolidating data, coding, and categorising around links or connections. Adjusting is needed after the first analysis then returning to the raw data to reflect on your initial analysis. The analysis is a flexible, reflective process of working and re-working your data to identify connections and relationships. This is done to make "replicable and valid inferences from the data to their context" (Krippendorff, 1989, p403). In this research content analysis is used to identify and analyse key themes in the documents in phase 1 and phase 2 particularly in relation to Performance contracts between the HEA and the Universities and in relation to information from University websites.

3.7.2 Case Study – Phase 3

A case study is a research approach where the researcher uses an empirical approach to investigate a particular phenomenon in real-life setting, using multiple sources of evidence (Creswell & Creswell, 2017). It offers an alternative way for a researcher to access the truth based on the researcher's ability to put forward their argument. It is possible that different recipients of the research would recognise different truths in the case presented (Cryer, 2006). The event, activity or situation being studied is "bounded" that is to say it is separated within a time period, place or geographical boundary (Creswell and Creswell, 2017).

Yin (2015) proposes that there are three types of case study:
To chronicle an intervention in a real-life context.
To explain the causal links in real-life interventions that are too complex for surveys or experimental methods.
To explore situations in which the intervention being evaluated has no clear single set of outcomes (Ladden, 2015).

In the educational context, (Stake, 2010) suggests this is a method of investigating people and programs for both their uniqueness and their commonality. He describes this work as a refinement of understanding. It helps to examine experiences and to decipher which of

these experiences are common and which are unique (Denzin and Lincoln, 2018). The case study can focus on events as they happen to allow the researcher to "test views directly concerning phenomena as they unfold in practice" (Flyvbjerg, 2006, p19). This is the reason this method is being adopted in this research.

3.7.2.1 Advantages of Case Study

In making the research process transparent and honest, readers can construct their own perspectives which "are equally as valid as our own" (Cohen, Manion and Morrison, 2000, p8) As an 'insider' the researcher has an intimate awareness of the research environment, to which the outsider is not privy (Jones cited in Tedlock, 2000). When it comes to fieldwork, the field is "a powerful disciplinary force: assertive, demanding, and even coercive" (Geertz, 1995, p119).

3.7.2.2 Disadvantages of Case Studies

The case study can have a bias toward verification, or a tendency to confirm the researcher's preconceived notions. It can be difficult to replicate the study, this could call into question the validity and rigour of the research process (Frideres, 1992). Some critics contend that the study of a single or small number of cases limits the extent to which the findings are generalizable (Ladden, 2015). The researcher should provide a detailed, coherent and systematic trail of evidence delineating how the case study results were arrived at (Walsham, 1995). The case study format provides an appropriate method to research Phase 3 of this study as it facilitates "telling the story" of that particular organisation. This method makes it possible to illustrate how policy is implemented on the ground and the impact policy can have in a live environment. The presence of the researcher in the environment over a long number of years allows an authentic voice to tell this story. It further expedites the availability of documents and interviewees to craft the case accurately.

3.8 Methods

The methods employed over the three phases of this study are described below. Phase 1 involved document analysis, where major International policy texts relevant to the research were selected, reviewed and critically interpreted. Phase 2 involved document analysis at the national level coupled with document analysis of relevant strategies and policies along with an interview with the key lead for teaching and learning in the Irish Universities

Association (IUA). Phase 3 consisted of face-to-face semi –structured interviews with key DCU staff to gain valuable insights into how policy has been shaped in relation to online learning in a single institution. The following section describes the approach and methods adopted in more detail.

3.8.1. Mechanism for Document Analysis

The mechanism used to frame the document analysis is an adaptation of a framework used in Brown, M., Anderson, B. and Murray, F., (2007) E-*learning policy issues: Global trends, themes and tensions.* The framework provided an existing mechanism to extract the issues of relevance in this discourse, having done this in a global context, albeit in an earlier timeframe. This framework was used to summarise the information in each publication, compare the documents and to decide which were of sufficient importance to include. The process consisted of first identifying the questions to be contemplated in this research and then selecting a range of material to be considered, appropriate to answer those questions. A literature review was conducted on the topic and the macro, meso, micro framework was identified as a theoretical framework to guide the analysis.

3.8.2 Document Analysis – Phase 1 & 2

Document analysis is a qualitative research method where both printed and electronic documents are reviewed and evaluated systematically. Document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin and Strauss, 2008). This method was used in both Phase 1 and Phase 2 of this research. The type of documents that may be evaluated as part of a study includes minutes of meetings; manuals; background papers; books and brochures; diaries and journals; event programs and memoranda; maps and charts; and newspapers. The analysis process entails searching, selecting, assessing, and synthesising data contained in documents. Document analysis yields data in the form of excerpts, quotations, or entire passages that are then organised into major themes, categories, and examples specifically through content analysis (Labuschagne, 2003). This research uses content analysis to extract meaningful information from the documents and to consider the meaning of that information.

3.8.2.1 Phase 1 Policy Document Analysis

In this research the databases in the DCU Library Education Subject Guide were searched , notably Search Educational Research Complete, SAGE Journals, SAGE Springer Link, Taylor & Francis Journals, Scopus and Google Scholar to do an initial sweep of relevant documents in a systematic way. The time frame specified was between 2000 and 2020, as this was the period under consideration for the research. The material was selected using keywords/phrases such as: Online learning policy, Education policy, Leadership policy, Lifelong Learning, Online learning policy, European Education policy, e-Learning Policy, and Distance Learning Policy. In total, 350 documents were downloaded and reviewed. After the initial review,176 documents were selected for more detailed examination in relation to policy. These were categorised into 4 folders to be analysed, International policy, the Policy process, Education policy and Irish Policy. The selection was based on the citations made, the topic covered, relevance to the research and to encompass a range of sources and outlooks.

3 8.2.2 Selection of Documents

Documents were chosen to present a span of perspectives from different regions and varying organisational standpoints e.g. Government bodies, International Groups, consulting firms and representative bodies. This approach was employed to capture the policy debate in this area. The discussion frequently manifests around topics like access and the stewardship of education. The rhetoric in these area's feeds into "interpreting the construction and resolution of policy dilemmas" in policy texts (Walsh, 2020). The policy discussion is a strategic and political process, indeed discussions" vary among what are often competing, even conflicting, cultural, racial, gender, class, regional, and other differing interests," (Peet &Watts, 1993, p228.).

The selection of documents was made cognisant of the necessity to adhere to the principle of "trustworthiness in interpretive research" (Guba,1981, Lincoln & Guba,1985). A common feature of these criteria is that they aspire to support the trustworthiness by reporting the process of content analysis accurately (Elo, and Kyngäs, 2008), which is done in subsequent sections. Lincoln & Guba proposed four criteria for assessing the trustworthiness of qualitative research, credibility, dependability, conformability, and transferability. The

authors later added authenticity as additional factor. To establish credibility, researchers must ensure that those participating in research are accurately described (Elo, and Kyngäs, 2008). Data is dependable if it remains stable over time and under different conditions. The potential for agreement between two or more independent people about the accuracy, relevance, or meaning of data is what is referred to as conformability. Transferability relies on the potential for findings to be generalized or transferred to other settings or groups. Authenticity, refers to the way in which researchers, fairly and faithfully, show a range of realities(ibid).

A total of 15 policy texts were selected for close review in the international category. Texts were reviewed from America, New Zealand, Europe, from The EU Commission, UNESCO, EY and PWC, among others A purposeful selection was made to get a cross-section of geographically diverse global viewpoints, governmental and non-governmental organisations, consultancy groups and multinational advisory groups. Many interesting documents could have been included however the selection was based on relevance to the research questions. The final selection was made keeping in mind that the analyst

> Works iteratively in a back-and-forth style moving between empirical data and theory, until the process generates theories that initially informed the researcher's expectations of what they thought the political reality was
> (Schwartz-Shea and Yanow, 2012, p. 28).

These selected texts were evaluated by adapting the framework used in the text *Brown, M., Anderson, B. and Murray, F., (2007), E-learning policy issues: Global trends, themes and tensions* to compare and analyse the selected documents (See Appendix D). The categories analysed included:

Major themes: principal themes relevant to the specific research questions.
Category of document: Is it a government discussion document (white paper), a government proposal (green paper) or a policy document. Is it a seminal work in this area?
Scale/Budget: Is the subject of the document of sufficient scale or value to warrant its inclusion. Timeframe: In the timeframe covered in the document of relevance to the research period 2000-2020.Target audience: Who is the document aimed at, is this audience part of the debate and has their voice been captured in the analysis? Sponsoring agency: Are the sponsors of the document influential participants in the research area? Author: Is

the author/authors of the document an important contributor to this field. Areas of priority: are the priorities covered in this document of relevance to the research. Key action points: What is the real-life context of the document. What actions will it generate? Implementation /responsibility: who is responsible for progressing this document into action?

In the Irish section, selected documents were analysed by comparing the relationship to other policies, their relevance to the Irish Context, their importance to the debate and if the viewpoint the document presented had been represented in the selection presented. The emergent themes from the International texts informed the selection of 12 documents in the Irish texts section. Initially all documents were scanned to filter out those most relevant to addressing the research questions. These documents were compared and evaluated again using the adapted framework from Brown, M., Anderson, B. and Murray, F., (2007*)* (See Appendix D). Categories reviewed under this framework included: relevance, themes, drivers, definition of online learning, consultation review process, and cross referencing with other documents. Documents were iteratively reviewed selecting a range of papers most relevant to analyse the research questions.

3.8.2.3. Rejection of Documents

Document analysis has often been used as a means of triangulation in combination with other qualitative research methods as "the combination of methodologies in the study of the same phenomenon' provides a means of validation" (Denzin, 1970, p. 291). The qualitative researcher is expected to draw upon multiple sources of evidence; to seek corroboration through the use of different data sources and methods. Apart from documents, such sources include interviews, participant or non-participant observation, and physical artefacts (Yin, 2015). In triangulating data, the researcher attempts to provide "a confluence of evidence that breeds credibility" (Eisner, 1991, p. 110). In examining information collected through different methods, the researcher can corroborate findings across data sets and thus reduce the impact of potential biases that can exist in a single study. According to Patton (1990), triangulation helps the researcher guard against the accusation that a study's findings are simply an artefact of a single method, a single source, or a single investigator's bias. With this in mind a wide range of documents from a wide

variety of sources were examined to get an overview of the topic under review. This was done to protect against bias identified in section 3.8.5.1. Insider bias and to ensure that a range of relevant perspectives were considered.

The criteria for selection refers to the aspects of the research considered that make them relevant or pertinent and what makes them not relevant. In the International policy texts category, documents were initial scanned to capture documents of interest in policy formation in relation to online, digital, and technology enhanced learning. All documents resulting from searches were initially scanned. Documents were rejected on the following grounds:

> Time Frame: if they fell outside the time frame of this research 2000-2020 they were not included for closer examination
>
> Credibility of source; If the document did not come from a creditable academic, governmental, professional, or representative group it was not included.
>
> Relevant to a Higher Education Context: Documents which did not refer to a higher education context were not included for further analysis.
>
> Duplication: Where the information contained in a document had been superseded by a later document, or where another document presented the case more coherently a document was rejected.
>
> Geographical spread: Some documents were preferred on the basis that they presented a view from a different geographical perspective, therefore some documents were rejected on the basis that their geographical perspective had already been captured.

Having filtered the documents to those relevant, selected documents were all read in full and considered. Conscious of the need to keep within the scope of the research questions, relevant documents were chosen as described in the previous section.

In the Irish policy texts category, a wide range of documents were reviewed to gain insights into policy formation in Ireland with respect to education, technology and in particular online learning in higher education. These selected texts were again evaluated by adapting the framework used in the text*. E-learning policy issues: Global trends, themes and tensions.*

(Brown *et al.*, 2007) to compare and analyse the selected documents (See Appendix D). As in the International section, the criteria for selection refers to the aspects of the research considered that make them relevant or pertinent and what makes them not relevant

Documents were rejected on the following grounds:

> Time Frame: if they fell outside the time frame of this research 2000-2020 they were not included for closer examination
>
> Credibility of source; If the document did not come from a creditable academic, governmental, professional, or representative group it was not included
>
> Relevant to a Higher Education Context: Documents which did not refer to a higher education context were not included for further analysis.
>
> Duplication: Where the information contained in a document had been superseded by a later document, or where another document presented the case more coherently a document was rejected.
>
> Seminal Documents: Seminal documents in education were selected to illustrate the debate in education in Ireland.

Walsh (2020) tells us that "using a thematic approach can lead to accusations of the analysis being too descriptive". Walsh adds that Todd (2016, pp. 22–23) points out, presenting analysis by themes is justified when investigating broad and complex policy dilemmas. Documents relating to the individual universities selected for the study were also reviewed. Initially the first performance compacts under the higher education system performance framework (HESPF), covering its first 2014-2016 three-year strategic compact cycle, in a sample of higher education institutions (HEIs) for the seven universities, were reviewed to gain an understanding of the performance review process. These were rejected from the analysis as the had been overtaken by the second round performance compacts which were more relevant to the current situation.

Next, the new performance template for 2018-2021 between the HEA and the HEI's was reviewed to highlight those aspects of the agreement that were relevant to this research.

The individual agreements between each of the seven universities and the HEA for the current (2018-2021) strategic HESPF cycle were then reviewed to gain insight into the strategic direction each of the universities are pursuing and what actions they are taking in relation to fully online learning. Each of the universities websites were then reviewed to understand what they were actually implementing in relation to fully online learning.

Document analysis can be less time-consuming and hence more efficient than other research methods. It involves the selection rather than the collection of data. Many documents are in the public domain and are often available online without a requirement to seek the authors' permission. Documents are "unobtrusive" and "nonreactive" that is; they are not influenced or altered by the research process. This counters concerns related to reflexivity directed at other qualitative research methods.

The investigator's presence does not alter what is being studied (Merriam, 1988). Documents provide broad coverage; they cover a long period, many events, and many settings (Yin, 2015). Disadvantages include that documents on their own may not provide sufficient detail to answer a research question. Some key documents may not be available to the researcher (Yin,2015). The researcher may be biased in their document selection (ibid, p. 80). If documents are produced in an organisational context, they may be aligned with a corporate agenda. As the distance between the researcher and the author of a document widens, Hodder points out that a range of perceptions of the data is possible (Hodder ,2000). This view is also supported by Miller & Alvarado (2005). However, document analysis is usually utilised in addition to other data, as in this case in this research.

3.8.2.4 Keyword selection

In scanning the policy texts, the keywords relating to online learning were selected by assessing which were most frequently occurring in the texts and most relevant to the topic. Six keywords/phrases were selected; some were more frequently occurring in particular periods; some were more frequently occurring in particular geographical locations. However, all were relevant to the discussion: online, digital, e-learning, distance, lifelong learning, technology enhanced learning. Each of the selected policy texts in Irish and International categories was searched for the frequency of these words or phrases as a

general indication of how important those key words appeared to be in those particular texts. The results were presented in table and pie chart form.

3.8.2.5 Key driver's selection

Taking Plomp and Pelgrum's drivers of technology in education: vocational, social, economic, commercial, marketing, pedagogy, transforming, cost, the frequency of each driver, in each of the selected policy texts in Irish and International categories were searched for the frequency of these words, as an indication of how important these drivers appeared to be in those particular texts. The results were presented in table and pie chart form.

3.8.3 Interviews - Phase 3

Interviewing is most appropriate when exploring complex or subtle phenomena. When the researcher needs to gain insights into people's emotions, opinions, experiences and feelings, interviews provide a more suitable method. Interviewing can be done in four ways (Noaks and Wincup, 2004, p80):

Structured Interview: the interview is conducted in a neutral way with no prompting or improvisation to ensure consistency. The questions are pre-determined and tightly controlled.

Semi-Structured Interview: the interview depends on creating a rapport with the interviewee and allows for some probing to understand the background. The order in which topics are addressed is flexible, and interviewees can develop their ideas and speak widely on the issues raised.

Open-Ended Interview: This is a flexible interview format with active listening being important. The interview would flow if a rapport is created.

Focus Group: This format facilitates interviewing several people at once. It provides the opportunity to step back from the discussion so that a group dynamic can emerge.

The most common types of interview are:

The face-to-face interview: this involves a conversation between two people and remains the most popular form of data collection. This method is the best form of data collection for sensitive projects and the method which elicits the highest quality of data. It also minimises the non-response rate and maximises the quality of the data collected. Groves

(1979) found that respondents expressed less discomfort about discussing sensitive topics face to face than by other means.

Telephone interviewing: this method involves researching on the phone. It can extend the reach of the population to be interviewed and is cheap and easy to arrange. People from all over the world can be interviewed if they have access to a telephone. Telephone interviews are more suitable for:

> *Hard to reach populations*, e.g. mothers at home with small children, shift workers, and people with disabilities.
>
> *Closed location access*, e.g. hospitals, religious communities, prisons, and the military. *Sensitive accounts*, some personal issues are so sensitive that participants might be reluctant to discuss them face to face but find a telephone interview easier.
>
> *Dangerous or politically sensitive locations*, e.g. war zones or locations where infectious diseases are widespread.

Group Interview: the focus group, takes a group interview format. It provides a social, flexible, semi-public methodology which shapes the data. A focus group session takes the form of a group chat which harvests insights combining perspectives of the participants in the chosen environment. The researcher plays the role of the moderator who can see how it "all fits together" (Duncan and Marotz-Baden, 1999) A focus group allows for easier reflection on collaborative experiences (Lunt and Livingstone, 1996; Bruseberg and McDonagh-Philp, 2002). In this research, questions were asked in a semi-structured format, which allows the researcher to follow up on important points and ask for clarification. This study used exploratory research to acquire a deeper understanding of the relationship between the rhetoric and the reality of policy formation and implementation required concerning the use of online learning in Higher Education. The interviews conducted for this research were conducted in a face-to-face manner to gather rich data from observation and questioning.

A purposive sample of policy makers in teaching and learning was used to conduct qualitative interviews to gain an insight in the attitudes and perceptions of university leaders in teaching and learning, to online learning. These are both "participants who were selected

because they are available" and "naturally occurring groups" a convenient group and a cluster as described by Fink (Houser and Oman, 2010).

The interview questions were piloted in an interview with a DCU Faculty Associate Dean of Teaching and Learning. This served three purposes:

It sharped the interview approach and highlighted areas of importance.

It added credibility to the research when requesting interviews from other target interviewees.

It identified how questions are interpreted when asked of a third party.

Purposive sampling in qualitative research is also referred to as "non-probability" sampling. This is due to the researcher applying their criteria when defining their sample; the researcher selects the individual as part of their study. Ritchie defines this sampling approach as a strategy where "members of a sample are chosen with a purpose to represent a location or type concerning the criterion" (Ritchie in Maruster, 2013). Qualitative research is employed more and more often by business researchers and practitioners. Part of its success is due to the fact that qualitative research seems to demand less effort and skill than quantitative research, however because of the multitude of possibilities and choices performing a qualitative research project, researchers choose specific people within a sample population as opposed to random studies where elements of the sample are known, and may deliberately include multiple criteria such as gender, ethnicity, culture etc. The main advantage of such an approach is the ability to critically think and define the parameters of the population that is intended to be studied at an early stage (Miles & Huberman, 1994).

3.8.3.1 Sample Bias

The selection of interviewees who were mainly based in DCU, raises the issue of bias. Is the sample based in DCU likely to present a representative sample of the sector? The purpose of the interview process is to allow issues of critical importance to emerge. This tells us that the real business of a case study approach is particularisation, not a generalisation. The first emphasis is on understanding the case itself. An interpreter in the field can observe the workings of the case, record objectively what is happening, but simultaneously

examine its meaning. The observer can refine or substantiate those meanings (Stake, 2010).

Creswell and Creswell (2017) caution that qualitative researchers need to demonstrate that their studies are credible (Ladden, 2015). Trustworthiness has replaced validity in qualitative research (Onwuegbuzie and Johnson, 2006). As a participant in the field of Online Learning, the principal researcher is what Roberts calls an interested researcher (Roberts, 2010). Roberts highlights the benefits that insider expertise can bring to bear on the credibility of the findings (ibid). The value of narratives of this type extends beyond the written word to enunciate the social structures in the environment and the identities of its players (Stalker, 2009).

Trustworthiness is central to safeguarding rigour in research. It centres on if the research substantiates what it aims to investigate. Adopting a case-study research design approach provides the researcher with the challenge to ensure that the work is seen to be trustworthy Guba and Lincoln (1985). Concerns in relation to validity, include: Transferability for generalisability or external validity; can the findings be applied to an analogous situation? Confirmability for objectivity; can the reader follow the researcher's thinking? Dependability for reliability; how dependable are the results? (Ladden, 2015).

To ensure honesty and transparency, the researcher declared his interest to interviewees and ensured, as far as practicable, their anonymity. Professional understanding and empathy offered opportunities for insights which would not otherwise emerge. Also, the researcher has provided a clear, comprehensive and logical trail of evidence.

3.8.4 Data Collection

The interviews were conducted in the offices of the interviewees for their convenience, or the interviewer interviewed them in an available room at his work location in DCU Glasnevin campus. Interviews took place over a ninety-minute period and were recorded on a dictaphone with a backup recording done simultaneously on a smartphone. Interviewees were informed of the purpose of the research, offered the option to review the transcript for accuracy, offered a copy of the findings and assured of anonymity as far as practicable at the outset of the interview. Informed consent and ethical considerations

were outlined (see appendices). The interviews were subsequently transcribed. A copy was sent to each participant to verify accuracy and to clarify any issues where required. Several of the interviewees came back with amendments which were incorporated, and an updated copy was returned to the interviewee.
In some cases, follow-up interviews were conducted to clarify or expand on issues raised.

3.8.4.1 Interview Question

These were grouped under three headings

> Section 1: To investigate how the Irish policy environment has responded to the emergence of new models of online learning
>
> Section 2: To analyse how the Irish university sector has responded to the opportunities and challenges presented by the emergence of new models of online learning.
>
> Section 3: To explore how one Irish university has harnessed the potential of new models of online learning. (See Appendix C for complete list)

Table 5 Interview Schedule

Date	*Interviewee*	*Location*
3/7/19 to 24/10/19	Pilot	DCU
	Retired Head of Open Education	City Centre Site
	Head of Teaching & Learning	DCU
	IUA Representative	Dublin City Centre (Relevant to Meso & Micro Sections)
	Retired Head of IT	DCU

3.8.5 Data Analysis

All researchers have great privilege and obligation: the privilege to pay attention to what they consider worthy of attention and the obligation to make conclusions drawn meaningful

to colleagues and clients (Stake, 1995, p 49). This research followed Braun & Clarke's (2013) process to analyse the data collected and involved six steps:

Step 1 Familiarizing yourself with your data

In the process of making sense of the transcribed data, initial ideas were noted. Open Coding involved participant-driven, broad coding of the transcripts, supported with definitions to deconstruct the data into general themes. These themes have clear labels and definitions to serve as rules for inclusion of units of meaning (text segments) (Maykut & Morehouse, 1994).

Step 2 Generating initial codes

Initial codes were generated using Nvivo. Next themes were re-ordered and coded into categories by grouping related themes, under these categories, and organising them into a framework to further the analysis of the data. This phase also includes distilling, re-labelling, and merging categories to ensure that labels and rules for inclusion accurately reflected coded content.

Step 3. Searching for themes

Nvivo was used, as illustrated in Figure 7, to collate codes into potential themes, gathering all the data relevant to each potential theme. These themes were broken down and restructured into sub-themes to gain further insight into the highly qualitative aspects under scrutiny. This inspection considered divergent views, negative attitudes, beliefs and behaviours. These were coded to categories to seek clear understandings of embedded meanings.

Step 4 Reviewing themes

Themes were checked to ensure that they worked in relation to the coded extracts, Figure 8, (Level 1) and the entire data set (Level 2). This generated a thematic "map" of the analysis. Data Reduction involved consolidating codes into a more abstract and conceptual map or final framework of codes, to be used for reporting purposes

Step 5. Defining and naming themes

The specifics of each theme were revisited to refine overall story that the analysis tells, generating clear definitions for each theme. Evaluation involved testing, validating and revising findings by seeking evidence in the data beyond textual quotes to support the stated

findings. This process involved interrogation of data and forced consideration of elements beyond the category itself:

Step 6. Producing the report

Rich, forceful examples were extracted, and the selected extracts were related to the research questions and the literature, to produce a scholarly report.

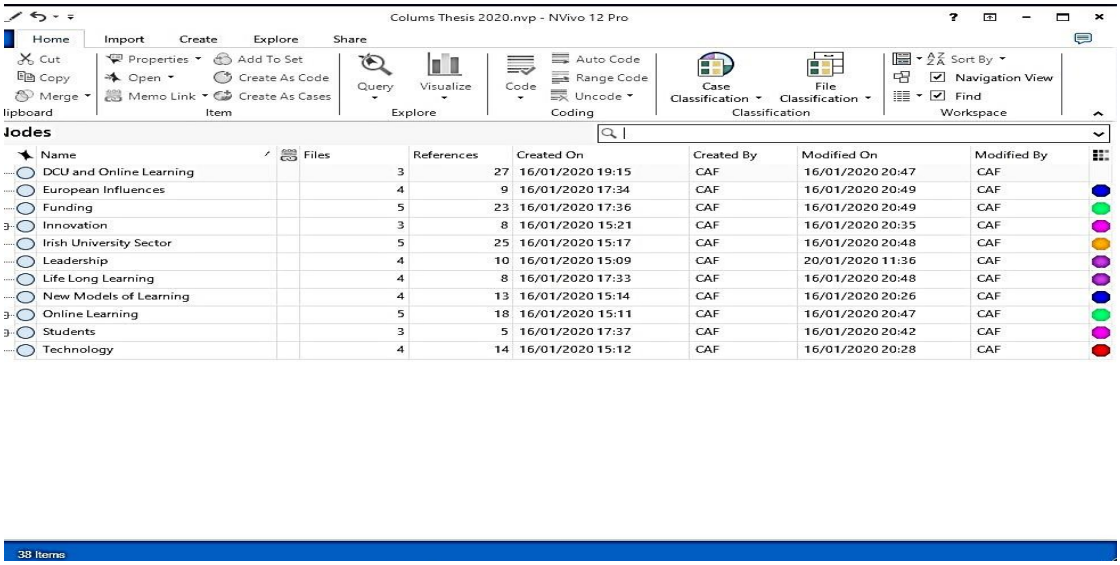


Figure 8 NVivo Coding

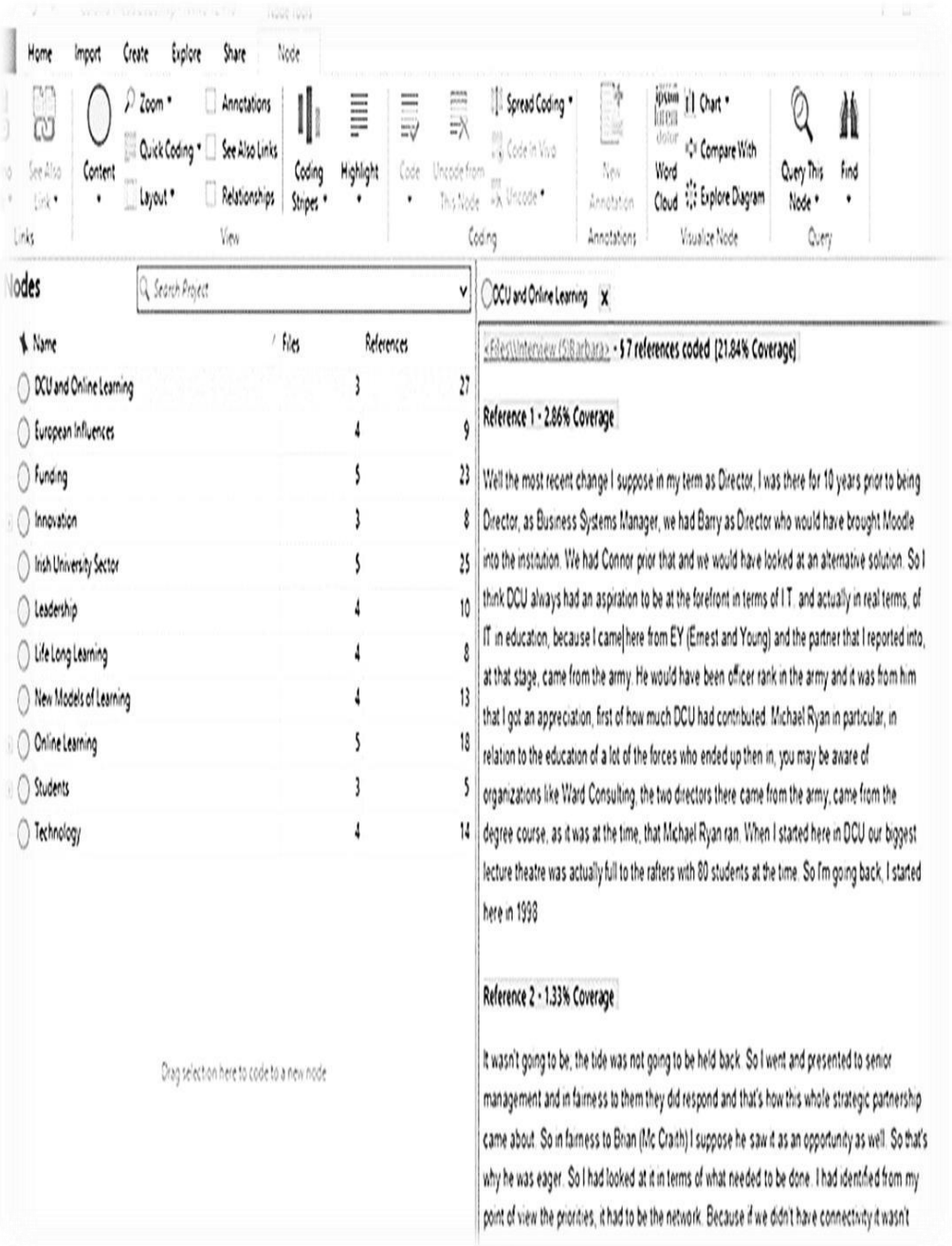


Figure 9 Coding Extracts

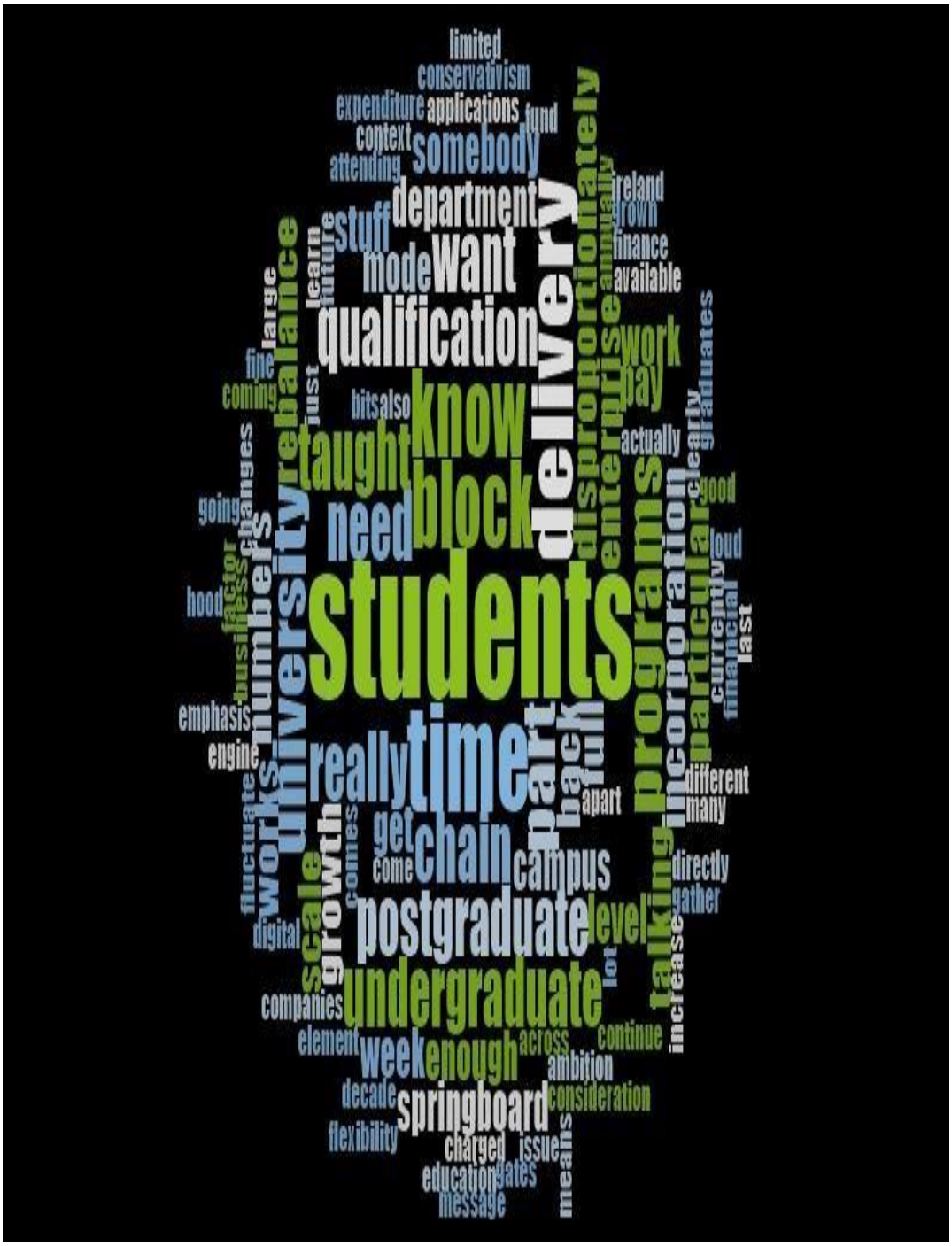


Figure 10 Word Cloud

Figure 10 features a word cloud capturing the some of themes revealed in the interviews.

3.8.5.1 Computer-Assisted Qualitative Data Analysis Software (CAQDAS)

There is an ongoing debate as to the value of Computer Assisted Data Analysis in qualitative research. The research approach of qualitative researchers tends to follow a holistic stance that interprets the nature and existence of objects in the social world based solely the subjective awareness people have of them (Edwards et al.2014 ,Webb 2004). The nature of computer technology assumes a positivistic approach that sees the world as being composed of objects that humans can study, understand and manipulate rather than seeing things from the perspective of the human actors (Roberts and Wilson ,2002). Critics suggest that the implicit assumptions of the software architecture may encroach on the qualitative research process and affect the meaning and interpretation that qualitative data presents. Others submit that computers distance researchers from their data; that computers cultivate a preference for code and retrieve as a strategy for analysis leading to the mechanisation of analysis, and dictate the use of a particular approach (Silver, 2018).Advocates refute this criticism saying that the use of CAQDAS brings researchers closer to their data, and they are flexible and adaptable tools. Advocates say they encourage transparency in process and stress that they remain always in control of what is done, to what extent and for what purpose, because they control the tool (Silver 2018). MacMillan argues that the role of theory in research, determines that research questions are defined not by the software tool but by the problems to be examined(MacMillan and Koenig, 2004).

The use of NVivo in this research took on the role of a database, storing interviews and documents, retrieving comments and enabling the analysis of both interviews and documents. The act of coding the data and slicing it under different themes could be done manually but Nvivo provides a tool to make it more efficient. All interviews were audio recorded and transcribed using an automated transcribing service. Each then had to be sense checked replaying the recording and filling gaps. This process was useful in familiarising the researcher with the data. On reflection, the value of doing this with Computer-assisted qualitative data analysis software (CAQDAS) is less effective than the researcher thought it would be, at the outset of the research. The real work is done in interrogating the data in depth, reflecting upon it and finding links and themes between theory and the data. This takes time and although the retrieval process is probably more

efficient, the process of sifting and understanding the material is a manual, laborious but necessary one.

3.8.6. Ethics

This was a minimal-risk research project that did not involve children or vulnerable groups, nonetheless there were ethical considerations outlined by the university which must be considered:

Honesty in presenting research goals and intentions- reporting on research methods and procedures, in precise and nuanced reporting, and in conveying valid interpretations and justifiable claims with respect to possible applications of research results.
Reliability in performing research- in communication of the results there needs to be fair, full, and unbiased reporting and meticulous and careful research. Objectivity interpretations and conclusions- the research must be founded on facts and the data must be capable of proof and secondary review; there should be transparency in the collection, analysis and interpretation of data, and verifiability of the scientific reasoning. Impartiality and independence – this is required from commissioning or interested parties, from ideological or political pressure groups, and from economic or financial interests. Open communication- is essential in discussing the work with other scientists, in contributing to public knowledge through publication of the findings, in honest communication to the Office of the VP for Research and Innovation, and the general public. This openness presupposes a proper storage and availability of data, and accessibility for interested colleagues. Duty of care for participants - is required for all the subjects of research, be they human beings, animals, the environment or cultural objects. Research on human subjects and animals should always rest on the principles of respect and duty of care. Fairness-should be practised in providing proper references and giving due credits to the work of others, and in treating colleagues with integrity and honesty. Responsibility for future science generations- The education of young scientists and scholars requires binding standards for mentorship and supervision. Adapted from (DCU, 2020b).

As outlined by Bryman (2001), a written submission to participants that guarantees informed consent, respect for privacy and assurances against deception and any real or potential harm to participants was sought by means of an ethical approval application from

DCU's Research Ethics Committee (REC) (See Appendix B..5). Ummanel et. Al (2016). advise we must ensure the research never causes an affront to dignity, embarrassment, loss of trust and social relations, loss of autonomy and self-determination and lowered self-esteem to participants (Cohen, Manion and Morrison, 2013 cited in Ummanel, McNamara and Stynes, 2016). Every effort was made to ensure that in this research, this was the case.

3.8.6.1. Insider Bias

While there are a range of valid approaches to social inquiry that can be adopted, any given approach to social inquiry inevitably carries bias (Greene 2007). As an institution, DCU recognises in their Ethical Guidelines on Insider Research , that insider bias is a potential issue researchers need to address, (DCU, 2017). The document highlights that interview research and the power at play during interviews as emphasised by Kvale (2008), can be made more transparent by presenting the method of investigation employed, so that the reader may evaluate any impact the power play may have on the findings reported (p. 496). Ethical challenges identified by Costerly et al (2010) are highlighted in the DCU's guidelines as:

> Negotiating access to your own work situation as an area being researched and securing consent for the research to take place; promising anonymity and confidentiality to your own colleagues; possibly challenging the value system of your organisation or professional field in some way; interviewing your own colleagues; managing the power implications of your work and your positioning as a researcher and as a practitioner within your research project.

To guard against bias they suggest some measures which are also advocated by Trowler (2016). Paying careful attention to feedback from participants, taking a deep interest in the experience of one's research participants, and being committed to accurately and adequately representing their experience is advised. Preserving the ability to be open, authentic, and honest is stressed. Trowler suggests that this can be done by creating pseudonyms, obscuring identities and changing unique details however this breaks the important principle of transparency in methodology so that the reader can assess its robustness. In this research the interviewees are named only as Interviewee 1, Interviewee 2 etc. Trowler maintains it is best to assume the reader can identify the researched institution. He advises that in the ethical clearance process participants should be informed that anonymity cannot be guaranteed. This was clearly advised in this case. Trowler

continues that senior managers will want assurance that their reputation or that of their organisation will not be damaged by the research. A possible solution he suggests is to offer sight of the research output, which was done in this case, with any amendments being accepted.

Trowler raises a second question described as “whose problem” by Dale (1989) and Ozga (2000) which distinguishes between three research problems. The Social Administration problem, is a reformist research project aimed at improving a client’s circumstances. The Policy Analysis project considers policy –making to be a role of government and managers. In this case the researcher is concerned that policies are delivered effectively irrespective of content or priorities. The third type is the social science project which attempts to gain a better understanding of how things work in some ways proposing new issues that neither policy makers nor clients have identified. This third category fits best with this research with the case study highlighting the impact of policy in the area under consideration.

Trowler’s third issue concerns power structure within universities and the subordinate position of some categories of people. He argues that revealing sensitive information about the university can be very serious for those in vulnerable positions. This was addressed in this research by interviewing a variety of senior people, some of whom have retired, some near retirement and one from outside of the university, none of whom could be deemed to be in a vulnerable category

Trowler’s final issue is that the researcher’s status within the university may affect the research process and its outcomes is recommended. The DCU guidelines on insider research quote Costerly (2010), who emphasises the importance of articulating one’s own perspective or premise clearly; “Your insights as an insider are valuable because of your depth of knowledge, but you should also demonstrate that you understand alternative perspectives” (p. 33), to address this issue. The advantages of being an insider in the environment includes access to naturalistic data and respondents. Smail (1982) points out that insiders and their interviewees have mutual knowledge and language. Hull (1985), argues that the insider has access to hidden transcripts with the result that the insider has

better access to the implicit meaning of participants. Trowler (2014) proposes that this leads to emic, or more meaningful accounts. This provides a thick description of lived experience. The disadvantages he suggests may be an inability to produce a culturally neutral account as the researcher may not be aware of some dimensions of social life which they see as normal.

3.9 Conclusion

This chapter has described how the research looks at policy in the area of online learning in Irish Higher Education. The research takes a qualitative approach to collect data to construct a case study of online learning at Dublin City University, which analyses this scenario, to inform the sector. Qualitative research takes the form of a series of semi-structured interviews with relevant players in online teaching and learning in DCU. The constructivist epistemology used is taken from a basis of knowledge which assumes that there is no one absolute truth, and that reality is socially constructed. The theoretical perspective is interpretive, an epistemological perspective that requires the researcher to grasp the subjective meaning of social action. The methodology employed is content analysis and a case study. The methods used are participant observation, interview, theme identification, comparative analysis, and document analysis. The researcher builds concepts, theories, hypotheses and abstractions from details. The process is charted transparently and was conducted in a manner that ensured best ethical practice was observed. Findings are shared openly respecting the confidentiality of participants. The next chapter presents analysis and discussion of findings.

CHAPTER 4 - ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents findings and results based on the three phases of the research:

Macro -Phase 1: Analysis of International texts.

Meso Phase 2: Analysis of Irish texts and Institutional Compacts.

Micro - Phase 3: A Case Study telling the story of Dublin City University.

Phase 1 the Macro section of the thesis begins the examination of the gap in the literature identified in 2.9.1 by reflecting on the issues at play, when considering the formation of policy in fully online learning, from a high level perspective. International policy texts are reviewed to understand current thinking globally in the formation, implementation and management of policy with respect to the new models of online learning Best practice internationally is identified, against which Irish policy and practice should seek to benchmark. The section considers the future needs of learners, concerns surrounding implementation and future possible scenario's. This represents the first phase of the research from a timing perspective where political, economic, social, technological, environmental and legal factors are examined from an international perspective.

Phase 2, the Meso phase provides an analysis of the Irish policy environment from a national perspective, with an emphasis on texts which have influenced online learning policy in Ireland. This approach builds on the understanding garnered from the broader International view and seeks to consider how policy texts in Ireland have been influenced and shaped in parallel with international experience. It continues to examine policy texts and initiatives taken in response to the unique Irish experience and to pressures active in the Irish environment. It signposts the options to be considered by individual Irish institutions which is examined in the next phase.

Phase 3, the Micro phase examines the actual impact of policy in online learning at a local level providing the final part of the analysis. This section presents a case study of online learning at one Irish Higher Education Institute, Dublin City University to illustrate how policy influences the actions of that institution. The case study highlights how policy has influence both by what it addresses and by what it fails to address and demonstrates how an

institution reacts to the challenges it faces in the sometimes uncertain policy environment, which was introduced in the two previous phases.

4.2 Macro Phase: Analysis of International texts

In this section, a range of policy texts purposefully selected to reflect how worldwide thinking in policy formulation and implementation has evolved, are analysed. The documents selected have been published by international bodies, including the EU (European Union), EUA (European Universities Association), UNESCO (United Nations Educational, Scientific and Cultural Organization), PWC (PricewaterhouseCoopers) and EY (Ernst and Young). These provided insights into online learning policy as defined in earlier chapters, across the world.

Table 6 situates each of these texts in the context of their relevance in the Macro, Meso, Micro Framework. We can see that while they are predominantly influential in a Macro environment there is overlap into Meso and Micro phases.

Categorising the texts into exact silo's is imprecise yet it is apparent that the following texts have significance at both an International (Macro) level and a National (Meso) level: E-learning in European Higher Education, Promoting Effective Digital-Age Learning, Digital Education Policies in Europe, Skills for Industry Strategy, Can Universities of today lead learning of tomorrow, the Horizon Report, Whatever happened to the promise of Global Online Higher Education and Learning and Teaching in the European Higher education area.

The following texts are influential at a local (Micro)Level in addition to International(Macro) and National(Meso) levels: Digital Skills and Competence, Global Quality in Open, Flexible and Technology Enhanced Education, A New Skills Agenda for Europe, and Unesco: The Future of Learning 1, 2, and 3.

Table 6 International Texts in the Macro, Meso Micro Framework

Macro-level: **Influences International Level**	***Meso level:*** **Influences at National level**	***Micro level:*** **Influences at Local level**
E-learning in European HE (2013)	E-learning in European HE(2013)	
Promoting Effective Digital-Age Learng (2015)	Promoting Effective Digital-Age Learng (2015)	
Digital Education Policies Europe (2017)	Digital Education Policies Europe (2017)	
Skills for Industry Strategy: PWC (2019)	Skills for Industry Strategy: PWC (2019)	
Can Universities of today lead learn. EY (2019	Can Universities of today lead learn. EY (2019)	
Horizon Report (2018)	Horizon Report (2018	
Whatever happened to the promise of Global Online Higher Education? (2018)	Whatever happened to the promise of Global Online Higher Education (2018)	
EU Digital Action Plan (2018)	EU Digital Action Plan (2018)	
Digital Skills and Competence (2018)	Digital Skills and Competence (2018)	Digital Skills and Competence (2018)
Global Quality in Open, Flexi and T.E.E. (2018)	Global Quality in Open, Flexi and T.E.E.(2018)	Global Quality in Open, Flexi and T.E.E.(2018)
Learning and teaching in the European higher education area (2018)	Learning and teaching in the European higher education area (2018)	Learning and teaching in the European higher education area (2018)
Unesco: The Future of Learning 1 (2015)	Unesco: The Future of Learning 1 (2015)	Unesco: The Future of Learning 1 (2015)
Unesco 2 (2015)	Unesco 2 (2015)	Unesco 2 (2015)
Unesco:3 (2015)	Unesco:3 (2015)	Unesco:3 (2015)

4.2.1 Emergent Themes across policy texts

The transformative potential of online learning has been highlighted by the enormous marketing reach of Massive Open Online Courses (MOOC's)**.** There is however a scarcity of empirical academic research into the impact that technology based models of online learning is having on teaching and learning in higher education across Europe (Popescu, 2014)**.** This has implications for the formation of policy both in Europe and globally. The European Universities Association(EUA), took a snapshot of what was happening in online learning across its membership with the purpose of placing the Association in an informed position to participate in policy formation that supported the endeavours of its members to champion innovation in teaching and learning: *Learning and teaching in the European higher education area* (Gaebel et al, 2018). The study conducted found that e-Learning was widespread with 91% of the sample integrating e-learning into its standard teaching offering. Online learning courses were offered by 82% of respondents, with other types of delivery such as online degree courses and collaborative inter-institutional programmes also increasing. While nearly all institutions were participating in online learning, it was not embedded in the institutions; with less than half reporting that it was being used right across the institution. This patchy implementation, it suggests, could be explained by individual faculties and staff members piloting new models of online learning.

This theme recurred in numerous papers over following years. The speed of adoption was dependent on a variety of factors including leadership, the governance model and available resources. Participants in the EUA survey agreed that online learning is most useful in providing greater flexibility and more effective use of classroom time, regardless of whether learners are off-campus or on-campus, traditional or non-traditional students. The survey found that institution-wide structures for the coordination and support of online learning are growing. In its conclusion, the report cautions that while it brings benefits, online learning is not a panacea and requires resources, staff engagement and development time to be successful. It suggests that opportunities presented should propel online learning from the peripheral domain of specialist discussion into a wider global debate on teaching and learning methods in higher education.

4.2.2. Exploring International Policy across Transnational Organisations

A lack of common definition was established in Chapters 1 and 2, the policy analysis sought to investigate what language and terminology is adopted in recent policy texts. Terms relevant to the research as used in reports are highlighted in Table 7 illustrating the prominence each occupies in the literature. The dominant terms are digital (2567) and online (1815); while e-learning (239) is prominent in two texts, it does not have a major presence in the other texts. Distance learning (219) and lifelong learning (189) are mentioned in nearly all texts, but technology enhanced learning (50) is only mentioned in a minority of cases. This reflects the fact that this term is almost exclusively used in UK text

.

Table 7 Frequency of Key Terms in International Texts

Paper/ Drivers	Online	Digital	e-Learning	Distance	Lifelong Learning	Technology Enhanced Learning
E-learning in European HE(2013)	87	0	39	29	7	0
Unesco: The Future of Learning 1 (2015)	34	28	0	2	3	0
Unesco 2 (2015)	12	20	0	4	5	0
Unesco:3 (2015)	42	23	4	3	14	0
Promoting Effective Digital-Age Learng (2015)	133	301	6	0	1	1
A New Skills Agenda for Europe: (2016)	37	10	0	0	2	0
Digital Education Policies Europe (2017)	253	877	19	10	7	19
Learning and teaching in the European higher education area (2018)	39	40	21	4	49	0
Horizon Report (2018)	67	163	1	7	7	1
Digital Skills and Competence (2018)	73	466	2	15	29	0
EU Digital Action Plan (2018)	2	287	1	0	4	0
Global Quality in Open, Flexi and T.E.E.(2018)	156	16	11	75	11	28
Whatever happened to the promise of Global Online Higher Education (2018)	207	4	0	50	0	0
Skills for Industry Strategy: PWC (2019)	656	297	135	20	47	1
Can Universities of today lead learn. EY (2019)	17	35	0	0	3	0
TOTAL	**1815**	**2567**	**239**	**219**	**189**	**50**

Table 8 The Drivers of Online Policy – International

Drivers/ Text	*Cost*	*Economic*	*Commercial*	*Marketing*	*Social*	*Vocational*	*Pedagogy*	*Transforming*
E-learning in European HE (2013)	5	0	0	0	17	0	2	0
Unesco 1 (2015)	6	10	0	0	34	2	14	7
Unesco 2 (2015)		16	0	0	0	0	4	3
Unesco 3 (2015)	0	9	0	0	0	2	36	5
Promoting Effective Digital-Age Lg (2015)	9	6	0	0	20	0	7	0
A New Skills Agenda for Europe: (2016)	0	18	1	0	16	2	0	0
Digital Ed. Policies - Europe and B. (2017)	28	23	9	4	39	16	18	8
Learning and teaching in the European higher education area (2018)	7	23	3	0	51	7	16	1
Horizon Report (2018)	36	29	0	2	36	4	1	2
Digital Skills & Competence (2018)	10	35	1	0	0	0	20	2
EU Digital Action Plan (2018)	0	19	0	3	18	0	8	0
Global Quality Open, Flex &T.E.E. (2018)	1	1	1	0	2	0	1	0
Whatever happened to the promise of Global Online Higher Education? (2018)	21	0	4	0	0	0	5	0
Skills for Ind. Strategy: PWC (2019)	104	20	0	11	72	19	12	12
Can Uni's of today lead learning EY (2019)	8	3	9	0	7	5	0	1
TOTAL	**235**	**212**	**28**	**20**	**312**	**57**	**144**	**41**

Table 8 illustrates the drivers of online learning in this analysis of international policy texts. Social factors (312) is the most frequently mentioned driver emanating from the texts. This is followed by the cost driver (235) and the economic driver (212). pedagogical (144) vocational (57), and transforming (41) factors are strong drivers but commercial (28) and marketing (20) are not mentioned frequently.

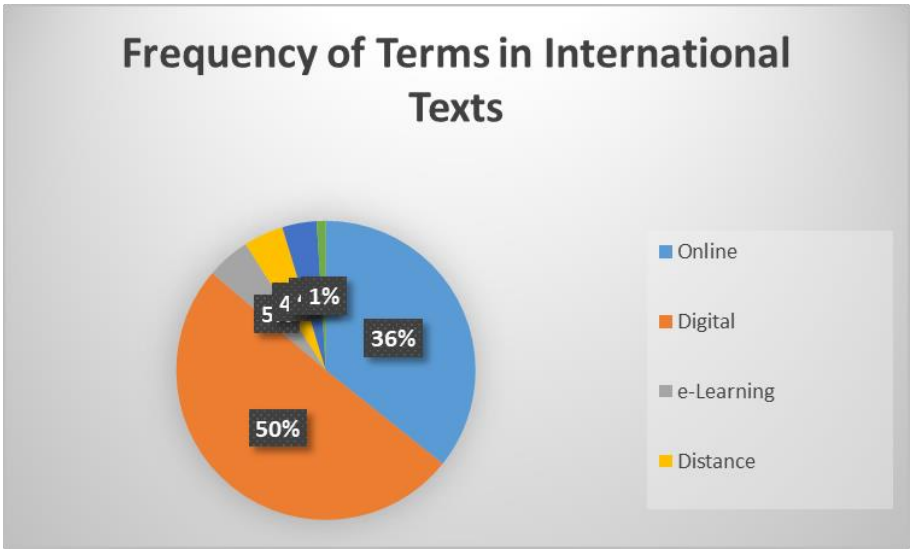


Figure 11 Frequency of Terms in International Texts

Figure 11 illustrates the frequency that selected terms occur in International texts. This pie chart makes clear that digital (50%) and online (36%) are the most frequently occurring terms in the International texts reviewed. The other terms combined make up 14% of the total.

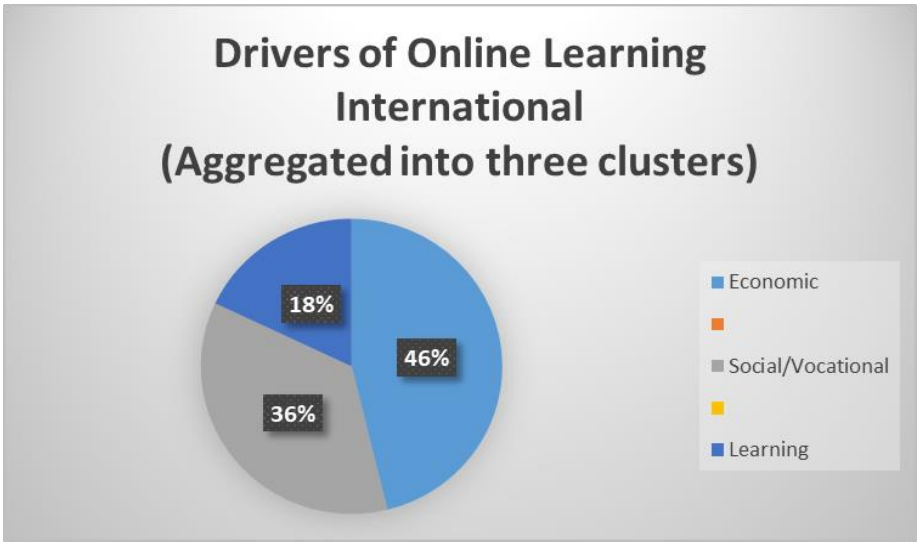


Figure 12 Drivers of Online Learning – International

In Figure 12 drivers are aggregated into three clusters: Economic, Social/Vocational, and Learning. The economic driver is by far the most frequently occurring force in influencing online learning in the International texts reviewed (46%). Social and Employment also occur frequently (36%), with Learning drivers occurring less often (18%).

4.2.3 Twenty First Century Skills

What are the learning outcomes that policy should seek to develop in twenty first century third level students? This debate is contributed to by UNESCO who produced a series of three reports on *the Futures of Learning* (Luna Scott, 2015a), by the EU Commission. In *A New Skills Agenda for Europe: Working together to strengthen capital, employability and competitiveness* (Commission, 2016) and in the 2018 *Horizon Report on Higher Education,* among others. The challenges facing education in the twenty-first century are identified as globalization, new technologies, migration, international competition, changing markets and political and environmental issues.

In the first UNESCO Report Luna Scott found that traditional educational institutions need to experiment with new structural formats and strategies for teaching and learning that respond more flexibly to the needs of learners and changing labour market requirements (Luna Scott, 2015a). Assessment should focus on student mastery of core academic content and the development of deeper learning skills such as critical thinking, problem-solving, collaboration, communication and metacognition. Radical changes in teacher education are essential to encourage this learning to flourish. Luna Scott recommends that the emphasis of learning should move from teacher-led learning to self-determined learning. Instruction should be tailored to individual needs and can be delivered virtually throughout the life of the learner.
This perspective needs to be incorporated in education policy internationally.

In the real world challenges are highly complex, often ill-defined, and interdisciplinary in nature, spanning multiple domains; social, economic, political, environmental, legal and ethical. UNESCO proposes that learners should have opportunities to reflect on their ideas,

hone their analytical skills, strengthen their critical and creative thinking capacities, and demonstrate initiative. To facilitate these requirements, it recommends that nations must form alliances in order to overcome obstacles to reimagining education. Innovative ideas can be developed locally and shared globally through international networks. Traditional education should be critically evaluated to determine if it is equipping students to compete in a global economy. Countries can contribute to a global pool of expertise regarding how best to implement twenty-first century learning. Twenty-first century learning must include transferable skills such as critical thinking, problem-solving, and the civic values outlined in the Global Sustainable Development Goals.

A US Perspective agrees suggesting that these themes have a wider reach (Becker *et al.*, 2018). This Horizon Report re-affirms the need for new forms of learning in the digital age and for the pedagogies that support learners in acquiring new competencies and skills to engage with twenty-first century challenges. Education, it assesses, should prepare learners to undertake collaborative problem solving scenarios that are persistent and lack clear solution. In particular, the ability to evaluate new inputs and perspectives, build new capacities, and strengthen autonomy are crucial.

The EU Commission agreed that new skills would be required in the future and identified globalisation and digitalisation as important "mega trends" affecting higher educational institutions and the world into which their graduates would emerge (EC, 2016). It corroborated many of the concerns identified in previous reports. International interdependency and technological change were seen by many respondents to their research as increasing the rate of change in economic and social structures. The importance of higher education as a driver of social and economic progress is highlighted. Students need to acquire the appropriate knowledge and skills identified as "transversal", "soft" or "21st century" skills, such as critical thinking, problem-solving and communication. The Commission highlights the need for more ICT specialists and for students across the board to enhance their digital skills. Higher education should do more to promote other skills, including language skills, necessary for mobility in a globalised economy, and to assist in intercultural understanding, and the capacity for engaged and active citizenship. Initiatives should be undertaken to increase links between higher education and other economic actors.

The ability to evaluate new inputs and perspectives, build new capacities and strengthen autonomy, is highlighted in *Futures of Learning: Report Two* (Luna Scott ,2015). It underlines growing concern about potential economic and global crises in the future and questions if today's learners possess the combination of critical thinking, creativity, and collaborative and communication skills, necessary to engage with the unexpected developments they would face. These skills include personalization, collaboration, communication, informal learning, productivity and content creation Luna-Scott suggests. It also underlines the importance to the twenty-first century workplace of personal skills such as initiative, resilience, responsibility, risk-taking and creativity; social skills such as teamwork, networking, empathy and compassion; and learning skills such as managing, organizing, metacognitive skills, and "failing forward".

Rethinking pedagogy for the twenty-first century is as crucial as identifying the new competencies suggests *Futures of Learning: Report 3* (Luna-Scott, 2015). It looks at how today's learners need to develop those skills. Throughout the literature we review, the pedagogy employed is emphasised as a critical success factor in implementing change in education. Traditional approaches, emphasizing memorization or the application of simple procedures, do not advance the critical thinking skills or autonomy of learners. To develop the higher-order skills they now need, individuals must engage in meaningful enquiry-based learning that has genuine value and relevance for them personally and their communities. Real-world experiences merged with sustained engagement and collaboration offer opportunities for learners to construct and organize knowledge; engage in detailed research, enquiry, writing and analysis; and to communicate effectively with audiences. Luna Scott argues that the "transmission" or lecture model is highly ineffective for teaching twenty-first century competencies and skills, yet widespread use of this model continues.

Pedagogical innovation must help learners develop the skills and competencies to make the most of multi-media and informal pathways to enrich their learning and develop digital literacy skills. Teachers require the support and time to utilise a range of resources and tools to create customised learning opportunities that are relevant and challenging. Higher educational institutions must devise new structural formats and strategies for teaching and

learning that are flexible to the individual needs of learners and to adapt to ever-changing requirements. Assessment should focus on the development of deep- learning skills.

These requirements need to be addressed at a policy level. This requires radical changes in teacher education. The role of teachers would migrate to that of mentors, mediators, guides, and facilitators. An important part of this role would be as learning coordinators, assessors, and designers and compilers of learning tools. Assessment would encompass customized learning for each student, availability of diverse sources, and collaborative group learning. Real-world experience should be incorporated in learning activities. These papers signpost that self-responsibility for learning is essential and learners of the future will expect to determine what their learning profile would look like. Lifelong learning can be the norm and can be facilitated by technology.

4.2.4 Moving from planning to implementation

The way in which educational organisations can migrate to this new type of learning is presented in *Promoting Effective Digital-Age Learning - A European Framework for Digitally Competent Educational Organisations (*Kampylis, Punie and Devine, 2015). This progresses the debate from what should be done, to what can be done to encourage online learning. To consolidate progress and to ensure sustainability, educational institutions need to review their organisational strategies, to enhance their ability to innovate and to exploit the full potential of digital technologies. The terminology used here moves to the overarching term digital technology.

The European Framework for Digitally-Competent Educational Organisations (DigCompOrg), as shown in Figure 13 (Kampylis, Punie and Devine, 2015, p5) provides a framework on which policy can be developed to cultivate online learning. The framework is an EU initiative to facilitate transparency and comparability between related schemes throughout Europe, and to help address fragmented and uneven development across the member states. The stated primary purposes of the DigCompOrg framework are: to encourage self-reflection and self-assessment within educational organisations as they progressively expand their commitment to online learning. To enable policy makers to create, execute and evaluate policy interventions, and to assimilate the use of online learning technologies effectively. The DigCompOrg Framework can also be used as a strategic planning tool for policymakers

to promote policies for the effective provision of online learning technologies by educational organisations at regional, national and European level. It sets out the areas to be considered in devising such a policy under the headings: Leadership & Governance, Teaching and Learning, Professional Development, Assessment, Content and Curricula, Collaboration & Networking, and Infrastructure. This provides a framework for developing and assessing online learning policy in an organisation.

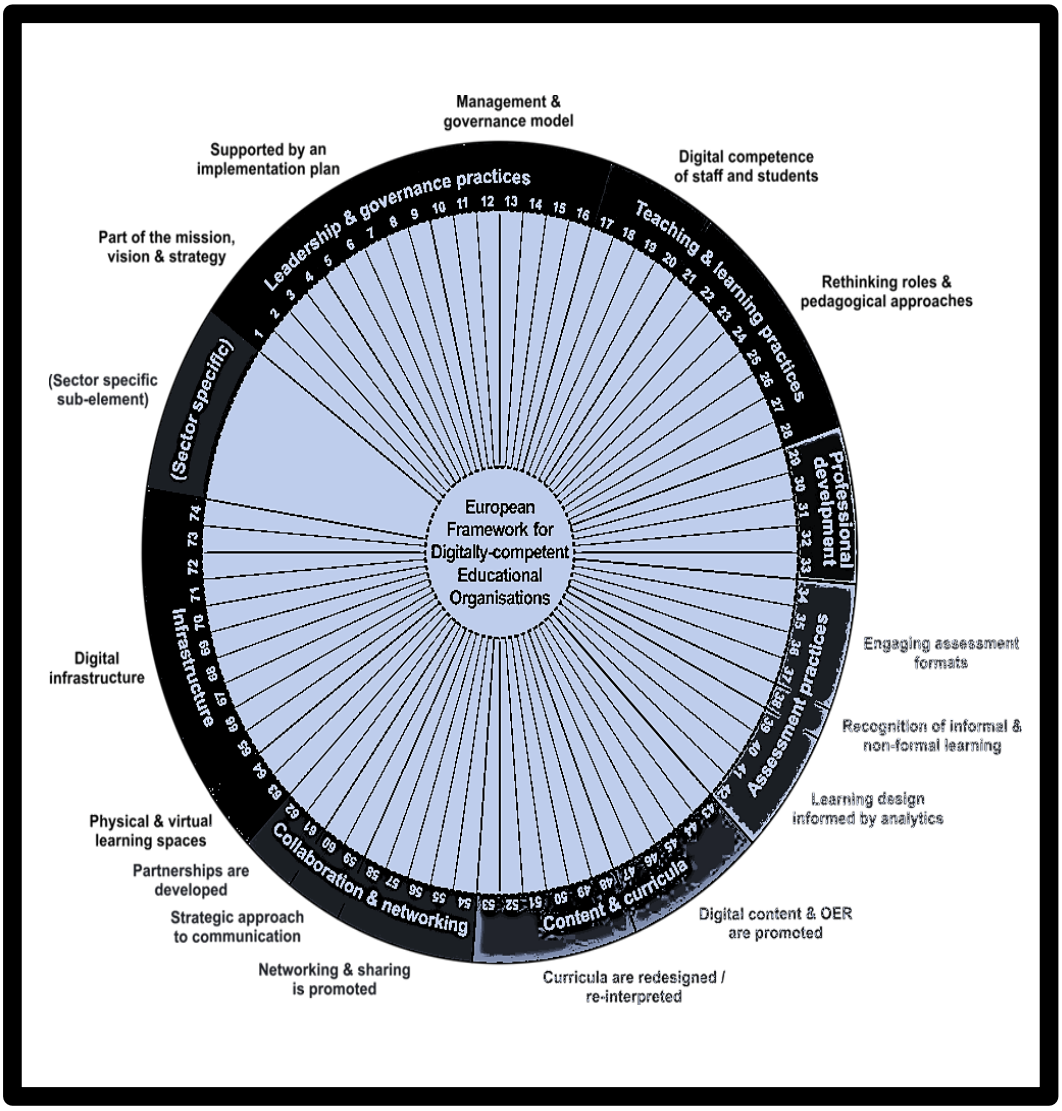


Figure 13 DigComOrg Framework

4.2.5 Promoting Excellence

Giving traditional organisations and third parties the re-assurance that online learning maintains standards of academic rigour and reliability remains a challenge. How these

concerns are addressed by policy in EU countries was explored in *Digital Education Policies in Europe and Beyond: Key Design Principles for More Effective Policies* (2017). This report on policy models for the integration and innovative use of digital technologies in education aimed to better understand how digital education policies are implemented in the EU and elsewhere, highlighting key enablers, success factors, and barriers. The core findings seek to inform, guide, and inspire policymakers at all government levels to design new policy initiatives or adapt existing policies for the digital transformation of education. Research by the Joint Research Centre (JRC) on *Learning and Skills for the Digital Era* (EU Science HUB, 2019) started in 2005 with the aim of providing evidence-based policy support for the European Commission to harness the potential of digital technologies, to create innovative education and training practices, and to improve access to lifelong learning. It sought to engage with the rise of the new digital skills and competences needed for employment, personal development and social inclusion. The paper presents six case studies which illustrate that both top-down and bottom-up initiatives can trigger innovation in education: "There is no single off-the-shelf solution to transforming education through digital technologies." (Conrads *et al.*, 2017, p7). Policies should be responsive to the specific context of implementation, Conrad advocates. Initiatives that start with an in-depth analysis of the baseline have a greater chance of being effective. In all cases, it is stressed that there was a strong emphasis on building teacher capacity. This was confirmed as an important element to ensure successful policy implementation. The commitment and buy-in of educators to the process proved to be important for the success of the strategies. Inadequate technological infrastructure, in particular insufficient internet speed, remained a major barrier preventing educational policies from yielding the expected results. The analysis of the cases suggests that digital education policies are more sustainable if they are embedded in an overarching strategy, if cost savings can be made and if a governance structure is established that is responsive to implementing necessary changes while ensuring continuity over time.

As part of a wider package of activities to support education at all levels in its 2016 work programme*, A New Skills Agenda for Europe*, the EU Commission sought to present an updated agenda for the modernisation of higher education. It claims that Europe's higher education systems are not contributing as well as they should to the EU's economic development and social cohesion. It points to three main challenges with which we have

now become familiar. Higher education in Europe is not equipping enough people with the right skills for modern society. Too few graduates are leaving higher education with skills in fields where there is high demand (like computing, where there are significant skills shortages). Too many are leaving with poor basic skills and limited soft skills, the skills relevant for work and life in a modern democratic society (critical thinking, problem-solving, communication etc.). Higher education could do more to tackle social divisions: people from low socio-economic and migrant groups remain far less likely to enter and complete higher education. This paper claims that Europe's universities lag behind competitors in the US in pioneering international research. European universities are often disconnected from the companies, public services and people in their own regions, meaning their teaching and research activities are not being used to bring benefits to surrounding areas. In general, spending on higher education in the EU has not kept pace with growth in student numbers and demands to contribute to innovation. Funding and quality systems also give little incentive to staff and institutional managers to deliver good teaching or to cooperate with firms on innovation. Specific EU-level actions it proposed include: Increasing the availability of intelligence on the jobs and careers that graduates get, through some new initiatives on graduate tracking (separate roadmap). Promoting student-centred teaching and learning through greater EU support for good teaching, good curriculum design, and effective use of ICT. Building inclusive and connected higher education systems.

To do this the focus should be on increasing fair access, participation and completion rates of under-represented and disadvantaged groups through relevant post-entry support and guidance and promoting the civic and social responsibility of students and universities. Key actions include providing support for HEI's to develop and implement institutional strategies for inclusion and study success. Encouraging the awarding of ECTS points to students for voluntary and community activities, based on existing positive examples. Ensuring higher education institutions contribute to regional innovation. The focus here is on making better use of the knowledge and skills universities bring to specific localities. Specific EU-level actions include supporting HEIs to help them become more entrepreneurial universities (and support effective cooperation between HEI's, business and the public sector. Targeted support for Managing Authorities and regional partners to help ensure that European Structural and Investment Funds money is spent effectively to develop higher education and

its role in innovation. Supporting effective and efficient higher education systems. This priority would focus on identifying and sharing effective ways to fund and structure higher education systems to ensure they work well. This would include the question of how to reward good teaching and innovation activities.

A 2018 report commissioned by the European Training Foundation, *Digital Skills and Competence and Digital and Online Learning* (Brolpito, 2018), forwards the proposition that new jobs and economic opportunities depend on the digital skills and competence (DSC) of the population, irrespective of the timing of new innovations. It confirms that learners look to customise their learning, building on their practical experience, in what has become a lifelong learning journey. *The Digital Education Action Plan* (2018) recognises that member states need to optimise the use of digital technology in teaching and learning. It proposes that digital competence would drive digital transformation in the future and education can be improved by using data analysis to better plan priorities, for what is coming next.

4.2.6 What is Next?

A 2019 report from the Observatory on Borderless Higher Education, sets out to capture the current state-of-play, in terms of online enrolment scale, student characteristics, and student outcomes. *Whatever happened to the promise of Online Learning: The State of Global Online Learning in Higher Education* (Garrett, 2019) looked at how online learning is viewed by governments, institutions, students, and employers, and how online learning is regulated by national authorities. It highlights that online higher education is characterised by limited data, most countries still do not call out online students in official data. Definitions remain verbose and reporting inconsistent. Blends of campus and online study are common but difficult to characterise and track. Much online and blended learning is led by individual faculty members or departmental efforts rather than institutional strategy, resulting in uneven quality and impact. Cost reduction is rarely a key driver of online higher education, and pricing tends to be conventional, to signal quality. Fully online degrees can save students a considerable amount on accommodation and travel, and can make the combination of full-time work and study more straightforward. Innovative payment models, such as pay-as-you-go or the ability to get credit for MOOC classes, are lending online offerings additional appeal.

In the US, the typical online student is a working adult who lives in the same region as the university. At postgraduate level, led by a small number of UK universities, cross-border online learning degrees have scaled up to some extent. Looking at the big picture traditional age, domestic students, and international students generally, continue to study on campus, with online learning playing no more than a supplementary role. There is still often scant data on the outcomes of online higher education programmes. The evidence that exists suggests that many non-traditional students (the typical online learning population) struggle to complete the programme they undertake, at undergraduate level.

In England, distance learning has a long history, spearheaded by the UK Open University More recently, a broad range of universities such as Liverpool, Leicester and Heriot-Watt have pursued fully-distance and online degrees at scale. Cuts to public funding for part-time higher education students, implemented in 2012/13, caused steep declines in enrolment. This hit the OU hard, particularly at undergraduate level. At the same time, traditional UK universities have grown comfortable with online postgraduate degrees. So while undergraduate distance enrolment overall has shrunk in the UK in the wake of funding changes, and the OU is under severe pressure, online learning is maturing among other traditionally campus-based, higher educational institutions**.**

In the United States in the 1990's and 2000's, the combination of general internet entrepreneurship in the economy, an ambitious for-profit higher education sector and up-scaled adult interest in earning a degree for career advancement, saw the creation, of a number of fully online universities and online initiatives at traditional institutions. After a period of monitoring, regulators made online degrees eligible for federal student aid. Online learning has matured to become an established part of the higher education landscape, offering convenience and flexibility for students and instructors, and expansion opportunities for institutions.

The scope for online learning to enhance education quality or to reduce direct costs remains uncertain. While mobile broadband penetration far exceeds fixed line access, this has had little impact on take-up of online higher education. Generally speaking, countries with higher fixed or mobile broadband availability are more likely to exhibit a prevalence for online learning, and none of the countries without significant broadband do so. United Arab Emirates boasts very high mobile broadband participation but negligible online or blended

learning adoption in higher education, something which is corroborated in our interview research. A small, wealthy country with a wide range of domestic and international higher education offers on the ground sees limited value in online options. This prompts the question: would the uptake of online education be more comprehensive in a poor country with good broadband availability?

Internationally, mainstream campus-based higher education has dramatically expanded enrolment since 2000. Debate continues about the cost efficiency of online learning. Many faculty and administrators regard online learning as more expensive to develop and deliver than conventional campus based programmes. Quantitative evidence that online learning can be more cost efficient comes from some for-profit higher education institutions. Our research indicates that the viability of online learning is dependent on achieving scale. Laureate
Education, which owns numerous traditional campuses around the world, also enrols over 62,000 fully online students through Walden University in the US and through support service partnerships with University of Liverpool and University of Roehampton. This suggests that, as outlined in previous reports, the success of online learning is dependent on local circumstances and how it is implemented.

Exploring the online environment in 2019, PWC produced *Skills for Industry Strategy: Promoting Online Training Opportunities for the Workforce in Europe*, (Soeiro, et *al.*, 2019). This report investigates local circumstances in Europe for enterprises, and how SME's in particular, need to be convinced of the economic benefits of online education. It allows enterprises to see online education as an investment that generates an increase in human and financial capital when implemented effectively. It found that the online training market in Europe is more fragmented and specialised than in other global regions. Consolidation and the emergence of large-scale platforms occur here at a much slower pace than in the United States. Market analysts predict that the rise of demand for continuous learning in Europe would increase the adoption of different methodologies and products. Change management, the fast pace of technology innovation, and vendor-developer partnerships are major restraints hindering the growth of the online learning market. The learning landscape today looks completely different than from the recent past. The report suggests that learners now expect content to be short and personalised and seem more committed to their learning goals. This indicates that there is a need for change in both content and

technology in the learning space. The use of games in workplace education, simulations such as flight trainers, or simulations for social benefit can help this situation. Learners can try out unfamiliar roles and contexts and make decisions appropriate to those contexts, in a safe environment. This approach requires collaboration between professional game designers, software engineers, and learning experts. Together, these groups could develop games based on effective pedagogy, employing learning analytics to adapt game experiences to the educational goals and requirements of players.

The increasing cost pressures imposed by automation and artificial intelligence (AI) the report contends, could have a great impact on the future of work with some tasks currently done by humans being done by machines. Migration, ethnic diversity, gender equality and social inclusion issues will require more inclusive educational opportunities. Commercial and industrial adjustments to meet urgent sustainability targets such as the United Nations (UN) Sustainable Development Goals (SDGs) will shift the environmental footprints of enterprises and their internal processes. Each of these trends will increase the need for lifelong learning acquiring the skills and capabilities required for the new opportunities and challenges presented. Enterprises will need to evolve to embrace contemporary resources to survive and thrive in this new environment.

Ernst and Young produced a report for the Australian Government which asked questions which, though directed to an Australian context, are relevant to this study; *Can the universities of today lead learning for tomorrow*? (Cawood, 2018). It found that the rise of fully online providers Udacity and Singularity University in the US, point to two potential disruptors: one, offering nano-degrees (an online programme of study completed in less than a year) supported by leaders in industry; the other, focused on scientific progress and rapidly expanding technologies. The authors suggest that similar online institutions could emerge in Australia, as they could in other countries. The report warns that a growing cohort of graduates are leaving the university environment with high debts and few job prospects. In our context this is relevant to the ongoing debate regarding the funding of third level education and the proposal in the Cassell's report (2016) that a student debt scheme is the way to fund higher education going forward. The report reveals that some university leaders estimate that around 40% of existing degrees would soon be obsolete, which could result in institutions losing their "cash cows" and being driven into specialities that they would not otherwise select. Some institutions have yet to bring their operating models online.

The paper proposes four possible future scenarios for discussion: *Champion*: This is the baseline scenario with incremental change. A hands-on government actively champions universities as strategic national assets. The majority of students enrol in traditional undergraduate and graduate degree programs. Universities streamline operations by transforming service delivery and administration. Funding from government exceeds funding from other sources. Technology integrates into traditional university models. It remains a protected landscape with elite universities dominating. This corresponds to Funding Option 1 in the Cassells Report on funding in Irish Higher Education. This is an incremental approach which protects the current status quo, with government providing most funding.

Commercial: In this scenario, a hands-off government requires universities to be financially independent to ease pressure on state finances. At the same time, legislated obligations to produce research are eased and the university landscape becomes more contentious with greater specialisation and universities concentrating on their core strengths. Students favour degree programs that integrate work experience. Universities draw closer to industry to collaborate on teaching and research. Funding from industry exceeds that of government. Tuition fees are uncapped. Most students are 18-25 year olds pursuing undergraduate degrees. Universities are autonomous and compete in a diverse environment. Technology is integrated into traditional delivery; AI remains niche in industry. This resembles Funding Option 3 in the Cassells Report where HE in Ireland is funded predominantly by student loans.

Disruptor: A hands-off government completely deregulates the sector to drive competition and efficiency. Education is funded by commercial mechanisms. Continuous learners and their preferences for micro-credentials dominate as technology disrupts the workplace. Education as a service develops. Universities expand into new ranges of services to compete with an array of providers. Research operates in a different domain with some specialist universities opting to solely concentrate on research. Digital technology achieves its full potential. AI is mainstream and displaces jobs.

Virtual: An activist government restructures the tertiary sector to integrate universities and the vocational education, and training sector prioritising training and employability outcomes as humans begin to be replaced by technology. Continuous learners are the majority. They prefer micro-qualifications, unbundled courses delivered flexibly, online. Universities restructure into networks that share digital platforms. Enrolment is open, fees are capped. Government provides the majority of funding. Learning has moved largely online. Universities concentrate on teaching and are linked to other educational outlets.

These are extreme possible scenarios. The report predicts that as universities evolve from being faculty-focused to being learner-focused, they begin to partner more closely with industry. To re-imagine their physical footprints, they would start to outsource functions such as admissions, counselling, instruction and certification to concentrate on what they decide is their core skill. In some universities this would be research; others are more skilled at designing and delivering content; and others would choose to outsource professional services like finance and facilities management to dedicated providers. Similarly, with degrees, as continuous learning rises and just-in-time models take off, some universities would offer unbundled courses that learners customise into qualifications which suit their current individual needs. Universities should consider which capabilities are core skills providing the unique selling proposition vital to their future success and actively build those, while unbundling non-core activities which could be more efficiently and effectively provided by others.

In relation to policy, the report maintains that the education sector develops the foundations for trade and future proofs citizens to succeed in a transformative age. Australian universities rank last in the OECD for their collaboration with businesses on innovation. Policy makers the report suggests cannot allow a period of slow evolution to leave the sector and learners behind. Policy makers should consider incentives for greater collaboration between universities and industry. The report warns that the education system requires a double transformation to ensure the existing model comes closer to learner and industry needs, providing an injection into the economy, while developing evolved offerings for the future market. It concedes that moving universities through transformative change would be challenging. Resistance to change is strong and the politics and inertia are intense. However, the power to change, external trends, plus internal drivers,

are powerful and the coming paradigm shift would be profound. It insists that to preserve the proud traditions of our universities, they must be transformed.

4.3 Meso -Phase 2: Analysis of Irish texts and Institutional compacts

In this section, a range of policy related texts are purposefully selected and analysed to reflect the discussion in Ireland in relation to policy formulation and implementation in online education as it has evolved. The documents selected have been published by national bodies including the Department of Education and Skills (DES), the Higher Education Authority (HEA), The Central Statistics Office (CSO), and the National Forum for the Enhancement of Teaching & Learning. The phase continues to examine the most recent performance compacts based on the System Performance Framework 2018/2020. Higher education institutions in Ireland first entered into a "performance compact" with the HEA in 2014. These outlined how each would contribute to national objectives (HEA, 2014). The compacts provide for how performance is to be measured and a proportion of funding is contingent on performance.

However, the question arises if these performance compacts are to be of value they must reflect a commitment to promoting and implementing new policies and procedures which can fully nurture the opportunities which online presents. In Chapter 1 we introduced a framework presented by the national forum to determine if a policy is enabling (Table 2). The debate when considering performance compacts of individual HEA's in this section centres around whether the reality matches the rhetoric. Just as self-regulated learning (SRL) is advocated as an active and constructive process through which learners can set goals and monitor and control their learning (Pintrinch, 2000), the process of self-regulation which governs performance compacts aims to drive performance standards in HEI's. In the absence of sanctions to regulate performance, the question to be considered is: have policies been implemented to promote new models of online learning or is it being left to maverick fringe players to navigate the pathway?

Table 9 Irish Texts in the Macro, Meso Micro Framework

Macro-level: International	***Meso level: National***	***Micro level Local***
	Expl. the Evolution of Ed. Technology Policy in Ireland (2019)	Expl. the Evolution of Ed. Technology Policy in Ireland (2019)
	National Plan for Equity of Access 2015-2019 (2015)	National Plan for Equity of Access 2015-2019 (2015)
	Progress Review of National Plan for Equity of Access (2018)	Progress Review of National Plan for Equity of Access (2018)
	HEA position Paper on Online & Flexible Learning (2009)	HEA position Paper on Online & Flexible Learning (2009)
	National Skills Strategy 2025 (2016)	National Skills Strategy 2025 (2016)
	Lifelong Learning among Adults in Ireland Q4 2017 (2018)	Lifelong Learning among Adults in Ireland Q4 2017 (2018)
	Investing in National Ambition: (Cassells Report, 2016)	Investing in National Ambition: (Cassells Report, 2016)
	National Strategy for Higher Ed. to 2030 (Hunt Report, 2011)	National Strategy for Higher Ed. to 2030 (Hunt Report, 2011)
	National Forum Strategy 2019-21 (2019)	National Forum Strategy 2019-21 (2019)
	Digital Overview Nat Forum (2018)	Digital Overview Nat Forum (2018)
	A Roadmap for Enhancem. in a Digital World 2015-2017 (2015)	A Roadmap for Enhancem. in a Digital World 2015-2017 (2015)
	Sectoral Consultation on Nat. Forum Strategy (2019)	Sectoral Consultation on Nat. Forum Strategy (2019)

Table 9 places Irish texts in the context of the Macro, Meso, Micro Framework and while all texts are primarily situated in the National (Meso) category their National influence has an impact at local (Micro) level. These documents have little impact at an International (Macro) level.

4.3.1 Introduction

The development of higher education policy in Ireland and its implementation is the responsibility of the government of the day and specifically the Department for Education and Skills(DES). The Higher Educational Authority (HEA) is the funding body for the universities and other designated higher education institutions and holds advisory and monitoring powers (HEA, 2013). Institutional performance-based compacts were introduced between the HEA and Higher Education institutions in 2014, in which the institutions set out their mission, with part of their funding being contingent on performance against the objectives outlined in their compact. The current Institutional compacts are reviewed later in the section.

Since the start of this century the internet has transformed the availability of knowledge to students worldwide. Internet access was available in 89% of Irish households in 2018 (CSO, 2018). Competing in a knowledge-based economy that was now global and increasingly barrier-free, became an imperative for an Irish workforce operating in an open economy. At the same time, a shift was happening in the provision of education, particularly higher education, internationally, moving from a welfare liberal model which promoted participation and equity to a neo-liberal model rooted in individualisation and competitiveness. New models of online learning emerged, presenting opportunities and challenges to Irish Universities. In this section, we review documents relevant to the development of Irish policy for online learning over the period of the last twenty years.

Table 10 illustrates the frequency of keywords in the documents reviewed. We can see that digital (512) and online (96) are mentioned in most, although not in all, documents. Life-long learning (116) is heavily featured in some relevant documents, while technology enhanced learning (1) is hardly mentioned at all. There are some mentions of distance learning (24) and e-learning (17), but not many.

Table 10 Key Words Reviewed in Irish Texts

	Digital	Online	e-Learning	Distance Learning	Life-Long Learning	Technology Enhanced Learning
National Strategy for Higher Ed. to 2030 (Hunt Report,2011)	2	6	1	3	12	
Digital Overview Nat Forum (2018)	236	31	0	0	1	1
A Roadmap for Enhancem. in a Digital World 2015-2017 (2015)	168	8	3	0	1	
Sectoral Consultation on Nat. Forum Strategy 2019–21 (2019)	13	3	0	1	0	
National Forum Strategy 2019-21 (2019)	35	4	0	0	0	
HEA position Paper on Open & Flexible Learning (2009)	0	29	12	11	4	
National Plan for Equity of Access 2015-2019 (2015)	0	1	0	0	3	
Progress Review of National Plan for Equity of Access (2018)	0	0	0	0	4	
National Skills Strategy 2025 (2016)	26	9	1	3	43	
Lifelong Learning among Adults in Ireland Q4 2017 (2018)	0	0	0	0	35	
Investing in National Ambition: (Cassells Report) (2016)	2	3	0	6	11	
Expl. the Evolution of Ed. Technology Policy in Ireland (2019)	30	2	0	0	2	
TOTAL	**512**	**96**	**17**	**24**	**116**	**1**

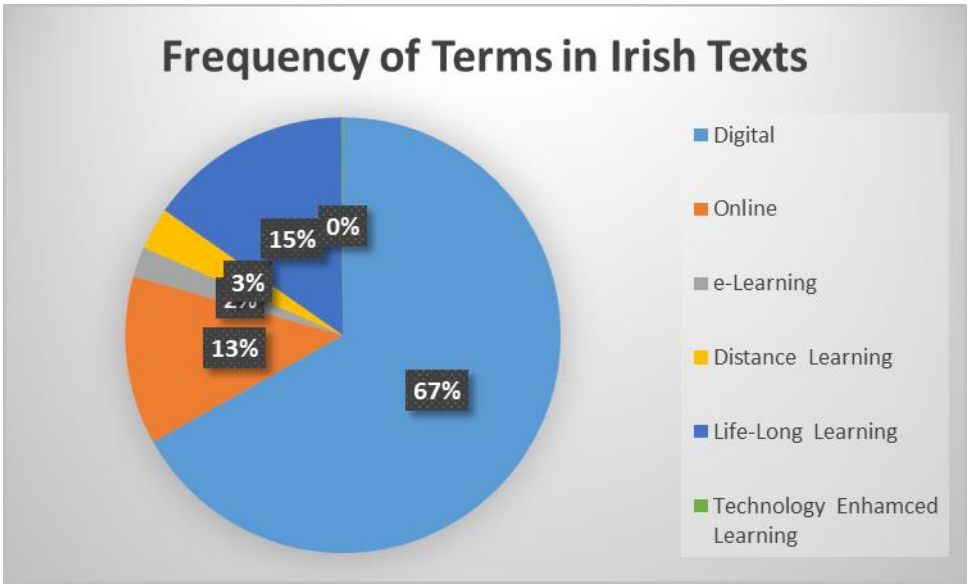


Figure 14 Frequency of Key Terms in Irish Texts

In Figure 14, we can clearly see that the dominant key term occurring in the Irish texts reviewed is Digital at 67%. Lifelong Learning is next at 15% with online at only 13%. Online does not have any prominence in Irish policy texts. The remaining terms, in total, account for 5%. This reflects the lack of definition in relation to online learning in Irish policy texts.

Table 11 highlights the drivers of technology as previously outlined by Plomp and Pelgrum (Plomp and Pelgrum, 1993), in the context of the Irish policy papers reviewed, Economic (388), Cost (279), and Social (255) drivers are most dominant here; with the Commercial (34), Vocational (20), and Transformational (19) drivers also featuring often in some texts. The Pedagogy (18) driver appears in fewer texts with the Marketing (13) driver hardly featuring at all, this reflects that these documents relate to public policy rather than to the policies of individual institution.

Table 11: Drivers of Irish Policy

	Economic	*Cost*	*Commercial*	*Marketing*	*Social*	*Vocational*	*Pedagogy*	*Transformation*
National Strategy for HE to 2030 (Hunt Report, 2011)	118	38	29	0	77	1	6	7
National Forum Digital Overview (2018)	0	0	0	0	5	0	4	5
A Roadmap for Enhancement in a Digital World 2015-17 (2015)	0	1	0	0	0	0	1	1
Sectoral Consultation on Nat. Forum Strat 2019–21 (2019)	0	0	0	0	0	0	1	0
Nat. Forum Strategy 2019-21 (2019)	0	0	0	0	0	0	0	0
HEA position Paper on Open & Flexible Learning (2009)	2	4	1	0	1	0	1	0
National Skills Strategy 2025 (2016)	46	8	2	10	32	12	0	0
Lifelong Learning among Adults in Ireland Q 4 2017 (2018)	3	0		0	0	0	0	0
Investing in National Ambition: (Cassells Report, 2016)	59	218	0	0	78	0	0	1
National Plan for Equity of Access 2015-2019 (2015)	59	2	0	0	28	2	0	0
Prog. Review of Nat Plan for Equity of Access 2015-2019 (2018)	24	0	0	0	6	0	0	0
Exploring the Evolution of Ed. Tech.Policy in Ireland (2019)	59	0	3	1	25	0	0	3
TOTAL	**370**	**271**	**35**	**11**	**252**	**15**	**13**	**17**

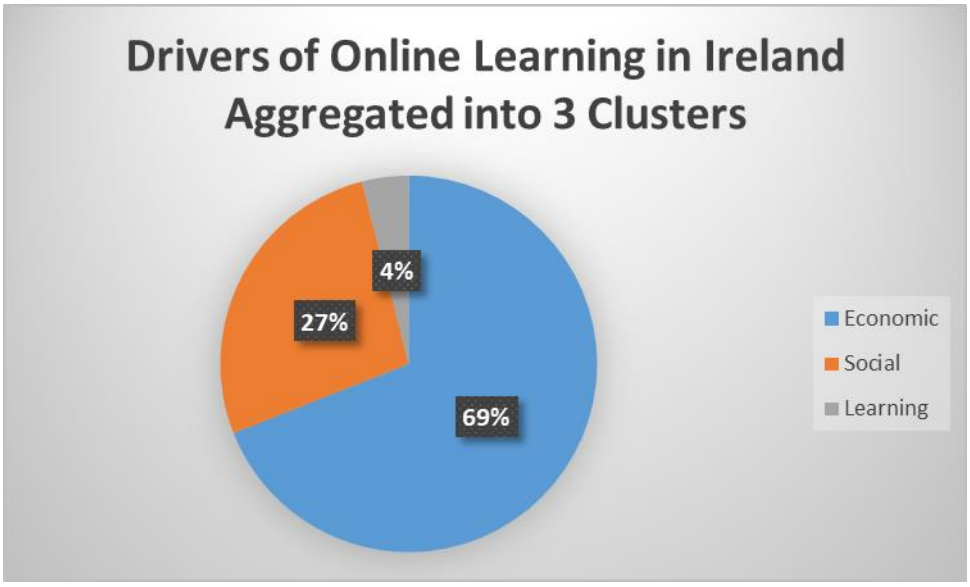


Figure 15 Drivers of Online Learning in Ireland

In Figure 15 the drivers of Online Learning in Ireland are aggregated into three clusters Economic, Social and Learning. The most frequent by far of words occurring in Irish texts reviewed are Economic at nearly 70%. Social terms occur next most frequently at 27%, with Learning terms only occurring in 4% of the texts reviewed from Ireland.

4.3.2 Climbing out of the Abyss- National Education Strategy

In the aftermath of the "most severe economic and labour market crisis since the foundation of the State" (Maitre *et al.*, 2014 p1), having been forced to accept a bail out from the European Union and the International Monetary Fund, Ireland was in the need of rejuvenation. *The National Strategy for Higher Education to 2030*, known as the Hunt Report, set out a vision for Irish Higher Education (Hunt, 2011). The report envisaged that Irish higher education could successfully meet the many social, economic, and cultural challenges facing Irish society, and that it could meet its key roles in teaching and learning, research, scholarship, and engagement with wider society. Walsh and Loxley suggest that the report presented higher education as a "cure and restorative" for the collapse of the Irish economy (Walsh and Loxley, 2015, p1128).

The Hunt report noted that the inflexibility of Irish higher education and Ireland's poor performance in lifelong learning were among the strongest concerns to emerge through the consultations and the submissions it received. Expansion in Higher Education had mainly been in the provision of full-time opportunities focused primarily on entrants from second-level education, with Irish higher education students having the narrowest age range across all

OECD countries. The learning-needs of adults in the population were not being addressed. Only 12% of undergraduate provision was part-time in the period 2007-08. This low level of part-time and flexible opportunities was inappropriate it maintained, particularly in the context of the huge potential demand for higher education from adults in the 21st century. It specifically stressed the need to "enhance human capital by expanding participation in higher education" (Hunt,2011, p10). The National Action plan has a target of 22% for part-time and flexible participation by 2021. Addressing this shortfall was one of the opportunities open to Universities as the century unfolded.

The Hunt report advised that institutional leadership is a key component in the successful introduction of innovation. This leadership imperative should be accompanied by a range of practical steps to advance the flexible learning agenda at institutional level. The Hunt group suggested that there is considerable enthusiasm among lecturers in higher education to innovate and excel in teaching and learning, this should be capitalised on by providing system-wide investment to ensure the availability of appropriate technological infrastructure and pedagogical support. Not all of the academic experts in our research agree however, this is discussed in later sections. In a strong message of support for flexible learning the Hunt Group proposed:

> While campus-based learning would continue to play a major role in higher education, the institutions would have to accommodate and serve the needs of an increasingly diverse student body, many of whom would need to engage flexibly with higher education…….Resources allocated to and within institutions should support all students equally, whether they are full-time or part-time, on-campus or off-campus (Hunt, 2011, p59)**.**

To date this funding aspiration has not been actioned, most part-time and off campus students are still not treated in an equal manner in relation to funding. The Hunt report advised that a greater variety of access routes and more flexible routes of progression should be provided, while remaining rigorous, fair and objective. This would provide a

greater degree of flexibility for students, and considerable potential for the creation of customised programmes, which could include modules from different institutions and different disciplines**.** The language used in this report very much draws on the aspirations and recommendations of the European reports reviewed from the OECD and the European Union.

Criticism of the report argues that it takes a pragmatic utilitarianism approach that is reminiscent of the New Public Management (NPM) philosophy followed by UK Conservative governments in the 1980s, and in New Zealand, Australia and the Netherlands (Ferlie, Musselin and Andresani, 2008) which had little to do with equality, but was more concerned with knowledge-based economic development and competitive performance in a globalised market. This offered a bounded-autonomy model, where the autonomy of individual institutions which is emphasised as worthwhile, was balanced with accountability to the HEA. This, it is argued, represented freedom of managerial action rather than strategic decision making (von Prondzynski, 2011). Walsh and Loxley claim that policy-makers in Ireland had designated education to have a central function in economic development for two generations. They argue that the strategy the group proposed did not represent a radical or innovative approach but presented:

> A well-worn path in presenting a reform agenda driven largely by economic considerations rather than a manifesto for revolutionary transformation of higher education (Walsh and Loxley, 2015, p1142).

4.3.3 The National Forum

The National Forum for the Enhancement of Teaching and Learning in Higher Education (the National Forum), was established in 2013 to enhance teaching and learning in higher education in Ireland and to advise the Higher Education Authority. It commenced reviewing digital teaching and learning, including online learning in 2014. Its initial research on digital learning was a consultation with the sector *Digital Capacity in Higher Education: Principles and first insights from the sectoral consultation*, with preliminary recommendations and actionable first steps (National Forum, 2014, p21).

The forum sought to devise a framework on which to base a digital roadmap for teaching and learning in Higher Education. It concluded that building digital capacity should be tackled

by the sector working together. Expertise should be integrated to optimise the potential that digital technology presents. The proposed roadmap was produced in 2015 under the title *Teaching & Learning in Irish Higher Education: A Roadmap for Enhancement in a Digital World 2015-2017* (National Forum, 2015). This was aimed at direct leaders in the higher education sector in relation to digital learning. It focused on higher education organisations and representative organisations within the sector who, it proposed, would jointly provide the leadership to build digital capacity, to enhance teaching and learning across the sector. The roadmap highlighted key priorities to facilitate change and provided an informed framework to support organisations in addressing these priorities. It proposed four overall recommendations: prioritising the strategic development of digital capacity in institutional and national policy and quality frameworks in a way that supports innovation for impact; strengthening and supporting collaboration within and between institutions and with different parts of the higher education sector; developing a consistent, seamless, and coherent digital experience for students in Irish higher education, and actively engaging with students and teachers to develop their digital skills and knowledge. It proposed developing a strong evidence base for enhanced pedagogy, and increasing the number of publications in the area of digital learning by Irish academics, individually and collectively, in high quality international journals.

The National Forum set out to promote this roadmap for growing digital capacity in 2015. This produced *Strategic and Leadership Perspectives on Digital Capacity in Irish Higher Education 2015*. This report claims that the sector shares the vision of "a culture that fully embraces digital learning" (p5). However, it discovered that the provision of flexible, online, distance education was very unclear, at that time, with strategic uncertainty across the board. While the digital capacity "roadmap" it proposed implies navigating a known route, on examining institutional compacts with the HEA, a lack of coherence in approach suggests a "road atlas" may have been more appropriate, with an array of strategic outcomes and a range of options to achieve them. The report warns that staffing levels for essential support staff were too low to allow for any step change in the level of digital learning integration or for the scaling up of already established pilot schemes.

We can see that the National Forum has evolved, from its initial exercises in environmental scanning to establish the landscape surrounding digital learning in Ireland, to its current, more streamlined and focussed strategy which aims to support and encourage collaboration

in the sector, to bring digital technology into the mainstream of Irish Higher Education. A clear definition of what it considers online learning to be is not contained in its various reports. Neither does it recognise off campus learners as a distinct group with unique needs, which require to be reported separately and addressed as a distinctive population with legitimate concerns. It faces the challenge in the future to make real impact, which can be clearly evidenced.

4.3.4 Online Learning Policy - helping to provide access in Irish Higher Education.

In the International section we discussed the tension between the demands of divergent stakeholders from the Knowledge Society and the Learning Community. This resonates in Irish education and has implications in policy formulation and implementation. The HEA recognised "the importance of lifelong learning in the context of the knowledge society" in its position paper on *Open and Flexible Learning* (HEA, 2009) outlining how the "development of broadband and the internet enables courses to be delivered in ways never before possible and students can access an enormous range of resources, free from limitations of time and space" (p.2). At this time, the HEA recognised the failure of the existing funding model in Higher education was in part responsible for the slow development of online and flexible lifelong learning in Ireland. It proposed reform of the public funding allocation model to achieve parity for flexible learning and to encouraged development. Action on this is still awaited.

Ensuring that the student body entering, participating in, and completing higher education at all levels reflects the diversity and social mix of Ireland's population was the objective of the *National Plan for Equity of Access 2015-2019* (HEA, 2015). It set out to review the HEA's Recurrent Grant Allocation Model (RGAM) and how it supported an access infrastructure in each HEI. Specifically, it sought to determine if core funding was being applied appropriately to support an access infrastructure in HEIs. It further sought to examine the issue of financial supports for part-time students from underrepresented target groups. The report stated that the HEA and the DES would consider the potential for reviewing options for funding access to part-time studies in the context of the overall financial resources available for

higher education, and in light of the recommendations then due from the Expert Group on Future Funding (Cassells, 2016).

Progress of the report was reviewed in 2018 in the Progress Review of National Plan for Equity of Access 2015-2019 (HEA,2018). This report set out to provide an interim assessment of the impact of current initiatives to support access-based on the Equity of Access plan. It sought to gather accurate data on access and participation and to base policy on what that data revealed. In so doing, it aimed to build coherent pathways from further education and to foster other entry routes to higher education. It sought to develop regional and community partnership strategies for increasing access, with a particular focus on mentoring.

Participation in education by mature students had actually declined since the commencement of this National Access Plan. This review recommended that the target set in the National Access Plan should be retained with a more flexible approach within higher education being supported by increased Government investment. The review recommended that more effective methods of promoting lifelong learning, in line with the National Skills Strategy 2025 (DES, 2016) were required. As reflected in the Higher Education System Performance Report 2014-2017 (HEA, 2014), it proposes that communicating the opportunities provided by educational providers on a national level was vital. Part-time/flexible learning remained a challenge, the review concluded suggesting that there was evidence that the rate of progress was accelerating and that reaching the target would be assisted by initiatives including PATH (The Programme for Access to Higher Education) and wider investment in flexible provision. As of 2020, this has yet to result in any action to facilitate life-long study by mature, continuing students, with the exception of the Springboard programme which was initiated as a jobs activation programme.

Providing skills development opportunities that are relevant to the current needs of learners, society, and the economy is the focus of the *National Skills Strategy 2025* (DES, 2016). It suggested that employers would participate actively in the development of skills and make effective use of skills to improve productivity and competitiveness.

Table 12 Lifelong Learning in Ireland

	2014	2015	2017	2018	% Increase 2015-2018
Population between 25 and 64 (millions)	**2.48**	**2.5**	**2.55**	**2.58**	**3**
People engaged in Lifelong Learning ('000)	**181**	**177.3**	**358.3**	**334.3**	**89**
Lifelong learning (%)	**7.3**	**7.2**	**14**	**13**	**5.8**
Formal Learning ('000)	**119**	**116.7**	**131**	**131.6**	**13**
Non Formal Learning ('000)	**64.8**	**64.9**	**249**	**221.7**	**241**

(Figures for Quarter 4 each year[1])[2](Solas, 2015), (Solas, 2016), (Solas, 2017), (Solas, 2019), (CSO, 2020)

It proposed that the quality of teaching and learning at all stages of education should be continually enhanced and evaluated. It recognises international trends like globalisation, the increasing use of technology and the growth of the knowledge economy as providing requirements for Irish employers and therefore the employment opportunities for the Irish population. The report anticipated that people across Ireland would engage more in lifelong learning. This increased focus on lifelong learning set a target to increase participation in this type of learning to 15% by 2025 (from 6.7% in 2014).

We can see from Table 12 of the 2.58 million adults living in the Republic of Ireland aged between25 and 64 years in quarter 4 of 2018, 334,300 had participated in learning activities in the four previous weeks. This amounts to a lifelong learning rate of 13%. Over 131,600

[1] No figures were reported for 2016

[2] In quarter 3 2017, the CSO introduced a new Labour Force Survey (LFS) which replaced the Quarterly National Household Survey (QNHS). This involved a number of changes to how the survey is carried out, therefore, outcomes before and after this time are not reporting the same measures. In calculating life-long learning, formal education is defined as education and training in the regular system of schools, universities, colleges, and other formal educational institutions. Non-formal education and training is any organised and sustained educational activities that does not correspond to the definition of formal education. Informal learning activities are intentional but less organised and structured than either formal or non-formal learning activities.

adults had participated in formal learning activities, while 221,700 participated in non-formal learning activities, translating into participation rates of 5% and 9% respectively (A small number of adults participated in both formal and non-formal learnings). Rates for both learning types increased according to the participant's level of education attainment, and in the main, declined with age. As measured in the Labour Force Survey, lifelong learning participation in Ireland in quarter 4 2018 at 13% exceeded the target set out in the National Skills Strategy for 2020 (10%). This is largely due to a jump of over 240% in non-formal learning between 2015 and 2018 from 64,900 to 221,700 as a result of the change in calculation methods employed, rather than as a product of any policy intervention.

4.3.5. Funding Policy in Higher Education

The crisis of funding in Irish Third Level Education was considered by the Expert Group on Future Funding for Higher Education, established by The Minister for Education and Skills. As a result of consultation and analysis, the group recommended new methods of funding in *Investing in National Ambition: A Strategy for Funding Higher Education* (Cassells, 2016*)*, known as the Cassells Report, which was published in 2016. Its central recommendation is that Ireland needs to substantially increase the level of investment in Higher Education to ensure that the system is able to fully support national economic and social development. The Expert Group recognises four ways that Higher Education can help achieve these objectives. It can provide an excellent student experience, create knowledge and facilitate innovation based on research which addresses the challenges society faces. Higher Education can contribute to national prosperity, and enhance human development. It can develop the knowledge and competences of students to meet the ever- changing requirements of organisations, while also enhancing their individual careers. Finally, it can increase access to and participation in higher education.

The Expert Group recognised that resources had fallen in real terms after the onset of the recession in 2008, and the hardship that the existing student fees of circa €3,000 per annum for undergraduate programmes was causing for many families. It further highlighted that increased pressure would be exerted on existing resources as the numbers of school leavers grow and lifelong learning expands.

The Group advised that the current funding problem could not be addressed by further efficiencies, use of information technology, a cap on numbers, or incremental change. The group recommended focused investment in three areas over a fifteen-year period with front loading over the first five years. Core Funding: An annual funding increase of €600 million by 2021 and €1 billion by 2030 to provide for the increases that demographics predict, to deliver higher quality outcomes, and to improve completion rates. Capital Funding: An investment of €5.5 billion in capital infrastructure, to cater for increased student numbers, capital upgrades, ongoing equipment renewal and maintenance, and health and safety issues. Student Support: An additional €100 million to deliver a more effective system of student financial aid.

It proposed three possible funding options: under *Funding Option One,* the state would increase the core grant to institutions and the €3,000 undergraduate student contribution would be abolished. Higher education would become free at the point of entry for all first-time EU students and for part-time learners. Free tuition, it suggests, might be extended to postgraduate education. Under *Funding Option Two,* the state would increase funding considerably and retain the current upfront undergraduate contribution of €3,000 and continuing fees for postgraduates. Fee waivers would continue under the current student grant system, and be expanded to ease the burden on some income groups. Part-time students would be funded in the same manner as full time students. *Funding Option Three* proposes that existing upfront fees for both undergraduates and postgraduates are abolished and would be replaced with a system of income contingent loans provided by the state. Higher education would be free at the point of entry for all students. Repayment of loans would only commence once a graduate's earnings reach a threshold level and would be set at a defined percentage of annual income, collected by the Revenue Commissioners. Graduates whose earnings did not reach the threshold would make no repayments. Increased state funding would still be required, and any increases in fee levels should not be offset by reductions in state funding. It also suggests a greater contribution be requested from employers who are major beneficiaries of the outcomes of higher education. All learners, full-time, part-time, undergraduate, and postgraduate should be treated equally and in a more holistic way. This loan option was proposed previously in the Hunt report (Hunt, 2011).

All three options involve a significant increase in the level of state funding. Under Option One the state contribution would be around 80%, for Option Two 72%, and for Option Three 55% to 60%. There has been no movement to implement this report, since it was published in 2016. In reality there has been little serious debate about the three options, and third level institutions continue to suffer from underfunding while students and their families continue to work under stressful financial pressure. When the report was issued in 2016, Peter Cassells stressed that urgent action was required. Four years later the EU Commissions view of the report is still awaited, and no action has been taken. The head of IUA Jim Miley, commented that the Heads of Universities think the loan option is "a cop out" and "It really was something that allowed the government to "get off the hook for the last couple of years" adding that "Loans were never going to solve the problem" (Moreau, 2019).

4.3.6 The Influence of Globalisation and the Neo-Liberal Agenda on Policy in Ireland

Many countries have launched national educational technology policies in the past number of decades aimed at increasing technology integration in education. *Exploring the Evolution of Educational Technology Policy in Ireland: From Catching-Up to Pedagogical Maturity* (McGarr, 2019) analyses educational technology policy in Ireland from 1997 to 2017 and draws attention to an underlying economic agenda for technology integration in schools, set against a backdrop of neoliberal discourses. The study found that the challenge of integrating technology is not just a question of "integration", it represents a realignment of the existing education system toward a more student-centred experience. Most recent policy also recognizes that the accompanying change process is both complex and context driven. The article highlights the symbolic function of policy and the role it plays in representing the educational system in a particular light to national and international audiences. Recognizing the symbolic function of educational technology policy and the neoliberal ideology underpinning it, can help identify the reasons for the apparent failures of past attempts to integrate technology in education as well as informing future policy iterations.

Lynch argues that this move to a neo-liberal approach attempts to shift the cost of education, and other public services such as housing, transport, care services etc., on to

the individual (Lynch, 2006). People are then forced to buy these services at market value, often from private enterprises, rather than have them provided by the state. The right to education moves from a right protected by the state, to a tradeable service. This approach fails to take account of public service mission of the university to educate all members of society and educate them for activities which are non-commercial in the arts, in politics, in caring work, or in public service work. We can see that the commercial potential of higher education has led to the establishment of 650 for profit colleges and universities in the United States. In Ireland, private colleges like Griffith College, which boasts the largest law school in Ireland, are a commercial success (Power et al., 2013). Yates outlines issues this neo-liberal approach raise: Globalization can trigger a "race to the bottom", in which nation states reduce welfare and regulatory costs in a competition with other states to attract foreign investors. Public provision of social needs is bypassed in favour of private delivery whether commercial, voluntary, or informal (social dumping). Provision and regulation is (or should be) made on a transnational scale. Regional and global international agencies exert influence on social policy and national welfare systems (Yeates, 2001). This is addressed by Performance compacts between the HEI's and the HEA which are addressed in the next section.

4.3.7 Institutional Compacts-Introduction

The *National Strategy for Higher Education to 2030* (Hunt, 2011), set out a roadmap for reform of Irish higher education. One of its recommendations was the creation of Key Performance Indicators (KPIs) as part of an ongoing dialogue between the HEA and Higher Education Institutes. This recommendation led to setting up performance compacts between the HEA and the Higher Education Institutes. The compacts provide for how performance is assessed and a portion of funding is allocated on the basis of actual performance against these KPIs. The second round of performance compacts, covering the period 2018-2020, was agreed between individual HEIs and the HEA in early 2019.This cycle sought to build on learning from the previous cycle.

Table 13 University Compacts 2018-2021 - Key Word Search[3]

Key Word/ HEI	*Online*	*Digital*	*e-Learning*	*Distance Learning*	*Lifelong Learning*	*Technology Enhanced Learning*
DCU	24	18	0	0	5	0
UCC	8	10	2	0	4	0
UCD	6	7	0		5	0
MU	0	4	0	0	5	0
TCD	6	6	0	0	1	0
NUIG	11	10	1	0	5	1
UL	4	8	0	2	1	0
TOTAL	**65**	**63**	**3**	**2**	**26**	**1**

Table 13 outlines Key word frequency in the Institutional performance compacts for 20182021 for the seven universities in Ireland established under the 1997 Universities Act (Acts of the Oireachtas, 1997). We can see that online (65), and digital (63), are the most frequent terms, occurring particularly often in DCU, UCD, and NUIG. Lifelong (26) is present in nearly all documents with e-learning (3), occurring in two documents, distance (2), only present in one document and technology enhanced learning (1), in one document.

High Level objectives outline the overall thrust of the current round of agreements. The first is to provide a strong talent pipeline by combining knowledge, skills, and employability, which respond effectively to the needs of our enterprise, public service and community sectors, both nationally and regionally. The next objective is to create rich

[3] (DCU and HEA, 2018), (UCC and HEA, 2019), (UCD and HEA, 2019), (NUIM and HEA, 2019), (TCD and HEA, 2019), (NUIG and HEA, 2019), (UL and HEA, 2019)

opportunities for national and international engagement which enhances the learning environment and delivers a strong bridge to enterprise and the wider community. The third objective is to conduct excellent research, development, and innovation that has relevance, growing engagement with external partners, impact for the economy and society and strengthens our ambition to become an innovation leader in Europe. The next objective is to significantly improve the equality of opportunity through education and training and recruit a student body that reflects the diversity and social mix of Ireland's population. The next objective is to demonstrate consistent improvement in the quality of the learning environment with a close eye to international best practice through a strong focus on quality and academic excellence. Finally, the compacts aim to demonstrates consistent improvement in governance, leadership and operational excellence. Each Higher Education Institution agreed to a performance compact with the HEA in 2014. This set out how each institution proposed to contribute to national objectives utilising its strengths.

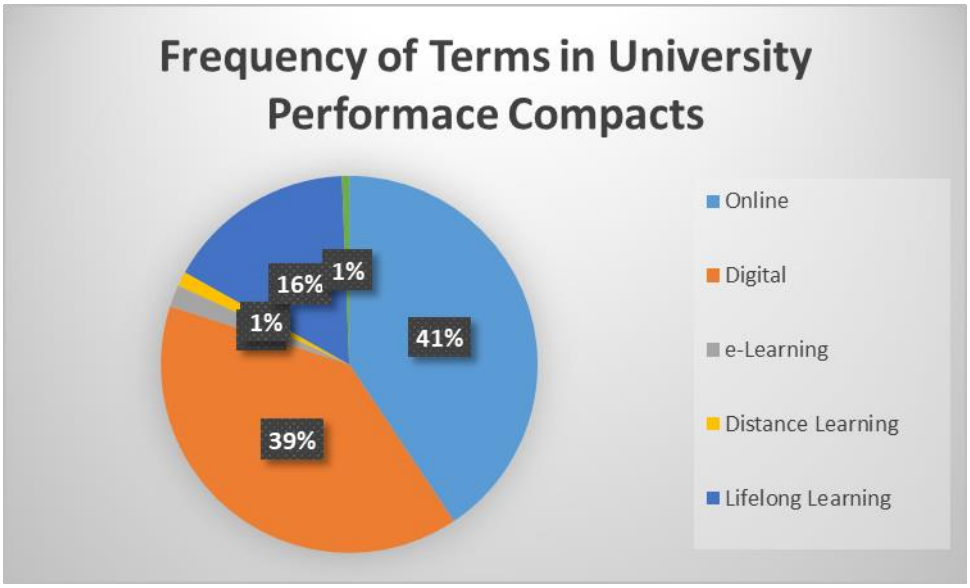


Figure 16 Frequency of Key Terms in University Performance Texts

In Figure 16, the frequency of key terms in the performance compacts is highlighted with Online (41%), Digital (39%), and being most prevalent, while lifelong learning has a 16% presence, and the other terms combined consisting of 4%. This indicates that in their interactions with the HEA, universities are becoming more engaged with the terms online,

and digital. The definition of what is understood by each term is not, however, given in the compacts or the template.

4.3.8 Performance Compacts – Key Objectives

Reviewing the compacts between the seven selected universities in this research and the HEA, three objectives 1,4, and 5, are most relevant to the research questions proposed in this research. To properly achieve the targets, the performance compacts set out to reach, targets should align with a strategic plan for the sector, in a way that is both achievable and worthwhile. If this was put in place the performance compacts of each institution could be tailored to meet those objectives and incentivized to do so. In reality the current performance compacts appear to be grafted from the self-focussed strategic plans of each individual institution.

Objective 1 proposes increasing those engaged in lifelong learning on a flexible basis to 15% by 2025. It sets out to increase those studying in HE on a flexible basis by 25% before 2021, from a baseline of 45,000 students in 2016/17. It aims to increase by 30% the number of Springboard places available by 2021 in both universities and institutes of technology. Finally, it looks to achieve the targets in the third ICT Action Plan 2019/2022(DES,2020). While, the responses from each of the universities represent worthy intentions, they do not focus on the specific outcomes addressed in the targets for Objective 1. Equally, while the process outlines incentives for HEI's to achieve these self-determined outcomes, it does not include penalties for failing to achieve them. This is highlighted by O'Shea and O'Hara (2020) as a contributing factor as to why participants in their research on this issue considered that the first set of performance compacts resulted in no behavioural change. "This has been attributed to the lack of enabling or incentive funding and the funding penalty at risk is regarded as not sufficient to impact behaviour" (O Shea and O Hara, 2020, p351).

The performance compacts do not set out a pathway to hit these milestones as part of a strategy, scaffolding performance based on continual improvement. However, the targets themselves make this difficult to achieve. In the case of the target of increasing Springboard places for example, the majority of Springboard funding is awarded to

applicants for courses which must be completed within a year (HEA, 2020). Most degree courses take 3-4 years to complete with most Master programmes taking at least two years to complete. Institutions therefore are not in a position to offer applicants Springboard courses which fully complete their programme of study. To properly use the Springboard mechanism as a vehicle for change which the institutions can strategically target in their performance compacts, the Springboard vehicle should be re-fashioned to make it practical to do so.

Objective 4 proposed that all HEI's should have a Student Success Strategy in place by 2020. It recommended that new data initiatives and indicators to support the development and implementation of the evidence-based National Plans for Equity of Access (HEA,2015) be implemented by 2019. It looked for the implementation of the strands of the Programme for Access to Third Level (PATH) Fund to support the National Plan for Equity of Access 2015-2019, (ibid). Objective 4 further sought the expansion of participation in Higher Education from underrepresented groups, with 2,000 additional enrolments from socio-economically disadvantaged groups and 1,000 from further education access programmes. HEI's were requested to increase in enrolments from DEIS schools by ensuring that every such school would be participating in a HEI led access programme. Finally, they were asked to specifically target improvement in completion rates for students from disadvantaged cohorts.

Overall for this objective, universities are building on and extending existing programmes rather than undertaking new focussed initiatives. Where the existing initiative is comprehensive, this is appropriate, but in sectors where the current response is inadequate, particularly in relation to funding such as in the case of mature, postgraduate, life-long learners, this response is not progressive. It does not represent a strategic commitment to policy development in this area but rather an attempt to manipulate existing strategic plans to retro-fit the objectives set out in performance compacts. This is identified by one of the interviewee's in research by O' Shea and O 'Hara (2020) as representing a "a bureaucratic process rather than a qualitative process" (O Shea and O Hara, 2020, p345).

Objective 5 is the most relevant to our research with target 5 stating that All HEI's would have policies in place for digital teaching and learning by 2019. It is apparent that universities are on a two tracked journey in relation to this objective. Some universities prioritise CPD, and improving progression rates when addressing this objective. In their approach to online learning and digital learning, many participants are still at the initial stages. They refer to piloting online programmes, and developing digital policies and procedures which are not currently in place. In contrast DCU had robust policies and practices in place for online learning, and a well-established suite of fully online programmes. As we have seen from the literature review, the most effective way to develop online learning is to take a cross-sectoral approach sharing best practise and developing enabling policies and procedures as outlined earlier in Table 2. which represent the most effective route map. Indeed, the policy models of Lasswell and Kingdon as highlighted in Chapter 1 could be used in the implementation across the sector.

4.3.8.1 Objective 1

Looking in more detail at the responses of individual institutions in relation to Objective 1 the targets of particular interest to our study are: Target 1 which aims to increase to 10% the number of those aged 25-64 engaged in lifelong learning; Target 2 which aims to increase by 25% the number of HE entrants studying on a flexible basis by 2021, and Target 6; which sets out to increase the number of available Springboard places by 30%, by 2021, and Target 9; which aims to provide more opportunities in Higher and Further Education for applicants to upskill or re-skill in ICT skills. These key performance indicators focus on growing the number of mature students entering higher education and being funded to do so in flexible ways. Each of the HEIs set two strategic goals to contribute to these objectives in its performance compact. These are addressed in different ways by each of HEIs, responses from each university are shown in detail in Appendix E.

All of the Institutions address these challenges in different ways but none of the institutions directly address the targets: DCU emphasised the development of the individual both inside and outside the formal learning process. UCC vowed to deliver an outstanding, student-centred teaching and learning experience with responsive, research which has a societal impact. UCD sets out to work with organisations including industry,

the professions and the wider community to ensure graduates have the adaptable expertise required to excel in changing work contexts to ensure employability. Maynooth planned to offer students new fields of study and subject combinations, greater choice of electives, additional opportunities to develop critical and analytic skills. They aim to enhance the sustainability and flexibility of taught Master's programmes, increasing enrolments from 1,000 to 1,400, with a combination of full-time and part-time delivery. TCD was looking to deliver the first phase of the Learning Foundry project which would increase STEM students in the university by 50% over ten years. NUI Galway has a new employability award and a new campus jobs project which it proposes as addressing this objective. UL is combining its graduate school and CPE into a single body allowing tailoring of its education and training, to the needs of postgraduate students be they full- or part time and liaising with key employers to develop Executive Education and other CPD offerings.

4.3.8.2 Objective 4

Objective 4 addresses the key issue of access. To address this objective DCU pledges it would develop, and implement a Widening Participation Strategy that would build on existing wide-ranging outreach and access initiatives targeted at underrepresented groups in society. It aimed to endeavour to systematically reduce the barriers to participation by mature, second chance, and lifelong learners and students with specific disabilities. It intended to continue its commitment to widening participation and enhancing access for all students, fostering an inclusive environment that mainstreams diversity and equality.

UCC proposed implementing an academic strategy to deliver an outstanding, student-centred teaching and learning experience, continue widening participation and enhancing access for all students, and sought to foster an inclusive environment that mainstreams diversity and equality. UCD was developing and implementing a suite of responses to widen access and ensure participation by diverse student cohorts by 2020. MU set out to build on its experience and achievements in supporting access, participation and success for students from diverse backgrounds. It proposed supporting staff in making curricula, teaching and learning more inclusive, international and intercultural.

TCD was seeking to enrol students with a broad range of talents and with the ability to engage with the kind of education the university offers. It suggested that its strategic approach aligns with the National Access Plan with particular attention given to the areas of priority target groups, data collection systems, mainstreaming and research. NUIG aimed to support a diverse student body and create a culture of inclusivity, by increasing to 24% from 21% (2017/18 baseline), the percentage of students from traditionally under-represented groups entering undergraduate study. UL focused on the equality of opportunity through the strategic and coordinated work of three dedicated units: The Access Office to support the recruitment, progression and success of students from disadvantaged backgrounds; the Mature Students Office and the Disability Office. UL planned to continue to foster enrolment through the coordinated work of the Mature Student Office, Disability Office and the UL Sanctuary initiative**.**

4.3.8.3 Objective 5

Objective 5 is the key objective of relevance to our research. DCU proposed developing a teaching and learning enhancement framework, which included the establishment of a new award in Learning Innovation for HE. It set out to review the assessment of teaching quality. The University intended to provide designated funding for staff teaching development, in disciplinary domains. DCU would develop research-supported metrics of the impact of T&L initiatives on the student learning experience. The college would build on its significant investment to date in digital teaching, and intended to deliver a step-change in its online programmes at both undergraduate and postgraduate level, by entering into a global strategic partnership with one of the leading online platforms worldwide, and by creating a substantial, new university unit that would provide expertise in creating online programmes to academic staff in each of its five faculties.

UCC aimed to deliver inspired teaching, learning and assessment excellence, informed by world-class research, delivered by staff who are supported to continually develop professional practice. UCC would position interdisciplinarity as a core academic mission of the university. It would create credit-bearing opportunities for all students to access a breadth of learning, and develop graduate attributes, including opportunities for students to engage with the creative arts and with language learning.

UCD considers it is committed to digital teaching and learning and proposed working with programme teams to incorporate blended learning to create flexibility and anticipate future digital worlds. It proposed developing it's virtual learning environment to provide a more consistent, accessible, and personalised online experience that enables technological enhancement of education provision, providing academic, programme and support staff with information regarding student engagement and to develop a digital learning and teaching policy.

MU intended to enhance supports for teaching development and learning innovation. It would strengthen capacity to support a culture of reflection and continuous improvement in teaching and learning practice, and would establish a teaching innovation fund. It proposed extending its teaching fellowship programme, funding the development and launch of three blended e-learning programmes which it would use to develop a Maynooth University strategy and action plan for blended and e-learning.

TCD proposed promoting the Momentum Programme, to support academics who have new leadership responsibilities or who are looking towards the next stage of their careers. The Trinity Education Project would encourage the adoption of new and relevant pedagogies, especially those relating to assessment, curriculum design and development, and the uptake of digital technologies. The Trinity Centre for Academic Practice and e-learning is focused on supporting academic and academic-related professional staff through professional development in teaching and learning It would enable professional development in face-to-face; blended and online environments. Trinity intended to continue to implement its major undergraduate change programme, which involves professional development of academic staff, and would seek opportunities to link the relevant professional development of its staff, especially with respect to assessment approaches, to the National Professional Development Framework.

NUIG aimed to ensure that staff who teach and design programmes are provided with professional training and development opportunities, to ensure that research-led teaching continues to generate a creative and stimulating environment. It set out to recognise and reward leadership and the scholarship of teaching and learning through the introduction of a new professorial promotion route It intended to review, revise and develop new

curricula to ensure that its portfolio of programmes is innovative, responsive to local, national and international demands. It aimed develop a policy for digital teaching and learning, include best practice guidelines for programme design and implementation, guidelines on data protection and "digital wellbeing" requirements; principles of course design and assessment for online/blended learning programmes; supports for student digital skills development and certification. This policy would be informed by the work of the National Forum.

UL proposed building on the work of its Centre for Teaching and Learning, targeting measures to support learners in areas with problematic non-progression rates. It planned programme/module reviews, the development of blended learning components and academic staff development in the area of transformative pedagogies. UL has already established the Educational Assistive Learning Technology Centre. While initially targeted at supporting students with disability, the Centre would be a key component in the development of technology assisted and enabled learning. A comprehensive Digital Learning Policy including lecture recording was planned to be implemented by 2019/20.

We can see that UCD, NUIG and UL have expressed a commitment to online policy development in Digital learning in these performance compacts. While UCC plans to "build on its strong eLearning capacity" it has made no commitment to developing policy through the compacts. DCU commits t*o "*renew and advance our Digital Teaching and Learning Strategy" which is based on existing policies and procedures. MU commits to commencing three eLearning programmes under this heading but does not specify how this will inform policy. TCD aims to encourage the adoption of new and relevant pedagogies, especially those relating to assessment, curriculum design and development, and the uptake of digital technologies but does not outline any policy initiatives to do so.

The policy development commitments made under Objective 5 by UCD, are the most focussed on policy committing to "Work with programme teams to incorporate blended learning, to create flexibility and anticipate the realities of future digital worlds" and to "Develop a digital learning and teaching policy that collates aspects of existing regulations, policies and guidelines that relate to the online environment, by 2020". NUIG give a

commitment to develop policy for digital teaching and learning by the end of 2018/2019, to include best practice guidelines for programme design and implementation, guidelines on data protection and "digital wellbeing" requirements; principles of course design and assessment for online/blended learning programmes; supports for student digital skills development and certification. UL commit to compiling comprehensive Digital Learning Policy including lecture recording shall be implemented by 2019/20. While these commitments are to be based on best research, they are not targeted at developing research in this area.

4.3.8.4 The implementation of Online learning policy in Higher Education

Reviewing the individual websites of each university, it can be seen that irrespective of the aspirations outlined in the compacts although many programmes incorporate an element of online delivery, only 50 were listed as fully online, in the Academic year 2019-20, of almost 2,000 programmes offered. This represents (2.5%) of programmes presented. This reflects the prevalence of online learning worldwide at 2% (HolonIQ, 2020), but the uptake of online learning during the COVID-19 pandemic will change this level of participation. It appears that while individual champions, or small teams in particular school's or faculties, are embracing fully online learning, HEI's have, up until now, been less inclined to take a cross institutional strategic approach to off-campus learning.

> We currently have sort of an undercover movement where there's an awful lot of blended learning taking place in full-time programs because all institutions have VLEs. Are they being used to their full potential? No, but the use of them is increasing. There's a growing awareness that more digital, and more blended, and more online, needs to be incorporated into all the educational offerings across all the institutions as we speak (Interviewee 4 2019, personal communication, 17 October).

While awareness is growing, planning for online learning, and moves to enable online learning have been less evident.

Table 14. Fully Online Programmes in Ireland[4]

University	*Fully Online Programmes*
UCG	13
DCU	11
UCC	2
UCD	11
MU	0
UL	3
TCD	10
TOTALS	**50**

This is highlighted in Table 14 which considers how many programmes the seven Irish Universities reviewed in this study, actually offer fully online.

4.3.8.5 Strategic Commitment

It is worth noting that a process for recognising the positive performance of institutions has been introduced as part of this accountability and performance review process. In 2019, the government allocated €5M in performance funding, to be awarded based on a review of Impact Assessment Case Studies submitted by HEI's. 39 cases were submitted with the HEA recommending 16 and these were approved by the DES (HEA, 2019). Rewarding the targeting of outcomes selected for attention by the HEA, represents a movement towards adopting a strategic approach to future planning which can facilitate planning over a longer term.

[4] (DCU, 2020a) (UCC, 2020), (UCD, 2020), (TCD, 2020), (NUIM, 2020), (NUIG, 2020), (UL, 2020)

Table 15 Performance based funding

Institution	*Award*	*Project*
CIT	€350,000	CIT AnSEO
GMIT	€350,000	Medical and Engineering Technology
ITS	€350,000	Insurance Practice
MIC	€350,000	Creative Arts /Future Technologies
MU	€350,000	ICARUS Climate Research Centre
NUIG	€350,000	European Research Performance
TCD	€350,000	International Students
TUD	€350,000	Establishment of Technological University
UCC	€350,000	Bystander Intervention
UCD	€350,000	UCD Research
UL	€350,000	Maths Upskilling
WIT	€350,000	Research Connections
DCU	€200,000	Widening Participation
DKIT	€200,000	Corporate Employer Partnership Programme
LIT	€200,000	LIT Certificate in Transition to Higher Education
LYIT	€200,000	Research
TOTAL	**€5,000,000**	

Table 15 outlines Performance based funding allocated in 2019 (HEA, 2019). The award of €200,000 to DCU is to promote widening participation, which is a positive development and recognition of the efforts DCU has been making in this area. Crafting policies that enable behavioural change requires more than the introduction of a range of metrics. As O'Shea and O' Hara (2020) highlight:

> The introduction of a qualitative/strategic component in the second evolution of the HESPF (2018–2021), while well intentioned, could potentially be suffocated by a significant increase in compliance related KPIs and detailed indicators with an attendant slighting of the strategic intent (O Shea and O Hara, 2020, p350).

Clearly when it comes to online learning and digital technology, although all colleges are aware of and interested in progressing online delivery, not all are at the same stage of development. Some institutions propose in their compacts engaging in trial or pilot online programmes and developing digital policies and procedures, while others, notably DCU, have well established online programmes and robust policies and procedures. However, even in the case of DCU, the discussion expresses a campus–centric approach. Little or no consideration is given, in any of the performance compacts, to the fully-online off-campus learner. There is a gap in policy formation to address the needs of this cohort of student.

4.3.9 Conclusions

4.3.9.1 Outcomes of the Analysis

The demand for education globally, specifically for flexible learning which is self-directed and customised to the student, is identified universally across International texts related to policy, in the first phase of this section. Texts benchmark existing practice globally in the implementation and management of the new models of online learning. Higher Education policies now need to enable learners to develop 21st century skills, including critical thinking, team-working, problem-solving, innovation, entrepreneurship and cross-cultural skills, all of which need to be incorporated in new forms of pedagogy. These skills can be delivered flexibly, online, as part of lifelong learning. Higher Educational Institutions will need to make them available to be learnt anytime, from anywhere to cater for the increasing demands on education. This will require training, resources, sharing of best practice, and coordination of standards internationally.

Parallel with the increased demand for education and the ever evolving range of technological tools and innovations in the educational environment is a contest for the control of education. Who is to learn what, and how should they learn it? This struggle is between what we broadly refer to as the Learning Community and the Knowledge Society. It is between the traditional view that education in itself is a benefit to society and the neoliberal view that in a globalised world education is required to provide skills to enable industry to compete, and that its success can be monitored by key performance indicators

New models of online learning require a different type of teaching, a tailored pedagogy suitable to an internet generation. This requires a movement away from the traditional approaches, emphasizing memorization or the application of simple procedures, which fail to advance learners "critical thinking skills" or autonomy. Those memorization and recall skills have been made redundant by the advancement of information technology, the Forth Industrial Revolution (Schwab, 2016b). To develop higher-order skills the teaching role migrates to that of mentors, mediators, guides, and facilitators. An important part of this role will be as learning coordinators, assessors, and designers.

The challenges highlighted internationally are mirrored in phase 2- meso where the Irish documents are considered. Later we will see their impact as the story of DCU and online learning illustrates what these changes can mean at a local /micro level. Adopting new standards on a national basis is best achieved through collaboration within the sector, agreement on definitions, sharing of best practice, and the cultivation of academic scholarship and publication within the sector. To implement change and maintain quality on an ongoing basis, requires a change process which is transparent, collaborative inclusive and sustainable. A raft of Irish government policies gave claim to national aspirations. They gave vision to what an Irish Higher education system should look like, but was frequently shackled by economic restraints the plans lacked an implementation roadmap. There is little evidence of a co-ordinated policy approach to move education forward with many of the policies appearing to have been drafted in isolation. In this environment the case for fully online learning lacked definition, structure, leadership and support.

We have seen how the National Forum was established and at first sought to define the state of online learning in Ireland and through consultation and collaboration to create a road map to move forward. Its attempts at incremental change have been overtaken by the need for emergency online teaching due to the pandemic. The initiation by the HEA of HESPF performance agreements with Higher Education Institutes has established a useful communication channel with the potential for co-ordinated strategic planning across the sector but the performance frameworks used have so far resulted in what presents as a two tier approach to fully online learning in Irish higher level education. The impact of existing policy and absence of a specific online learning policy in this area is illustrated in the case study in the next section.

4.4 Micro - Phase 3: Case Study telling the story of Dublin City University

4.4.1 Introduction

In this section the story is told of the impact of Irish online learning policy, through the perspective of one Irish Higher Education Institute, DCU. In using the case study format the history of the development of online learning in Ireland is traced. Insider insights convey how government policy, innovation, and technological development has impacted on the evolution of online learning over time. The case study is informed by a series interviews with key policy makers who had direct input into determining and implementing policy in the chosen case subject. Their comments are introduced where appropriate in the text to provide context and rich perceptions. The case highlights how online learning policy can continue to have impact in promoting wider access to higher education in Ireland.

Dublin City University (DCU), is a relatively young university located north of Dublin city, in the

Republic of Ireland. It was established as the National Institute for Higher Education, Dublin (NIHE) in 1975, and was elevated to university status in September 1989 by statute (Acts of the Oireachtas, 1997). DCU, caters for 17,000 students having completed an incorporation process, where teaching colleges St Patrick's College, Mater Dei Institute, and Church of Ireland College of Education were incorporated under the DCU umbrella, in September 2016. These colleges were amalgamated with the DCU School of Education Studies to form the DCU Institute of Education which has a combined total of over 4,000 students. DCU has a rich history of offering distance programmes, and of innovation in teaching employing new educational technologies. The National Distance Learning Centre (NDEC), was established in 1982, at DCU. It linked together the Irish universities and the National Institutes for Higher Education in Dublin and Limerick, in a collaboration to offer joint distance learning programmes through the NDEC, which was a national organisation based in DCU. Growing from this foundation, the National Institute for Digital Learning (NIDL) was established at Dublin City University in 2013.

4.4.1.1 Early Days

Opening up access to higher education came onto the agenda in Ireland in the early nineteen-eighties, building on the introduction of free second level education in 1966 by then Minister for Education, Donogh O'Malley. Higher education institutions needed to adopt more flexible policies to cater for the diverse needs of the adult student population (Clancy and Benson .1979). The National Distance Education Centre (NDEC), was set up in 1982, with Professor Chris Curran as founding Head, bringing together constituent members in a collaboration to provide distance education targeted at Irish adults.

> We had IBEC (Irish Business and Employers Confederation), the unions, city council, and various other players in there. While it worked, UCD never came aboard, the six other universities did, but Trinity went out very early (Interviewee 2 2019, personal communication, 9 July).

In 1986, NDEC offered its first undergraduate programme, a BSc in Information Technology. The first NDEC postgraduate programme, an MSc in Management and Applications of IT in Accounting was launched in 1990, in cooperation with the Irish Institute of Chartered Accountants. This was followed by a BA in Humanities programme in 1993 which was accredited by six universities. This time coincided with what was later to be deemed the "Celtic Tiger" era in Ireland. In 1995, fees for campus-based students were abolished by Labour party Minister for Education, Niamh Bhreathnach. This did not, however, include part-time off campus students. The MSc in Management of Operations started in 1997 as did a Bachelor of Nursing Studies (BNS), in cooperation with an Bord Altranais (the Irish Nursing Board). The MSc in Internet Systems followed in 2001 (Galvin and et al, 2012). NDEC produced self-instructional texts for its programmes in hard copy and distributed them by post to students. The texts consisted of modules, which were written by academics in member institutions. In addition, face-to-face tutorials were offered to students at a number of study centres around Ireland. Students selected their study centre based on their location and the institution with whom they were registered. Tutorials were hosted by a panel consisting of academics from each of the contributing institutions and active industry practitioners with academic training. Learners posted assignments back to tutors who provided detailed feedback and assessment. Annual exams were held face-to-face in exam centres around Ireland. Students could select which exam centre they wished to attend. Qualifications were accredited by DCU with no distinction from on-campus qualifications.

4.4.2 The Funding Challenge – filling a policy gap

Dr Denis Bancroft took over as Director in 1999 moving from the Open University(OU) in the UK. The future appeared to be promising. The biggest challenge facing the NDEC was funding.

Initially, NDEC received a bulk grant from the Government.

> When it started there was a lot of support from the HEA particularly, John Hayden, Secretary General, but it never came through with proper funding. The Higher Education Authority (HEA), promised to put online learning into the Recurrent Grant Allocation Model (RGAM), which would get paid per student, but this never happened (Interviewee 2 2019, personal communication, 7 July).

The National Distance Education Council, an advisory body of interested stakeholders, was setting out plans for the development of distance education in Ireland based on the first white paper on Adult Education in Ireland. This white paper recognised the value of lifelong learning, and assessed that there was need to significantly increase the scale and flexibility of existing provision, to promote strategic shifts towards adult-friendly policies within existing institutions (Government of Ireland, 2000). The future of the sector would be promising, if the White Paper on adult education was to prove accurate. It proposed a remodelled National Distance Education Council which would create a plan for the development of distance education in Ireland over the following five years. The new council would support institutions in their distance education planning, co-ordinate the work of the institutions, and govern the National Distance Education Centre (Irish Times, 2000). In 2001, the brand name Oscail, (Irish for Open) was launched to promote NDEC programmes. The teaching and learning model appeared to be working reasonably well at this time. Government's policy intent was

> To deliver education to some extent mirrored on the OU in the UK delivering educational opportunities to people who couldn't otherwise attend university (Interviewee 3 2019, personal communication, 27 August).

However, this was not a collaboration without its challenges. Co-ordinating a range of independent institutions and getting them to agree to joint programme, procedures, policies and plans did not always succeed.

> While the model was working, the collaboration between institutions was not always a harmonious one. The perception was that this was supposed to be a shared initiative governed by all the Irish universities but DCU took control (Interviewee 2 2019, personal communication 7 July)

An outsider view shared this perception "The other universities disengaged from Oscail over time and did their own thing. The concept of a national centre never really worked" (Interviewee 4 2019 personal communication, 17 October). The World-Wide Web now began impacting on education as it had done in other areas. In the late 1990s, the nature of distance education began to change radically, distance education started to move online. Oscail initiated a process to move its postgraduate programmes towards a fully online delivery environment, and later its undergraduate programmes (Galvin and et al, 2012). All of its postgraduate programmes were offered in an online-only format from 2003 (Boyle, O'Keeffe and Walsh, 2007). The rhetoric towards open and distance learning was still positive in 2001. The HEA, held a national symposium on open and distance learning declaring it favoured a "genuinely collaborative national model for ODL (open and distance learning)". Dr. Ronnie Saunders took over as Head of Oscail in late 2003. Two years later in 2005 the Government took the decision to withdraw funding from Oscail. Why did this happen?

> You had far more provision going to private colleges which would have emerged over that period. There was a significant number of linked providers and of existing universities or higher education institutions delivering programmes at community level. I would infer that it was a strategic decision, they made the decision that they no longer needed to make this kind of provision (Interviewee 3 2019, personal communication, 27 August).

The policy promises of the white paper on Adult Education in Ireland had failed to deliver a viable funding model. This left DCU with the dilemma of whether it should continue to support distance learning through Oscail? In keeping with a commitment the university had

made in its strategic plan to support "the development of e-learning and enabling technology, of distance education and the challenge of lifelong learning" (DCU, 2001), the University decided to continue operating Oscail as a separate unit within the college. This was consistent with a culture of strategic foresight which the university was cultivating, as outlined in the 2005-2010 Strategic plan *Leadership through Foresight* (DCU, 2005, as quoted in Munck and McConnell, 2009).

> The strategic intent (mission statement) of DCU articulated in Leadership through Foresight proclaimed that the university is 'a distinctive agent of radical innovation, within a culture of world-class excellence in higher education and scholarship' (Munck and McConnell, 2009, p35).

In the absence of a robust funding model, strategic policy choices would have to be made to ensure survival.

4.4.3 Strategic Options to fill a policy deficit

Elloumi observed that the environment that online learning institutions operate in is an open system, institutions have difficulty in maintaining proprietary offerings and require a realistic strategic perspective to gain sustainable competitive advantage (Elloumi and Anderson, 2004). The Internet had intensified the competition and rivalry among higher education institutions, particularly in distance education. Although the Internet had changed the look and feel of the learning experience, conventional factors like scale, scope, expertise of personnel, administration processes, and investment remained a perpetual source of competition. Oscail students now had to find ways to finance the total cost of their online studies, despite countless government policy statements in the past espousing the value of lifelong learning and continuous professional development and the need for flexible offerings to address these requirements. For example, in the *National Action Plan for Social Inclusion 2007-2016* the Government recognised the importance of:

> The ability to continuously develop skills and competencies through lifelong learning and up-skilling; supports for those with caring responsibilities and greater flexibility in work organisation……In consultation with the Department of Education and Science, the National Office for Equity of Access to Higher Education will set goals and targets and develop baseline data for the participation [In Higher Education] of students with a disability, mature students and those from socio-economically disadvantaged backgrounds (Ireland, 2007).

In reality, in the context of a global recession which was hitting Ireland severely, no funding was forthcoming, for mature, part-time, off-campus students After a series of interim Heads, Séamus Fox was appointed Head of Oscail in 2011. Oscail had to maintain strict budgetary discipline in order to survive. In this environment Oscail considered two strategic options, a niche strategy or a partnership.

4.4.3.1 Niche Strategy

This option was to select and promote those programmes best suited to online delivery, for which there would be a viable cohort willing to pay the cost of undertaking those programmes, without directly competing against the campus-based faculties of the host university, DCU. In the undergraduate area two pathways were offered, IT and Humanities. The IT pathway exploited DCU's reputation for excellence in this area to present a flexible offering to a large and growing niche of people who wished to upskill or formalise learning in the critical IT area but did not have the ability to attend traditional campus- based classes, "DCU had established a considerable reputation for education in IT under the leadership of Professor Michael Ryan" (Interviewee 5 2019, personal statement 24th October).

The Humanities pathway addressed the needs of learners who wished to study for vocational and self-development purposes. This stream offered subjects like English, History, Psychology, Sociology, and Philosophy presented in modular form, offering students the opportunity to self-pace their learning, and to combine subjects according to their interests and needs. The Postgraduate offering was targeted at graduates who were seeking to upskill or reskill to advance their careers. Fully online classes were presented at night or at weekends to facilitate minimum work disruption. Students could self-pace their studies to complete a Graduate Certificate, a Graduate Diploma or a Masters qualification in areas like Management of

Operations, Management of Information Systems, and later Management for Sustainable Development. In some cases, employers funded the studies of their employees as a form of professional development. This niche strategy allowed Oscail to offer:

> Increased flexibility, not only to provide 'second chance' education to adults who, due to family, work and other commitments, cannot attend full-time (or part-time)

> on-campus, but also for the increasing number of the Irish workforce (and those not in work), who require reskilling/upskilling and continued professional development (Delaney and Fox, 2013).

4.4.3.2 Partnership

In this option, DCU would address the issue of getting to scale with online offerings to make them more rewarding by partnering with an "enabler" who would promote the programmes internationally to gain additional learners worldwide. There enablers are companies that help brick and-mortar colleges build online programmes as quickly as possible that have "positioned" themselves as experts in all the areas that have allowed for-profit online colleges to flourish: marketing, technology, and customer support (Kolowich, 2014). Discussions took place with a number of providers in the past with a view to making DCU programmes available online to a worldwide audience:

> It's a model that has high initial costs and lower marginal costs, as you increase you can double your numbers without doubling your costs. The challenge in digital education is one of scale. We've talked to up to a dozen external organizations who are delivering online learning of one kind or another (Interviewee 3 2019, personal communication, 27 August).

4.4.3.3 Conflicting Pressures. Politics, and Power struggles

As outlined in the literature review, the policy process is a complex political procedure in which there are many actors: politicians, pressure groups, civil servants, and publicly employed professionals Hill (2014). It consists of both policy texts and policy discourses (Ball, 2015). Some of these competing powers are struggling for authority, identity, and control (Apple,2019). This struggle in the Online Learning Environment is illustrated in an adapted version of Porters Five Forces Model (1985) in Figure 17.

.

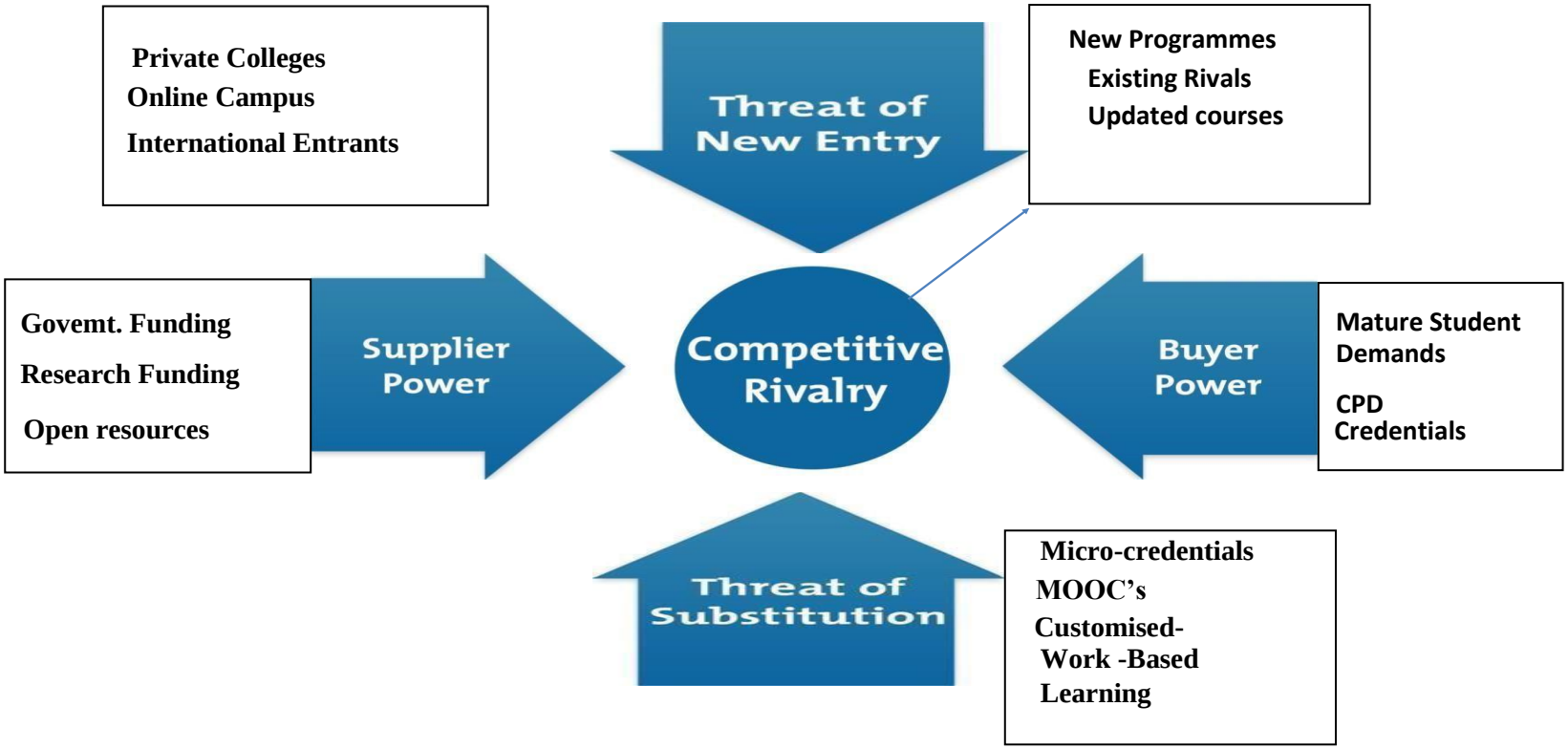


Figure 17 The Five Forces Model Impact on Online Learning Policy

Figure 17 illustrates the conflicting tensions active in the online learning policy environment.

Power of Buyers: Mature Learners make higher demands for return on spending. The commodification of education can lead to demands for credentials, which have not been earned. Organisations funding CPD can make demands to influence content.

Power of Substitutes: Other options open to potential learners include: MOOC's where learners can participate for free. Customised learning can be supplied by providers directly to organisations. The provision of micro credentials by non-academic providers can suit some candidates.

Power of Existing Competitors: This includes current rivals, new programme offerings and updated materials or methods.

Power of Suppliers: In this environment suppliers take the form of Government who provide funds in return for the provision of services as specified by their policy priorities. Research Funding from Industry or benefactors is a source of supply. Open Resources supplying academic material, can exert pressure to constantly update content.

Power of New Entrants: New providers entering the environment include private colleges, traditional universities going online, and International suppliers competing across geographical borders for students.

Each of these sources of power exerts pressure on policy makers, to legislate and implement policy to cater for their particular concerns. No policy environment remains in a state of constant stability. Competing vested interests vie to be incorporated in an ever-evolving policy process. The policy process is most likely to be successful, when it is transparent, inclusive and renewable.

4.4.4 Leadership

Professor Brian Mac Craith was appointed President of DCU in 2010. His leadership proved vital in the cultivation of online learning at DCU. When Professor Mac Craith came to office in 2010. austerity was having a profound effect, but incorporating digital learning in DCU's offering was always part of Mac Craiths vision. "Digital was very much called out in the first strategic plan that he would have developed in 2010" (Interviewee 3 2019, personal

communication 27 August). Professor Mac Craith established the VOLG (Virtual and On-line Learning Group), led by Registrar, Professor Anne Scott, Deputy President of DCU. It consisted of a group from across the university and had people with an interest in online learning like, Séamus Fox, Head of Oscail, Jean Hughes, Head of the Learning Innovation Unit, Billy Kelly, Dean of Teaching & Learning, and representatives from each of the faculties. The VOLG group reported in 2012 and included in its recommendations the establishing of a National Centre for Digital Learning. This evolved into the National Institute of Digital Learning (NIDL), which was established in November 2013. Professor Mark Brown, commenced in February 2014, as Ireland's first Chair in Digital Learning, and inaugural Director of the National Institute for Digital Learning (NIDL). The Institute has as its mission:

> To design, implement and research distinctive and transformative models of Blended Online and Digital Learning education which help to transform lives and societies by providing strategic leadership, enabling and contributing to world-class scholarship, and promoting academic and operational excellence (NIDL, 2019).

At this time Oscail changed its name to the Open Education Unit (OEU) and was one part of four strands that made up the NIDL. The other strands were the Teaching Enhancement Unit (TEU), which has responsibility for teaching and learning support and development in the University. The Ideas Lab, is an innovation incubator which has a goal of exploring new and alternative models of education. The Ideas Lab manages the Fáilte ar Líne Project, and DCU's MOOC initiatives. Finally, the Digital Learning Research Network, aims to strategically engage with professional bodies and key external stakeholders in order to influence policy and benchmark the effective use of digital and online learning against international best practice, while promoting leadership in online learning and a community of practice. The NIDL launched its brand name DCU Connected at this time, and it presents programmes at undergraduate and postgraduate level to national and international learners under this brand-name.

In DCU's most recent strategic plan, Talent Discovery and Transformation 2017 – 2022**,** the final one under the Presidency of Professor Brian Mac Craith, the aspiration is presented that DCU aims to implement a Digital Campus Vision, to establish 'an integrated, digitally connected university through an advanced network of connected infrastructure, digital platforms and people' (DCU, 2017).

4.4.5. Culture & Consultation – DCU-Fuse

The phrase "culture eats strategy for breakfast", is most often credited to Peter Drucker. It conveys that to have the best chance at success a policy requires a transparent process, which is sustained by interested stakeholders, in a supportive environment. An online consultative process called DCU Fuse, was undertaken in May 2017 to give DCU stakeholders the opportunity to discuss, in an online workshop format, DCU's new strategic plan. As this was shortly after the incorporation process outlined earlier, building community was particularly important. The 24-hour event generated almost 6,000 separate online contributions and over 7,000 likes were shared, along with around 80,000 page views. Contributors took part from 21 countries, spending on average 74 minutes on the platform. A wide spectrum of stakeholders contributed: Academic Staff made up 22%, Alumni 8%, External Guests 10%, Postgraduate Students, 5% Undergraduate Students 24%, and Professional Staff 31% (Brown, 2017). They contributed by engaging in 32 separate conversations, over four strands, through an online discussion forum where they could discuss virtually, or post to online forum threads. DCU Student Union President, Niall Behan commented:

> DCU-Fuse brought large-scale town hall meetings to the 21st Century online environment. This level of commitment to ensuring all opinions are heard, is part of a holistic model everyone at DCU is proud of. By being self-reflective and inquisitive in this manner, all aspects of the student experience can be improved, creating an even better institution (ibid).

This proactive process built consensus, and support for policies targeted to the future. It provided a unique 21st Century vehicle to encourage debate, and discussion on the choices available for DCU's new strategic plan, released later in 2017 and paved the way for successful implementation (Brown, 2017). Criticisms of the process include that the university failed to capitalise on the initiative. Although some follow up events were organised under the DCU Fuse title they did not attract the same level of participation. This process contrasts with the recent reactive move to online teaching provoked by the COVOID-19 crisis, which was not a planned, policy driven move, and had some negative

consequences as a result. Face to face lectures recorded in haste through a lecture capture format provide students with a less than satisfactory learning experience. Some lecturers are reluctant participants in online learning.

> Most academics are research orientated they don't pay enough attention to their lectures often delivering the same lecture year after year without updating them. The problem with the University system is the lecturer doesn't want to know. Their focus is on the research, the student is a pest and having a better form of communication only makes it worse (Interviewee 2 2019, personal communication, 7 July).

This highlights how as stakeholders some lecturers have contrasting requirements than the students they teach. In reality how the institution values the activities they perform; teaching scholarship and contribution to society, is measured in the salary and promotions policies they operate. The contrasting needs of different stakeholders was exacerbated by an emergency dash to online teaching in response to COVID-19. The need to balance the requirements of a variety of stakeholders was recognised by Kaplan and Norton (1998), who presented their Balanced Score Card Model. This was adapted for use in an educational setting by Umashankar, and Dutt (2007, p64) and is illustrated in Figure 18. In this model, there are four stakeholder groups whose differing requirements must both be met and balanced when providing a service, in this case, education:

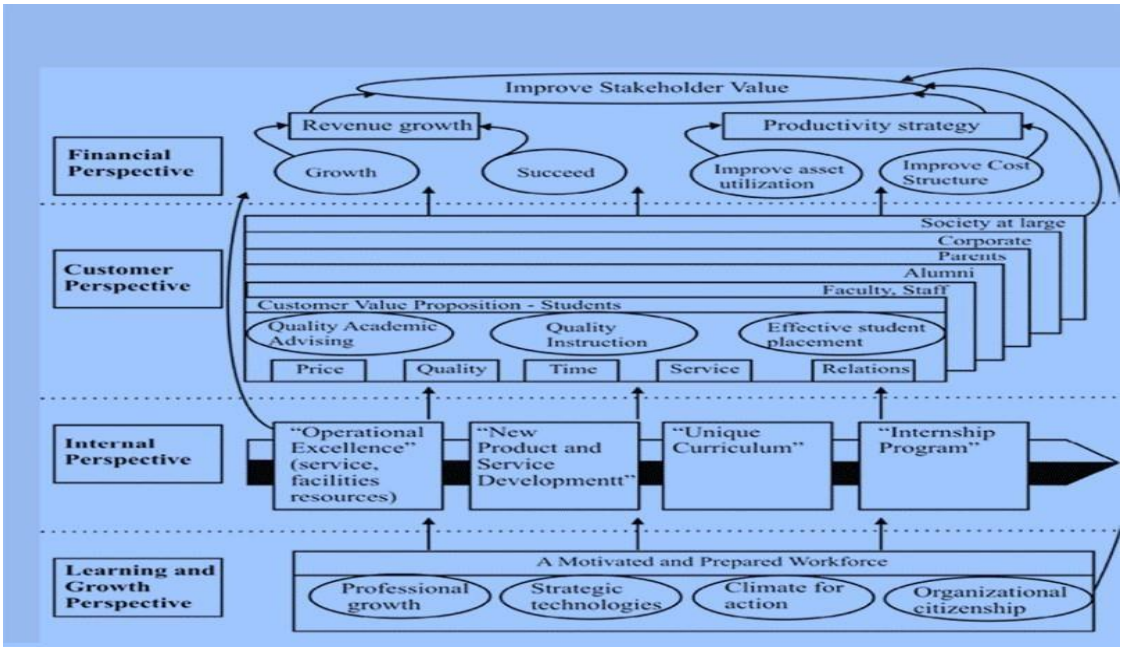


Figure 18 The Balanced Score Card in Education

Each of the four perspectives are outlined below:

4.4.5.1 The Financial perspective: This requires a service provider to adhere to financial considerations like staying within budget, generating targeted income and using assets to provide maximum benefit.

4.4.5.2 The Customer perspective: Examines performance from a customer viewpoint. This can include student perception of value, government metrics and the values expected by society. That is to say, the education service may have a range of different customers with a variety of expectations, all of which must be balanced.

4.4.5.3. The Internal perspective: Internal players within the organisation., like lecturers and administrators, have requirements to ensure operational excellence on a day-to-day basis. Investment is needed to fund new offerings to ensure that the organisation and its employees remain relevant and current and to ensure the best staff are retained and incentivised. As we have seen some staff are committed to research and view teaching as a chore. Often online teaching can be viewed a further unnecessary burden deflecting academics from their preferred agenda.

4.4.5.4. Learning and Growth Perspective: Considerations from this perspective build around ensuring the organisation is sustainable in the long term. Investment in training, growth and technology are required to ensure the organisation continues to do the right things, with the most suitable equipment, in the right way. The requirements of each of these groups should be considered when crafting policy to improve chances of successful implementation. There are in addition global influences on policy formation, these are discussed in the next section

4.4.6 Global Influences

One of the most significant features of online learning worldwide in general, and specifically in Europe, is that it varies hugely from country to country: “The way it's supported, the size, the numbers, the tradition, the culture and particularly how it's funded is hugely different

from Germany and Holland, where it's really well-funded, to Ireland where it is not funded at all" (Interviewee 2, 2019, personal communication 16th July) .The EU has fostered initiatives like funding research in the field of online learning. The European Commission has presented papers on digital education, digital learning, and initiatives like DigiCompEdu (Fucci, 2016) which is a basic framework for enhancing the skills of those who are delivering online learning. Organisations like European Union and the OECD often lead the way in getting governments to think ahead or at least to be seen not to be falling behind developments. Leading European countries can provide exemplars for change in relation to the speed of adoption of new methods of online learning. Benchmarking against best practice as executed in other European countries can provide models which can be adapted to local conditions. However, there are limitations to the influence such bodies can have.

> It's really good to have to have all those initiatives in place, high level policy, contextual documents, and objectives but then, like in Ireland, there's an even greater gap between discussion and implementation on the ground (Interviewee 4 2019, personal communication, 17th October)

There is a gap in Ireland between government and top level industry rhetoric and how policy is implemented in education. Other European countries have moved much faster to address this challenge. "The Austrian bureaucracy centres around traditional programmes. People have found their ways around it and in many cases students can be much more flexible. Countries like Switzerland and Denmark are enabling this through their mainstream budgets" (Interviewee 4 2019, personal communication 17t October). DCU, through the NIDL, is an active participant in European and World Distance education communities as a member of bodies like EDEN (European Distance and ELearning Network,) EADTU (European Association of Distance Teaching Universities) and ICDE (International Council for Open and Distance Education) who held their world conference hosted by NIDL in Dublin, in 2019. Participation in these communities facilitates benchmarking, collaboration, and co-operation with the leaders in online learning internationally and places DCU in a position to learn from best practice elsewhere.

4.4.7 Irish University Sector

The Irish Higher education sector has a growing awareness of online learning and the need to fully engage with it. The National Forum for the Enhancement of Teaching and Learning began in October 2013 aiming to enhance teaching and learning for all students in higher education and to be an advisory body to the Higher Education Authority (HEA). One of its strategic aims is to support those who learn, teach, and support learning to embrace and harness the potential of digital technologies, with the goal of enhancing learning, teaching, and overall digital capability. We have seen from the literature review that the focus of the Forum was wide and its definition of online learning, unclear. In addition, the uptake of fully online models of Teaching and Learning is limited.

> There is a slight dichotomy in the discourse, between everybody who says' yes online learning is the future', and that we can make learning much more flexible and delivery much more flexible and collegiate for a whole new type of learner, upskilling people at work and in work, and all sorts of wonderful things. But actually, the policies to enable all of that to happen haven't really happened. (Interviewee 4 2019, personal communication, 17 October).

However, the use of online learning has been increasing. "There's a growing awareness that more digital, and more blended, and more online, needs to be incorporated into all the educational offerings across all the institutions as we speak" (Interviewee 4 2019, personal communication, 17 October). While awareness is growing, planning for, and enabling the growth in online learning is less clear:

> I'm also shocked at how little mention e-learning, and distance, and online learning gets in the National Skills Strategy which is supposed to take us to 2025, or the National Strategy for Higher Education which is to take us to 2030. It has a small mention, a tiny mention (Interviewee 1 2019, personal communication, 3 July).

There is one Government scheme which has encouraged online delivery in a practical way, and continues to do so, the Springboard initiative. This is reviewed in the next section.

4.4.8. Springboard

One Government policy initiative that has channelled funding to online programmes is Springboard. This programme began in 2011 as part of the Government's Jobs Initiative and is co-funded by the Government of Ireland and the European Social Fund. It complements the core State-funded education and training system and provides free or 90%-funded upskilling and reskilling higher education opportunities in areas of identified skills need. The initiative's primary target group when it was established was unemployed people with a previous history of employment. Over recent years, with the decline in numbers on the live unemployment register in Ireland, the focus was changed to include more people in employment. DCU Open Education has received funding for undergraduate IT programmes and some postgraduate management programmes under this initiative.

> One of the things that I think has been really helpful in trying to make sure that we have a good core, has been that Springboard has been available for online or distance programs, I think that's good. I was part of a strategic discussion at the government level and at one point they were going to give universities the fee per student, regardless of registration type, full-time, part-time, or online. It seemed to be almost ready to deliver. I think it's really poor that it never happened (Interviewee 1 2019 personal communication, 3 July).

This Springboard funding is directed at particular programmes delivered over one year (or two years for some IT programmes), but must be tendered for each year, with places capped. In the absence of a coordinated approach in Irish Higher Education Institutions, there is the chance of failing to capitalise on a huge opportunity:

> There's a much bigger risk now of not doing anything in my opinion, and we'd be better off making our model more inclusive, and more flexible, and going with the flow and you know Ireland doesn't have a lot of other natural resources. We have human capital if you want to call it that. And if we don't invest in the human capital side of things we might as well give up (Interviewee 4 2019, personal communication, 17 October)

A new approach, exploring the MOOC pathway was chosen by DCU in 2016. This is reviewed in the next section.

4.4.9 Back to the Future

The absence of a sectoral strategy policy and the lack of progress in deciding on a funding policy for Higher education, moved DCU to continue exploring its partnership options. In June 2016, NIDL launched an online Irish Language and Culture short course, Fáilte ar Líne, on the

FutureLearn platform. This MOOC initiative was co-funded by the Department of Culture, Heritage and Gaeltacht, under its twenty-year strategy for the Irish Language with support from the Irish National Lottery. Over 70,000 learners from 135 countries participated in the programme. Its success led to the development of a suite of follow on short courses. FutureLearn is a digital education platform founded in December 2012. The company is jointly owned by The Open University of the UK and SEEK Ltd, an Australia-based job seekers platform. The success of the Fáilte ar Líne project and the relationship built with FutureLearn during this project, highlighted to both parties that further collaboration would be mutually beneficial. This was in keeping with DCU's search, over a number of years, for a strategic partner to build the scale of its online programmes by attracting learners worldwide. What Future Learn offers, is the potential to present programs at scale nationally and internationally. "So our future business model is based on an enrolment of a hundred students. The average enrolment on a part time postgraduate program in D.C.U. currently is between 15 and 20" (Interviewee 3 2019, personal communication, 27 August). Interest in this option continued to grow as the uptake of Massive Open Online Courses (MOOC's) started to impact on the educational environment worldwide:

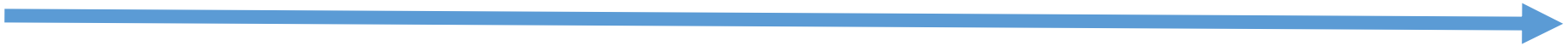
> Without engaging in the MOOC debate at a policy level, there is a risk that Ireland may be inadequately prepared to respond to the new global online learning environment, especially as the movement evolves and new types of courses and formal credit earning pathways emerge from reputable institutions (Brown and Costello, 2016).

On June 16th 2019, DCU and FutureLearn announced a new partnership going forward where DCU would become part of a network of selected Universities worldwide offering programmes on the FutureLearn platform. This plan involves DCU offering a range of short and longer accredited courses from micro credentials to postgraduate degrees aimed at working professionals and global learners. The courses offered are to cover a wide variety

of subjects: from Artificial Intelligence to Irish Language and Culture, to FinTech for Business Leaders, through the National Institute for Digital Learning.

> I am delighted that DCU has become one of a small number of global university partners of FutureLearn. This partnership further strengthens DCU's commitment to increasing educational opportunity, and supporting a culture of innovation in learning. By delivering a wide range of flexible, technology enhanced programmes, we can ensure DCU remains at the cutting edge of education's digital revolution
>
> (Brian Mac Craith, 2019

Free 2nd Level Education 1966	Murphy report 1973	Kenny Report 1983	White Paper Adult Education in Ireland 2000	Govt. withdraws funding from Oscail 2005	National Action Plan for Social Inclusion 2007	HEA Discussion Paper Open & Flexible Learning 2009	Hunt Report 2011	National Plan for Equity of Access 2015	Nat. Forum Digital Roadmap 2015	National Skills Strategy 2016	Cassell's report 2016	Perform. Funding Compacts 2018	Dept. Further & Higher Education Started 2020	Index Survey 2020



NIHE Dublin 1975	NDEC Started 1985	DCU University 1989	DCU Strategic Plan Leading Change 2001-2005	Oscail Started 2001	DCU funds Oscail 2005	DCU Strategic Plan Leadership Through Foresight 2006-2008	Brian Mc Craith President of DCU 2010	DCU Strategic Plan Making a Difference 2008-2010	Springboard 2011	DCU Strategic Plan Transforming Lives & Societies 2012-2017	VOLG Group 2012	NIDL& OEU 2013	DCU Connected2014	DCU T & L Strategy 2017-2022	DCU Strategic Plan Talent Discovery Transformation 2017-2022	DCU Fuse 2017	Fáilte ar Line 2018	Future Learn 2019	Daire Keogh President of DCU 2020

Figure 19 Timeline of DCU Response to Government Policy Texts and Discourse

Figure 19 illustrates the major milestones impacting on educational policy in Ireland as relevant to online learning in Higher Education and charts how DCU has responded to those milestones. It should be noted that in most cases there appears to have been a relatively weak connection between Government policy initiatives and DCU's own policy initiatives. For example, the Digital Roadmap had no influence on DCU policy as plans were already well underway internally to address this issue in DCU.

4.4.10 Summary of DCU Case Study

In summary, online learning has been part of the fabric of DCU since it emerged at the start of the twenty-first century. Building on a tradition of distance learning at DCU through NDEC and Oscail, the National Institute for Digital Learning has shifted fully online learning from the periphery towards the mainstream of teaching and learning. This shift was cultivated, to a large extent by the leadership of its President Professor Brian Mac Craith who had the foresight to see the opportunity presented through smart use of technology, in challenging economic times. Although the public policy language was positive towards online learning over decades, when it came to funding and implementing these new models, investment did not match the rhetoric.

During the lifetime of the current Performance Compact with the HEA (DCU and HEA, 2018) DCU commits to deliver a step-change in its on-line programmes at both undergraduate and postgraduate levels. This is to be achieved by entering into a global strategic partnership with FutureLearn and by "creating a substantial new university unit that would provide expertise in creating online programmes to academic staff in each of our five faculties" (DCU and HEA, 2018). Examples of the impact of these developments suggested in the HESPF include: Online optional modules for first year undergraduate students, and a range of new online postgraduate programmes developed with each of its faculties. An online engagement mechanism for international students, CPD offerings addressing lifelong learning and upskilling needs of individuals and organisations.

The next phase of DCU's commitment to online learning has been accelerated by the COVID-19 pandemic. The foresight and the organisational learning it has acquired through presenting and managing Higher Education programmes online, has positioned it favourably to provide a model of best practice nationally and to contribute positively to the future of online learning internationally.

4.4.11 Conclusion

In this chapter, research findings were presented and discussed following a three phased approach:

In Phase One, an analysis was conducted of International policy texts. Across International texts, a recurring theme was that demands on international education systems have changed as growing numbers worldwide seek to access higher education and see online learning as a credible option. In Europe, 90% of Higher Educational intuitions employ some level of online learning however, in the main this is not a focussed cross-institutional strategy. Globalisation and digitalisation are changing the requirements made of Higher Education not just by traditional students, but by a growing cohort of lifelong learners who need to keep their skills current, in a knowledge based, fast changing society. The skills they need to learn are different too. Soft skills, transversal skills, communications and problem solving, team based skills are needed to tackle 21st Century challenges. These demands are primarily driven by vocational, economic and but principally, cost drivers.

While empirical evidence of what is actually happening in the implementation of online learning is sparse particularly in Europe, there is strong evidence of what works best in implementation of fully online learning. Inadequate technological infrastructure, in particular insufficient internet speed, is a major barrier to success. These needs and best practice methods should form the basis of crafting contemporary policy in online leaning with what works best being shared internationally. Building teacher capacity to teach in an online environment is vital. Winning the commitment and buy-in of educators is important to success of the strategies. Online educational policies are more sustainable if they are embedded in an overarching strategy, if cost savings can be made and if a governance structure is established that is responsive to implementing necessary changes.

Taking an incremental approach, a three step method has proved effective with the first step addressing those technological deficiencies and assuring the local education community of the quality that can be built into online learning. In the second step enablers are put in place to align online learning with campus based practice. This includes sharing knowledge and best practice, collaborating between institutions to agree standards and procedures and raising awareness of online opportunities with students. Cultivating research on new pedagogy suitable for the online environment, and archiving teaching materials on a national basis for open access, also helps. In the third step online learning begins helping to shape the mainstream teaching and learning approaches of Higher Educational Institutions. This is achieved through policy alignment across institutions, embedding online learning in the mainstream and taking a unified cross -sector approach to

improve overall efficiency and effectiveness. Senior Management support and leadership is crucial.

In Phase 2 Irish policy texts and performance compacts between the HEA and Higher Education Institutes were reviewed. The experience in Ireland has been patchy. Pockets of good practice have developed in isolation, when individuals or particular faculties have championed the cause of online learning, rather than through the implementation of a national strategy or through unified institutional vision and mission. This is partly due to a lack of an adequate funding model which has been suggested in many policy texts over decades, but never delivered upon. Countless policies over decades have highlighted the potential of online learning to facilitate flexible learning, to open up access to many groups who would otherwise be unable to participate in lifelong learning, however most of these policies, however well-intentioned have failed to implement a structured delivery plan which is properly funded. Indeed, it was noted in the research that Irish policy texts in this area seldom cross reference one another.

The National Forum has been tasked to develop this area in recent years and while it has moved cautiously building understanding, community and consensus, recent developments show signs of green shoots with agreement that the sector should share professional development opportunities, teaching, learning and assessment resources and encourage scholarship in the area of online learning in the sector. Capturing the baseline of activity gives a greater chance to build success. In Ireland, the recent *INDEx Survey of the Irish National Digital experience* (National Forum, 2020), surveyed students and teachers in Irish higher level education to get baseline data on digital skills in Ireland. It captured some very useful data, however, the INDEx survey failed to identify the delivery mode of the surveyed populations, missing the opportunity to identify the fully online cohort targeted in our research. The requirements of off-campus students are seldom identified to senior management as Irish policies are almost exclusively campus-centric.

Performance compacts between The HEA and the HEI's as recommended by The *National Strategy for Higher Education to 2030* (Hunt, 2011) commenced in 2014. These set out how each institution proposed to contribute to national objectives utilising its core skills. The review looked at the current compacts (2018-2021) which addressed 6 overall objectives broken into a series of targets under each objective. The result has been a compliance based

approach where existing stand-alone strategic plans were adjusted to fit the objectives and targets of the HESPF's. As a vehicle to fashion strategic intent and monitor performance these compacts have huge potential, however the lack of substantial incentives to use them in this way is currently limiting their usefulness.

Phase 3 presented, a case study of online learning at DCU. Distance learning has been an integral part of DCU for nearly thirty years. In the absence of a robust policy to implement an appropriate funding model, the University has had to seek out creative routes to champion online learning through partnerships and building community relationships with online educators globally. This foresight has placed DCU in a strong position to overcome the difficult times experienced globally now in 2020, and should enable the University to become the Digital Campus it sets out to become in its current Strategic Plan, making online learning a core part of the student experience in each of its five faculties, in the future.

The history of online learning in DCU has not been a smooth journey and the case study outlines how the rhetoric seldom matched the follow up actions when policy met funding for fully online higher education at DCU. Often consigned to the periphery, the lack of robust policy implementation necessitated innovation, partnership and resilience to survive. The sector as a whole has witnessed pockets of good practice, but the absence of a coherent national strategic approach to fully online learning has hampered progress to date. The case study outlines how one Irish University, DCU, has successfully responded to new models of online learning. Having the agility to respond to environmental changes has however seen some smaller private colleges react nimbly to the opportunities these models present for example Hibernia College has led the way in fully online teacher education (Hibernia, 2020). The successes DCU has had have been facilitated by a culture of change through consultation as evidenced by the DCU-Fuse initiative. Having a process of implementation, and a culture which enables innovation and change, is essential to the success of online learning in DCU, and in any Higher Education Institute which wishes to go down this route.

CHAPTER 5 - CONCLUSION

5.1 Introduction

This chapter reflects on the study in terms of the realisation of its three main research objectives:

> To investigate how the Irish policy environment has responded to new models of online learning.
>
> To analyse how the Irish University sector has responded to the opportunities and the challenges presented by the emergence of new models of online learning.
>
> To explore how one university has responded to government policy texts and policy discourse.

We have seen in phase 1 and phase 2 of the research, that on the basis of the evidence available in policy texts, and through policy discourses the development of online learning has largely been a "bottom up" phenomenon. As outlined in this research, the implementation of online learning, both in Ireland and internationally was initially patchy. In Europe, most higher education providers had some level of online participation, however, it was institution-wide in less than 50% of cases (Popescu, 2014). This could be explained by the piloting of small online learning initiatives by individual faculty members or departments, rather than by being encouraged through institutional strategy. This scenario also appears to be the case in most Irish Higher Educational Institutions.

One of the greatest challenges the study reveals to implementing online learning and incorporating it in policy was overcoming cultural barriers. To move online learning from the periphery into more mainstream provision, it was necessary for traditionally-minded organisations and interested third-parties to accept and be reassured that full online delivery maintains standards of academic rigour and reliability. The research signals how the issue of quality assurance became highly relevant in the online environment with the ICDE recommending that online quality models should be adopted by mainstream educational institutions (Ossiannilsson, Williams and Brown, 2015). The need to get more reluctant staff members on-board with the idea of online learning has in the past been a further challenge. There are few direct benefits for academics to innovate in their teaching, and the research points out that staff development and support are essential to promote and encourage uptake. As Salmon

(2005, p.205) advised “To engage large numbers of academics, any approach must seek to ensure ownership, not only of content but also of pedagogy”. Salmon describes this as moving academics from” flapping to flying”, in relation to adopting online learning. It was in that context that this research started in 2018, with recent events in the context of the Covid-19 pandemic making the need for a coherent, cross-sector policy for online learning a more widespread concern across the Irish Higher Education landscape.

5.2 The Response of the Irish Policy Environment to new models of Online Learning

In Ireland, the research has found little evidence of a coherent overall strategy on online learning in Higher Education. In the US, online learning has matured to become an established part of the higher education landscape, offering convenience and flexibility (Garrett, 2019). The difference, is partially explained by the control of education in both jurisdictions, with hundreds of private colleges offering higher education in the US to make a profit, while most universities in Ireland are still largely state funded. Arguably, online learning policy is most effective if it is embedded in an overarching strategy, if cost savings can be made, and if a governance structure is established that is responsive to implementing necessary changes, while ensuring continuity over time (Conrads et al., 2017). It is clear that the Irish policy environment up until now, has taken a tentative approach to new models of online learning and has not embraced the opportunities it provides.

Research in the field suggests that online-learning is at its most useful by providing greater flexibility, convenience, and more effective use of classroom time, regardless of whether learners are off-campus or on-campus, traditional or non-traditional students. Many of the drivers for using technology in education were outlined by Plomp and Pelgrum (1993) as vocational, social, economic, commercial, marketing, cost effectiveness, transformation, and, pedagogical. Governments cannot compel educators to embrace online learning, they can however, recognise the potential it presents and give priority to, particular drivers to provide the conditions in which it can flourish. Clearly in the US the driver is economic, with private providers seeing the financial rewards and potential cost savings available through online learning.

The National Forum for the Enhancement of Teaching and Learning in Higher Education emerged in Ireland in 2014. Developing digital learning became a major part of its mission. Initially, it consulted with the sector to establish what digital learning practice was happening on the ground, and to discover how it could be developed, creating enabling policies which would be informed by, and give guidance to the sector. They found that the Irish experience mirrored most international online growth, with pockets of good practice and individual academics and faculties leading the development. The National Forum has struggled to engage senior leadership in Irish Higher Education in the promotion of online learning, as evidenced by an outside review of its activities by Paris-based Learning Avenue (Henard, 2017), while recognising that this engagement was essential to its development. It continues to encourage the sector to act collectively to share knowledge and expertise, and to fast-track the adoption of online learning efficiently and effectively. Its latest strategy focuses on promoting professional development for staff in digital learning, supporting staff to harness the potential of digital technology, enhancing the development of digital teaching and learning within disciplines and across disciplines, and developing student success. However, prior to the Covid-19 crisis the focus on digital learning gave little attention to supporting the development of fully online delivery for distance students.

The conditions called out in the literature to facilitate online learning include fast broadband access, countries with higher fixed or mobile broadband availability are more likely to exhibit prevalence of online learning, and none of the countries without significant broadband do so (Garrett, 2019). This remains to be a problem in many parts of rural Ireland and the implementation of Government policy to address this has been slow and controversial. Taking a unified cross-sector approach to online learning can improve the efficiency of the sector and may even support greater regional development. This approach involves aligning policies in relation to flexible learning and other areas of development across sectors and countries. It requires making potential students aware of the opportunities that online learning presents and cultivating a demand for online learning, particularly where no alternative options are available. Promoting research into pedagogical practice in the use of online learning on an ongoing basis to ensure it is achieving learning outcomes should help

to develop greater sectoral expertise. The thesis suggests that new found expertise in online learning should be consolidated within the wider educational context with the promotion of common approaches to issues like data protection, assessment and sharing digital resources. This expertise would help to transform teaching and learning and to embed online learning as a mode of delivery within the sector. Policies and procedures in these areas are still in an early stage of development in Ireland, and although we have reviewed both policy texts and policy discourses which espouse these forms of good practice, there is little evidence of practical action to implement recognised best practice.

Identifying and sharing effective ways to fund and structure higher education systems to ensure they work well include the question of how to reward good teaching and innovation activities. Ireland has become increasingly dependent on foreign direct investment (FDI) to provide jobs and tax revenue, particularly in the knowledge economy. There is a tension between providing education as a public good for the benefit of both the individual and society, against the economic pressures to provide suitably qualified knowledge workers who can compete in a globalised, neo-liberal marketplace. Policy is based on choice, with proactive, evidence-based options, which are transparent, credible and have the support of stakeholders being the most likely to succeed. There has been paralysis in relation to the funding of Higher Education in Ireland, with no progress made since the Cassells Report (2016) was issued. Until this "wicked problem" (Churchman, 1967) is tackled, and a clear pathway for future funding is established, the opportunities afforded by online learning as a distinct delivery mode are likely to remain unfulfilled. A clear definition of what is understood as fully online learning in Irish policy documents is elusive. In order to improve the implementation of online learning it must first be defined as has been done in this research:

> Education being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment (Singh and Thurman, 2019, p303).

Once Online Learning is unambiguously defined as a delivery mode and that definition clearly agreed by the sector and policy makers, it can be measured and improved.

Finding No.1 The characterisation of online learning in Ireland needs clear definition

5.3 How has The Irish University Sector responded to new models of Online Learning?

Higher education has traditionally been seen as a driver of social and economic progress (Garrett, 2019). To remain relevant, it needs to address the challenges facing twenty-first century students. These include mega-trends like globalisation and digitalisation, new technologies, migration, international competition, changing markets and political and environmental issues. Real-world challenges are highly complex, often ill-defined and interdisciplinary in nature, spanning multiple domains; social, economic, political, environmental, legal and ethical (Becker et al., 2018). Learners must have opportunities to reflect on their ideas, fine tune their analytical skills, strengthen their critical and creative thinking capacities, and demonstrate initiative. In particular, the ability to evaluate new inputs and perspectives, build new capacities and strengthen autonomy is crucial.

These skills are identified as important to Ireland in the National Skills Strategy 2025 (DES, 2016) and in regular reports from the Expert Group on Future Skills Needs (EGFSN). The National Plan for Equity of Access 2015-2019 (HEA, 2015) recognised the growing importance of lifelong learning and suggested reform of the RGAM model for funding higher education to facilitate funding of all students. Such reform is likely to encourage more mature learners to participate. Funding is one of six fundamental levers for improvement in education (OECD, 2014) The funding reform failed to materialise and the interim review of the plan in 2018 found that the number of mature learners had actually declined. Meanwhile the CSO was reporting a growth in lifelong learning (CSO, 2018). This growth was due primarily to a dramatic rise in non-formal learning, due mainly to new methods of measuring lifelong learning, while formal learning continued to be self-financed by mature learners. In the student cohorts addressing mature and lifelong learners this research indicates that the Irish University sector has not responded to new models of online learning.

As seen in the literature review, The Hunt report (Hunt, 2011), recommended that the sector should facilitate on-campus or off-campus students who study full-time or part-time. Recognising the importance that life-long learning would play in the education landscape of the future it recommended that resources allocated to and within institutions should support all students equally irrespective of how they study by adapting the funding model. This has not happened in any meaningful way as the issue of Higher Education funding continues to be avoided. In the future, theory and research evidence should inform policy for online learning. This is not currently evident from national policy texts. Currently in Ireland economic factors are the most influential drivers in the adoption of online learning. Social and vocational drivers, like opening access to education, and continual professional development do have influence, however, pedagogical factors are not very powerful.

Finding No.2 The most influential driver of Online Learning in Ireland is the economic driver.

5.4 How has DCU responded to government policy texts and policy discourse.

In the case study section of this research, the evolution of online learning at DCU was traced from the National Distance Education Centre to Oscail, and on to DCU Connected and the National Institute for Digital Learning. As an institution, DCU learned about the pedagogical imperatives involved in teaching off-campus. Its commitment to innovation and forward thinking encouraged it to adapt to changing circumstances and technologies and to continue funding its distance learning operation as the internet moved distance learning into online learning, while enhancing the University's understanding of the dynamics of successful online programme design, presentation and management. The advent of the National Institute for Digital Learning confirmed DCU's commitment in this area and through the DCU Connected brand, it has continued to grow its online offerings, recognising and developing the opportunities it presents and developing the policies and procedures to maximise its impact.

The research highlights that through its recent partnership with FutureLearn, DCU seeks to grow the use open educational resources to propagate a philosophy based on its mission of transforming lives and societies. This has seen DCU provide leadership and assistance to those seeking to begin teaching online during the Covid-19 pandemic not only in Ireland, but internationally. It requires more than a policy to implement change. To implement an educational policy in Ireland, as pointed out in Chapter 1 in the framework advocated by Murphy (2018), it needs to be situated in practice, be based on consultation, have been tested at operational level, it needs to facilitate innovation and should be monitored and reviewed for effectiveness. The DCU Fuse initiative in 2016 illustrated the power of consultation and collaboration at DCU. Taking a strategic approach, a policy should be reflective of the HEI's priorities, be guided by the HEI's vision and with the HEI's strategic objectives and should allow the HEI to meet its legal obligations (Murphy, 2018). In summary. In order for policy to be effective and successful, all relevant stakeholders must be encouraged to contribute in a meaningful way, through a clear process. When such a process is executed, contributors take ownership of the policy and enable its implementation increasing the likelihood of successful enactment.

Finding No.3 Good policy emanates from a collaborative process which is inclusive, transparent, and credible.

5.5 Contribution to existing professional knowledge and practice

This study began with an understanding that policy is a complex political process involving many actors and different choices. These choices need to be understood from a critical perspective as they reflect a site of struggle over the very meaning of being educated and who should control the decisions we make and what becomes "official"' policy (Apple, 2019). Therefore, as stated in Chapter 1, online learning needs to be understood by going beyond what you see or read at face value by asking deeper questions. With this critical perspective in mind, the research makes a significant contribution to new knowledge on three main fronts.

Firstly, the research helps to reveal how online learning in Ireland has grown, over the past decade. National policy initiatives have yet to fully respond to online learning as

a distinct mode of study, as opposed to merely incorporating more digital activities and experiences within traditional campus-based education. When stakeholders talk about online learning policy in Ireland they often appear to be using ambiguous definitions. It follows that the lack of a clearly understood and commonly agreed definition of online learning in the sector is a deficiency. Prior to Covid-19 most policy debate in Ireland around the concept of digital learning was inherently campus-centric and failed to help us understand how to fully exploit, the potential of new models of online learning.

Notably, as shown in Chapter 4, the MOOC movement has been largely ignored in national policy texts, even though millions of learners around the world, and many Irish learners, have engaged in this type of online, non-formal, lifelong learning. While even before the Covid-19 crisis online learning, including both MOOCs and formally accredited programmes, was experiencing phenomenal growth, there is now more urgency than ever to develop a policy environment that helps to harness the strategic opportunities they afford both nationally and internationally. Hence, the importance of key finding

#1: Online learning in Ireland needs clear definition and to find its strategic place within the higher education landscape.

Following on this point, and the study's original intention to ask deeper questions about policy, the research has helped to reveal how the underlying drivers for online (and digital) learning are not as strongly anchored in teaching and learning rationale as many Irish educators may perceive. Indeed, the pedagogical rationale for a greater investment in online learning does not feature particularly highly in major policy texts as other drivers such as social, economic, commercial and vocational factors appear to be influencing policy discourses. Accordingly, the research makes an important contribution to the field as expressed in key finding

#2: The most influential driver of online learning in Ireland is economic which up until now has done little to challenge the status of traditional campus-based education.

Notwithstanding the above point, the research demonstrates that competing and coexisting discourses of persuasion, coupled with the absence of national policy, has not prevented at least some significant progress at the institutional level. For example, the strategic investment in MOOCs and more recently credit-bearing micro-credentials at DCU has occurred despite any significant national policy initiatives in this area. Of course, more targeted public policy initiatives and related funding for online learning as a distinct delivery mode may have accelerated this progress. The key point is that the final case study phase demonstrates how strategic digital transformation is possible under challenging and rapidly changing circumstances. Leadership is shown to be an important factor along with the institutional context and process in which policy is developed, as reflected in key finding

#3: Good policy requires leadership and emanates from a collaborative process which is inclusive, transparent, and helps to enable an innovation culture.

5.6 Future Research

DCU is embarking on an exciting new international partnership with FutureLearn. How this partnership develops and the re-imaging of credentials offered worldwide to life-long learners will continue to be a rich source of research in the future.

The National Forum for the Enhancement of Teaching and Learning has recently issued the findings of its 2019 INDEx Survey (National Forum, 2020) setting a baseline benchmark which captures current practices in online learning in Irish Higher Education. It did not capture data in relation to delivery mode however. Building on that research to collect data on delivery mode, particularly in relation to off-campus students, is an important area of research for further investigation.

This research has provided an insider view of how one Irish University has evolved its online offering to be suitable for the twenty-first century. Charting how this journey advances to where online learning becomes mainstream in that university, will make for valuable future investigation.

5.7 Conclusion

In June 2020, MOOCs attracted over 500,000 million visits from people around the world, up 2.5 times on the month of January 2020. This thesis finishes on this optimistic note in the hope that online learning will now be a major priority for Irish politicians, policy-makers and institutional leaders over the remainder of the decade.

In 1999, John Chambers the CEO of Cisco Systems predicted:

> The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error (Farrelly, 2014, p198).

In the post Covid-19 era, perhaps that time may now have come.

REFERENCES

Acts of the Oireachtas, electronic I. S. (1997) *electronic Irish Statute Book (is)*. Available at: http://www.irishstatutebook.ie/eli/1997/act/24/enacted/en/index.html (Accessed: 7 February 2020).

Anderson, T. (2004) 'Teaching in an online context, p. 22.

Anderson, T. (ed.) (2008) *The theory and practice of online learning*. 2nd ed. Edmonton: AU Press.

Anderson, T. D. and Garrison, D. R. (1998) 'Learning in a networked word New roles and responsibilities', p. 16.

Anderson, T. and Dron, J. (2011) 'Three generations of distance education pedagogy', *The International Review of Research in Open and Distributed Learning*, 12(3), pp. 80–97. doi: 10.19173/irrodl. v12i3.890.

Anderson, T. and Elloumi, F., (2004). Toward a Theory of Online Learning. Theory and Practice of Online Learning. *Chapter*, *2*, pp.33-60.

Anderson, T. and Zawacki-Richter, O. (eds) (2014) *Online distance education: towards a research agenda*. Edmonton: AU Press (Issues in distance education series).

Apple, M.W. (2019) On doing critical policy analysis. *Educational Policy*,*33*(1), pp.276-287.

Arnold, D. and Sangrà, A. (2018) 'Dawn or dusk of the 5th age of research in educational technology? A literature review on (e-)leadership for technology enhanced learning in higher education (2013-2017)', *International Journal of Educational Technology in Higher Education*, 15(1). doi: 10.1186/s41239-018-0104- 3.

Austin, R. and Turner, R.N., (2020). The role of blended learning for community cohesion: lessons from Northern Ireland. *Technology, Pedagogy and Education*, pp.116.

Babson Report: Allen, I. E. and Seaman, J. (2016) *Online Report Card: Tracking Online Education in the United States*. Babson Survey Research Group. Available at: https://eric.ed.gov/?id=ED572777 (Accessed: 23 January 2019).

Ball, S. (2010) *The Teacher's Soul and the Terrors of Perfomativity*. Doi: 10.1080/0268093022000043065.

Ball, S. (2015) What is policy? 21 years later: reflections on the possibilities of policy research. Discourse: Studies in the Cultural Politics of Education, Vol. 36, pp306-313.

Bates, A. W. (2015) *Teaching in a digital age*. Victoria: BCcampus, BC Open Textbook Project. Available at: http://open.bccampus.ca/findopentextbooks/?uuid=da50f5f1-bbc6-481ea359e73007c66932&contributor=&keyword=&subject= (Accessed: 23 January 2019).

Bates, T. (2012) *Nine steps to quality online learning: introduction | Tony Bates*. Available at: https://www.tonybates.ca/2012/05/02/nine-steps-to-quality-onlinelearning-introduction/ (Accessed: 21 May 2020).

Becker, S.A., Brown, M., Dahlstrom, E., Davis, A., DePaul, K., Diaz, V. and Pomerantz, J. (2018) NMC horizon report: 2018 higher education edition. *Louisville, CO: Educause*.

Berners-Lee, S. T. (2017) *Three challenges for the web, according to its inventor*, *World Wide Web Foundation*. Available at: https://webfoundation.org/2017/03/webturns-28-letter/ (Accessed: 6 March 2020).

Bleckmann, P. (2018) The role of multinational enterprises in Colombia's economic development DOI: 10.13140/RG.2.2.24169.60008

Bower, B. L. and Hardy, K. P. (2004) 'From correspondence to cyberspace: Changes and challenges in distance education', *New directions for community colleges*, 2004(128), pp. 5– 12.

Boyle, L., O'Keeffe, N. and Walsh, E. (2007) 'Widening access to distance education using mobile technologies-A pilot project.'

Brolpito, A. (2018) *Digital skills and competence, and digital and online learning | ETF*. Available at: https://www.etf.europa.eu/en/publications-and-resources/publications/digital-skills-and-competence-and-digital-and-online (Accessed: 30 January 2020).

Braun, V. and Clarke, V. (2013) Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist*, *26*(2).

Broadbent, J. and Poon, W.L., (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*,*27*, pp.1-13.

Brown, M., Anderson, B. and Murray, F., (2007). E-learning policy issues: Global trends, themes and tensions. In *ICT: Providing choices for learners and learning. Proceedings Ascilite, Singapore, December 2007*.

Brown, M., (2016). MOOCs as social practice: A kaleidoscope of perspectives. *From books to MOOCs*, pp.31-41.

Brown, M. and Costello, E. (2016) 'The Development of MOOCs: Irish Country Report', p. 10.

Brown, M. (2017).*DCU Fuse: 24-hour online collaborative brainstorm*. Presentation under Ethical Leadership category at QS Wharton Reimagine Education Conference, Philadelphia,

Brown, M., (2013). *Deconstructing evaluation in education* (Doctoral dissertation, Dublin City University).

Bruseberg, A. and McDonagh-Philp, D., (2002) Focus groups to support the industrial/product designer: a review based on current literature and designers' feedback. *Applied ergonomics*, *33*(1), pp.27-38.

Bryman, A., (2007). Effective leadership in higher education: A literature review. *Studies in higher education*,*32*(6), pp.693-710.

Bryman, A. and Bell, E., (2001) The nature of qualitative research. *Social research methods*, pp.365-399.

Butler, D., Leahy, M., Shiel, G. and Cosgrove, J., (2013). Building towards a learning society: A national digital strategy for schools. *Dublin: Educational Research Centre*.

Carroll, N, (2013) E-learning – the McDonaldization of education, European Journal of Higher Education, 3:4, 342-356, DOI: 10.1080/21568235.2013.833405 Available at: https://doi.org/10.1080/21568235.2013.833405 (Accessed 28 June 2020)

Cassells, P. (2016) 'Investing in National Ambition a Strategy for Funding Higher Education. pdf', *Department of Education & Skills*.

Cawood, R. (2018) *Can the universities of today lead learning for tomorrow? the university of the future | VOCEDplus, the international tertiary education and research database*. Available at: https://www.voced.edu.au/content/ngv:80888 (Accessed: 30 January 2020).

Chen, Y. (2001b). Transactional distance in World Wide Web learning. Innovations in Education and Teaching International, 38, 4, 327–339. doi: 10.1080/1470329011007453

Cherryholmes, C. H. (1992) 'Notes on pragmatism and scientific realism', *Educational researcher*, 21(6), pp. 13–17.

Churchman, C. W. (1967) 'Free for all', *Management Science*, 14(4), pp. 141–146.

Clancy, P. and Benson, C., (1979) *Higher education in Dublin: a study of some emerging needs*. Higher Education Authority.

Clement, J. (2020) 'Worldwide digital population as of April 2020'. Statista. Available at:

https://www.statista.com/statistics/617136/digital-population-worldwide/ (Accessed 14 June 2020)

Coffey, J. (1977) 'Open learning opportunities for mature students', *Open Learning systems for mature students. CET Working Paper*, 14.

Cohen, L., Manion, L. and Morrison, K. (2013) 'The ethics of educational and social research', in *Research methods in education*. Routledge, pp. 99–128.

Conrad, D. (2005) 'Building and maintaining community in cohort-based online learning.', *Journal of Distance Education*, 20(1), pp. 1–20.

Conrads, J., Rasmussen, M., Winters, N., Geniet, A. and Langer, L., (2017) *Digital education policies in Europe and beyond: Key design principles for more effective policies* (No. JRC109311). Joint Research Centre (Seville site).

Corbin, J. and Strauss, A. (2008) *Basics of Qualitative Research (3rd ed.): Techniques and Procedures for Developing Grounded Theory*. 2455 Teller Road, Thousand Oaks California 91320 United States: SAGE Publications, Inc. doi: 10.4135/9781452230153.

Cosgrave, R., Rísquez, A., Logan-Phelan, T., Farrelly, T., Costello, E., Palmer, M., McAvinia, C., Harding, N. and Vaughan, N., (2011). Usage and uptake of virtual learning environments in Ireland: findings from a multi institutional study. *All Ireland Journal of Higher Education*,*3*(1).

Costello, E., Farrelly, T. and Murphy, T., (2020). Open and Shut: Open Access in Hybrid Educational Technology Journals 2010–2017.*The International Review of Research in Open and Distributed Learning*,*21*(1), pp.113-134.

Creswell, J. W. and Creswell, J. D. (2017) *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Cronbach, L. J. and Snow, R. E. (1977) *Aptitudes and instructional methods: A handbook for research on interactions.* Irvington.

Cronin, C. and MacLaren, I., (2018). Conceptualising OEP: A review of theoretical and empirical literature in Open Educational Practices. *Open praxis*,*10*(2), pp.127-143.

Crotty, M., 1998. *The foundations of social research: Meaning and perspective in the research process*. Sage.

Cryer, P., (2006) *The research student's guide to success*. McGraw-Hill Education (UK).

CSO (2018) *Information Society Statistics - Households 2018 - CSO - Central Statistics Office*. Available at: https://www.cso.ie/en/releasesandpublications/er/isshh/informationsocietystatisticshousehold s2018/ (Accessed: 28 January 2020).

CSO (2020) *Adult Education Survey - CSO - Central Statistics Office*. CSO. Available at: https://www.cso.ie/en/methods/education/adulteducationsurvey/ (Accessed: 11 May 2020).

Cunningham, G. (1963) *Policy and practice*. Public Administration Vol.41, pp 22938.

Daniel, J. (2016) 'Making sense of blended learning: Treasuring an older tradition or finding a better future', *Online Learning News, Contact North-March*, 2.

DCU (2001) *President's Office, - Leading Change - DCU Strategic Plan 2001-2005 | DCU*. Available at: https://www.dcu.ie/president/plan.shtml/ (Accessed: 7 April 2020).

DCU (2007) *President's Office*, Transforming Lives and Societies, *DCU Strategic Plan 2012-2017*Available at: https://www.dcu.ie/sites/default/files/...strategic.../DCU_Strategic_Plan_2012-2017.pdf (Accessed 11th May 2020).

DCU (2017) *Talent, Discovery & Transformation | DCU*. Available at: https://www.dcu.ie/talent-dscovery-transformation.shtml (Accessed: 13 February 2019).

DCU (2020a) *DCU Home | DCU*. Available at: https://www.dcu.ie/ (Accessed: 11 May 2020). *Research Policies | Research Support | DCU*. Available at: https://www.dcu.ie/researchsupport/research_policies.shtml (Accessed: 30 April 2020).

DCU and HEA, I. H. E. (2018) '2018-2021 DCU Compact.docx'.

Dale, R., (1989). The Thatcherite project in education: The case of the City Technology Colleges. *Critical social policy*,*9*(27), pp.4-19.

Delaney, L. and Farren, M., (2016). No 'self 'left behind? Part-time distance learning university graduates: social class, graduate identity and employability. *Open Learning: The Journal of Open, Distance and E-Learning*,*31*(3), pp.194-208.

Delaney, L. and Fox, S. (2013) *The role of distance education in broadening access to Irish higher education*. Available at: http://doras.dcu.ie/19966/ (Accessed: 7 August 2018).

Deloitte (2019) *IE_Ta_GMCS_Global_Mobile_Consumer_Survey_Ireland_Final.pdf*. Available at:https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/TechnologyMedia Co mmunications/IE_Ta_GMCS_Global_Mobile_Consumer_Survey_Ireland_Final.pdf (Accessed: 6 March 2020).

Denzin, N. K. and Lincoln, Y. S. (2018) *The SAGE Handbook of Qualitative Research*. 5th edn. California: SAGE.

Department of Education and Skills. Ireland (ed.) (2007) *National action plan for social inclusion 2007-2016: building an inclusive society*. Dublin: Stationery Office.

Department of Enterprise and Skills (2016) *National Skills Strategy 2025*. Available at: https://www.education.ie/en/Publications/Policy Reports/pub_national_skills_strategy_2025.pdf (Accessed: 31 January 2020).

Department of Enterprise and Skills (2020) *Technology Skills 2022 Ireland's Third ICT Skills Action* Plan. Available at: https://www.education.ie/en/Publications/PolicyReports/technology-skills-2022.pdf (Accessed: 27 June 2020).

Dewey, John. (1938) Experience and Education. New York: Macmillan

Diggins-Mannion Y. (2019) An analysis of Educational Information and Communication Technology (EICT) policy-making in higher education in Ireland, PhD thesis, University of Limerick, Limerick.

Donnelly, R. and O'Rourke, K.C., (2007). What now? Evaluating eLearning CPD practice in Irish third-level education. *Journal of Further and Higher Education*,*31*(1), pp.31-40.

Donnelly, R. and Maguire, T. (2018) *Supporting Teaching and Learning Transformations Through the National Professional Development Framework: Establishing and Recognising an Inclusive Community of Practice for All Who Teach in Irish Higher Education*. Available at: https://arrow.tudublin.ie/cgi/viewcontent.cgi?article=1061&context=ltcart (Accessed: 21 May 2020).

Dopfer, K. (2004) '1 Evolutionary economics: a theoretical framework', p. 56.

Duffy, T. M. and Cunningham, D. J. (1996) '7. Constructivism: Implications for the design and delivery of instruction'.

Duncan, S. and Marotz-Baden, R., (1999) Using focus groups to identify rural participant needs in balancing work and family education. *Journal of Extension*, *37*(1), pp.4-19.

EC-European Commission, (2016). A new skills agenda for Europe. Working together to strengthen human capital, employability and competitiveness (COM (2016) 381 final). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Brussels: European Commission. Available at: https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-381-EN-F1-1.PDF (Accessed 30th January 2020)

Educause (2018) The *NMC Horizon Report: 2018 Higher Education Edition*. Available at: https://library.educause.edu/resources/2018/8/2018-nmc-horizon-report (Accessed 30th January 2020)

Edwards, P., Mahoney, J.O., Vincent, S. (eds.) (2014). Explaining Management and Organisation Using Critical Realism: A Practical Guide. Oxford University Press, Oxford.

Egnatoff, W. J. (1999) 'Tapscott, D. (1998). Growing Up Digital. The Rise of the Net Generation. New York: McGraw Hill. xii+ 338. ISSN 0-07-063361-4. Web site: www. growingupdigital. com', *Education and Information Technologies*, 4(2), pp. 203–205.

Elo, S. and Kyngäs, H., (2008). The qualitative content analysis process. Journal of advanced nursing, 62(1), pp.107-115.

Ernst & Young (2018) *Can Universities of today Lead learning of tomorrow*. Available at : https://assets.ey.com/content/dam/ey-sites/ey-com/en_au/topics/government-and-public-sector/ey-university-of-the-future-2030.pdf. (Accessed :30th January 2020)

Erlingsson, C. and Brysiewicz, P., (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, *7*(3), pp.93-99.

Elloumi, F. (2004) *Value chain analysis: A strategic approach to online learning. Theory and practice of online learning*.

EU Science HUB (2019) *Learning and Skills for the Digital Era*
Available at: https://ec.europa.eu/jrc/en/research-topic/learning-and-skills (Accessed: 30 January 2020

Farrelly, T., (2014). E-Learning and Higher Education—Hyperbole and Reality. In *Higher Education in Ireland* (pp. 198-215). Palgrave Macmillan, London.

Flyvbjerg, B., (2006) Five misunderstandings about case-study research. *Qualitative inquiry*, *12*(2), pp.219-245.

Foucault, M. (1970) 2005th edn. London; New York: Routledge (Reprint). Available at: http://public.eblib.com/choice/publicfullrecord.aspx?p=240649 (Accessed: 3 March 2020).

Fleming, T. (2008) 'We are Condemned to Learn: Towards Higher Education as a Learning Society' Level 3 6, http://level3.dit.ie/html/issue6/fleming/fleming.pdf

Frideres, J. ed., (1992) *A world of communities: Participatory research perspectives*. Captus Press.

Fucci, M. (2016) *Digital Competence Framework for Educators (DigCompEdu),* EU Science
Hub - European Commission. Available at: https://ec.europa.eu/jrc/en/digcompedu (Accessed:23 April 2020)

Gaebel, M., Zhang, T., Bunescu, L. and Stoeber, H., (2018). Learning and teaching in the European higher education area. European University Association asbl. Available at: https://www.eua.eu/resources/publications/757:trends-2018-learning-and-teaching-in-the-european-higher-education-area.html. (Accessed 20th June 2020)

Galvin, C., Walsh, G., Henderikx, P., McMullin, B., McMullan (2012) *Oscail PRG Report Final 4 May 2012.pdf*. Available at:
https://www.dcu.ie/sites/default/files/qpo/Oscail%20PRG%20Report%20Final%204%20May%202012.pdf (Accessed: 3 April 2020).

Garrett, R. (2019) 'Whatever Happened to the Promise of Online Learning?', *International Higher Education*, (97), pp. 2–4. doi: 10.6017/ihe.2019.97.10935. Available at: https://wonkhe.com/blogs/whatever-happened-to-the-promise-of-online-learning/(Accessed 30th January 2020)

Garrison, D. R., Anderson, T. and Archer, W. (1999) 'Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education', *The Internet and Higher Education*, 2(2–3), pp. 87–105. doi: 10.1016/S1096-7516(00)00016-6.

Garrison, D. R. and Vaughan, N. D. (2008) *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley & Sons.

Gee, J.P. (1999) An introduction to discourse analysis. London: Routledge. Gumperz.

Geertz, C., (1995) After the Fact: Four Decades, Two Countries, One Anthropologist.

Giroux, H.A., (2003.) *The abandoned generation: Democracy beyond the culture of fear*. Palgrave Macmillan.

Gijsbers, G. and Schoonhoven, B. (2012) 'The future of learning: a foresight study on new ways to learn new skills for future jobs', *European Foresight Platform (EFP) Brief*, 222.

Glennie, J., Harley, K., Butcher, N. and van Wyk, T., (2012). Open educational resources and change in higher education: Reflections from practice. Available at:http://oasis.col.org/bitstream/handle/11599/80/pub_PS_OER_web.pdf?sequence=1 &isAllowed=y (Accessed: 25 June 2020)

Goldkuhl, G. (2017) *Pragmatism vs interpretivism in qualitative information systems research: European Journal of Information Systems: Vol 21, No 2*. Available at: https://www.tandfonline.com/doi/full/10.1057/ejis.2011.54?c (Accessed: 19 March 2020).

Gosling, D. (2008). Educational development in the United Kingdom. London: Report to the Heads of Educational Development Group (HEDG)

Good, T. L. and Brophy, J. E. (1990) *Educational psychology: A realistic approach*. Longman/Addison Wesley Longman.

Government of Ireland (2000) *Learning for Life: White paper on Adult Education*. Available at: https://www.education.ie/en/Publications/Policy-Reports/fe_aduled_wp.pdf (Accessed: 6 April 2020).

Greene, J.C., 2007.*Mixed methods in social inquiry* (Vol. 9). John Wiley & Sons.

Group, H. E. S. and Hunt, C. (2011) *National strategy for higher education to 2030*. Report. Department of Education and Skills. Available at: http://www.lenus.ie/hse/handle/10147/120285 (Accessed: 7 August 2018).

Groves, R.M. and Kahn, R.L., (1979) Surveys by Telephone; A national comparison with personal interviews.

Guba, E. G. and Lincoln, Y. S. (1985) *Naturalistic inquiry*. Newbury Park, CA: Sage.

Guri-Rosenblit, S., Šebková, H. and Teichler, U. (2007) 'Massification and diversity of higher education systems: Interplay of complex dimensions.', *Higher Education Policy*, 20(4), pp. 373–389.

Hage, J. (1980) *Theories of organizations: Form, process, and transformation*. John Wiley & Sons.

Hiatt, J., (2006). ADKAR: a model for change in business, government, and our community. Prosci.

Hammond, Nick (2003) Learning technology in higher education in the UK: Trends, drivers and strategies. In M. Van der Wende and M. van der Ven (eds), The use of ICT in Higher Education: A mirror of Europe. Lemma Publishers: Utrecht, pp 109-122.

Hargreaves, A. (2003) *Teaching in the Knowledge Society, Education in the Age of Insecurity* (Maidenhead: Open University Press).

HEA (Higher Education Authority). (2009). Open and flexible learning: HEA position paper. Dublin: HEA.

HEA (Higher Education Authority). (2012a). *Part-time and flexible higher education in Ireland: policy, practice and recommendations for the future*. Dublin: HEA.

HEA, I. H. E. (2013) *Towards a performance evaluation framework: Profiling Irish higher education.*

HEA (2014) *Higher-Education-System-Performance-2014-17-report-1.pdf*. Available at: https://hea.ie/assets/uploads/2018/01/Higher-Education-System-Performance2014-17report-1.pdf (Accessed: 31 January 2020).

HEA, I. H. E. (2015) *National Plan for Equity of Access to Higher Education 20152019*, *Higher Education Authority*. Available at: https://hea.ie/policy/accesspolicy/national-access-plan-2015-2019/ (Accessed: 31 January 2020).

HEA, I. H. E (2018) *Progress Review of National Access Plan and Priorities to 2021 Higher Education Authority*. Available at: https://hea.ie/assets/uploads/2019/01/HEA-Progress-Review-2021-NAP.pdf (Accessed:20th June 2020)

HEA, I. H. E. (2019) *Performance-Funding-Allocations-2019.pdf*. Available at: https://hea.ie/assets/uploads/2017/04/Performance-Funding-Allocations-2019.pdf (Accessed: 23 May 2020).

Healy, Y, (2001) *Caution on e-learning*, The Irish Times 17 April 2001.Available at :https://www.irishtimes.com/caution-on-e-learning-1.302537. (Accessed: 4 October 2020)

Henard, F. (2017) *Review of the National Forum for the Enhancement of Teaching and Learning*, Avenue Learning, Paris. Available at : *https://hea.ie/assets/uploads/2017/04/Review-of-theNational-Forum-for-theEnhancement-of-Teaching-and-Learning-2.pdf (*Accessed 26 July 2020)

Henderson, M., Selwyn, N. and Aston, R., (2017) What works and why? Student perceptions of 'useful 'digital technology in university teaching and learning. *Studies in Higher Education*, *42*(8), pp.1567-1579.

Hicks, E. and Hicks, J., (2006). The law of attraction: The basics of the teachings of Abraham. Hay House, Inc.

Hill, M., (2014) *Policy process: A reader*. Routledge.

Hiller, J. (2016) 'Epistemological foundations of objectivist and interpretivist research', *Music therapy research*. Barcelona Publishers Dallas, TX, pp. 236–268.

Hodder, I. (2000). The interpretation of documents and material culture. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (2nd ed., pp. 703–715). Thousand Oaks, CA: Sage.

Holmberg, B. (2005) *Theory and practice of distance education*. Routledge.

HolonIQ. (2019). *The online degree market is one of the fastest-growing segments of global higher education, which we forecast would reach $74B in 2025*. Available at: https://www.holoniq.com/notes/74b-online-degree-market-in-2025-up-from-36b-in2019/ (Accessed 13 June 2020)

Houser, J. and Oman, K. S. (2010) *Evidence-based practice*. Jones & Bartlett Publishers.

Hunt, C., (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 26th June 2020)

Hunt, N., (2017). Part-time and Flexible Learning in Irish Higher Education. In Access and Participation in Irish Higher Education (pp. 215-233). Palgrave Macmillan, London.

Hutchins, E. (1995). Cognition in the Wild, Massachusetts Institute of Technology.
Idemudia, U. and Amaeshi, K. eds., (2019). *Africapitalism: Sustainable Business and Development in Africa*. Routledge.

Irish Times (2000) *From a distance . . .*, *The Irish Times*. Available at: https://www.irishtimes.com/news/education/from-a-distance-1.253124 (Accessed: 3 April 2020).

Jameson, J. (2013) 'e-Leadership in higher education: The fifth "age" of educational technology research: e-Leadership in higher education: The fifth "age"', *British Journal of Educational Technology*, 44(6), pp. 889–915. doi: 10.1111/bjet.12103.

Jarvis, P. (2004) *Adult education and lifelong learning: Theory and practice*. Routledge.

Kalat, J. W. (2002) 'Teaching biological psychology to introductory psychology students', *The teaching of psychology: Essays in honor of Wilbert J. McKeachie and Charles L. Brewer*, pp. 361–368.

Kampylis, P., Punie, Y. and Devine, J. (2015) *Promoting effective digital-age learning-A European framework for digitally-competent educational organisations*. Joint Research Centre (Seville site).

Kaplan, R. S. and Norton, D. P. (1998) 'Putting the Balanced Scorecard to Work', in *The Economic Impact of Knowledge*. Elsevier, pp. 315–324. doi: 10.1016/B978-07506-70098.50023-9.

Karathanos, D. and Karathanos, P. (2005) 'Applying the Balanced Scorecard to Education', *Journal of Education for Business*, 80(4), pp. 222–230. doi: 10.3200/JOEB.80.4.222-230.

Keegan, D., (1986). The Foundations of Distance Education, London: Croom Helm.

Keen, A. (2007) 'The cult of the amateur: How the democratization of the digital world is assaulting our economy, our culture, and our values', *NY: Doubleday Currency*.

Khandwalla, P. N. (1972) 'Environment and its impact on the organization', *International studies of management & organization*, 2(3), pp. 297–313.

Kingdon, J. W. (1984) *Agendas, alternatives and public policies.* Boston: Little Brown.

Kolowich, S. (2014) 'What you need to know about companies that run online programs for colleges', *Chronicle of Higher Education*.

Kotter, J.P., (1995). Leading change: Why transformation efforts fail.

Krippendorff, K. (1989). Content analysis. In E. Barnouw, G. Gerbner, W. Schramm, T. L. Worth, & L. Gross (Eds.), International encyclopaedia of communication (Vol. 1, pp. 403-407). New York, NY: Oxford University Press. Retrieved from http://repository.upenn.edu/asc_papers/226

Labuschagne, A., (2003) Qualitative research: Airy fairy or fundamental. *The qualitative report*, *8* (1), pp.100-103.

Ladden, B. (2015) 'Can Evaluation Improve the Quality of Education Provision? A Case Study of an evaluation process in an Irish Post-Primary School

Lasswell, H.D. (1956) *The decision process: Seven categories of functional analysis.*

Bureau of Governmental Research, College of Business and Public Administration. University of Maryland.

Lewin, K., (1951). Field theory in social science: selected theoretical papers (Edited by Dorwin Cartwright.).

Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage.

Luck, L., Jackson, D. and Usher, K. (2006) 'Case study: a bridge across the paradigms', *Nursing inquiry*, 13(2), pp. 103–109.

Luna-Scott, C. (2015a) 'The Futures of Learning 1: Why must learning content and methods change in the 21st century', *Education, research and foresight working papers, available online at http://unesdoc. unesco. org/images/0023/002348 E*, 234807.

Luna-Scott, C. (2015b) 'The Futures of Learning 2: What Kind of Learning for the 21st Century?' Available at: http://repositorio.minedu.gob.pe/handle/123456789/3709 (Accessed: 14 January 2020).

Luna-Scott, C. (2015c) *The Futures of Learning 3: what kind of pedagogies for the 21st century?* Available at: http://repositorio.minedu.gob.pe/handle/123456789/3747 (Accessed: 6 August 2018).

Lunt, P. and Livingstone, S., (1996) Rethinking the focus group in media and communications research. *Journal of communication*, *46*(2), pp.79-98.

Lynch, K., (2006) Neo-liberalism and marketization: The implications for higher education. *European educational research journal*,*5*(1), pp.1-17.

Maitre, B. *et al.* (2014) *Technical paper on trends in economic stress and the great recession in Ireland: an analysis of the CSO survey on income and living conditions (SILC)*.

Maruster, L. (2013) *Qualitative Research Methods*. SAGE.

Mason, R. (1998) 'Models of online courses. ALN magazine', *ALN Magazine*, 2(2), pp. 1–10.

Mathes, J., 2019. Global quality in online, open, flexible and technology enhanced education: An analysis of strengths, weaknesses, opportunities and threats. Oslo, Norway: International Council for Open and Distance Education. Available at: https://www.icde.org/knowledge-hub/report-global-quality-in-online-education (accessed 30th January 2020)

Mayer, A., Rose, D. H. and Gordon, D. (2014) *Universal Design for Learning: Theory & Practice*. Wakefield, MA: CAST. Available at: http://www.cast.org/ourwork/publications/2014/universal-design-learning-theorypractice-udlmeyer.html#.XGhL7ej7TIU (Accessed: 16 February 2019).

Maynard, M. (1994) 'Methods, practice and epistemology: The debate about feminism and research', *Researching women's lives from a feminist perspective*, 10(26), pp. 10– 26.

Maykut, P.S. and Morehouse, R., (1994) *Beginning qualitative research: A philosophic and practical guide* (Vol. 6). Psychology Press.

MacCraith, B. (2019) *DCU announces global partnership with online education provider FutureLearn*. DCU News. Available at: https://www.dcu.ie/news/news/2019/Jun/DCU-announces-global-partnership-onlineeducationplatform-FutureLearn.shtml. (Accessed 22 April 2020)

McCue, T. J. (2018) *E Learning Climbing to $325 Billion by 2025 Fu Canvas Absorb* Schoology *Moodle*, *Forbes*. Available at: https://www.forbes.com/sites/tjmccue/2018/07/31/e-learning-climbing-to-325billion-by2025-uf-canvas-absorb-schoology-moodle/ (Accessed: 17 April 2019).

McGarr, O. (2019) *Exploring the Evolution of Educational Technology Policy in Ireland: From Catching-Up to Pedagogical Maturity - Oliver McGarr, Keith Johnston,* Available at: https://journals.sagepub.com/doi/10.1177/089590481984359 7 (Accessed: 31 January 2020).

McGarr, O. and Ó Gallchóir, C., (2020). Exploring pre-service teachers' justifications for one-tone technology use in schools: implications for initial teacher education. *Technology, Pedagogy and Education*,*29*(4), pp.477-490.

MacKeogh, K. and Fox, S., (2009). Strategies for embedding e-learning in traditional universities: Drivers and barriers. *Electronic Journal of E-learning*,*7*(2), pp.147-154.

MacMillan, K. and Koenig, T., (2004). The wow factor: Preconceptions and expectations for data analysis software in qualitative research. *Social science computer review*,*22*(2), pp.179-186.

Means, B., Toyama, Y., Murphy, R., Bakia, M. and Jones, K., (2009) Evaluation of evidence based practices in online learning: A meta-analysis and review of online learning studies.

Merriam, S.B., (1988). Case *study research in education: A qualitative approach*. Jossey-Bass.

McGreal, R., (2017). Special report on the role of open educational resources in supporting the sustainable development goal 4: Quality education challenges and opportunities. *The International Review of Research in Open and Distributed Learning*, *18*(7).

Miller, F.A. and Alvarado, K., 2005. Incorporating documents into qualitative nursing research. *Journal of nursing scholarship*, *37*(4), pp.348-353.

Miles, M.A., (1994) Miles and Huberman (1994)-Chapter 4. pdf. *Qualitative Data Analysis: An Expanded Sourcebook*, pp.50-72.

Moore, G. E. (1965) *Cramming more components onto integrated circuits*. McGraw-Hill New York, NY, USA.

Moore, M. G. (1973) 'Toward a Theory of Independent Learning and Teaching', *The Journal of Higher Education*. Ohio State University Press, 44(9), pp. 661–679. doi: 10.2307/1980599.

Moore, M.G., (1993). Theory of transactional distance. *Theoretical principles of distance education*,*1*, pp.22-38.

Moore, M. G. (2007) 'Learners Come in Different Types', *American Journal of Distance Education*, 21(1), pp. 1–2. doi: 10.1080/08923640701298571.

Moore, M.G. and Kearsley, G., (2011). Distance education: A systems view of online learning. Cengage Learning.

Moreau, E. (2019) *EU Verdict on Cassells Report Not Expected Until 2020*. Available at: https://www.universitytimes.ie/2019/07/eu-verdict-on-cassells-report-notexpected-until2020/ (Accessed: 22 January 2020).

Morrison, D. (2013) 'Constructivism | Online Learning Insights'. Available at: https://onlinelearninginsights.wordpress.com/tag/constructivism/ (Accessed: 16 February 2019).

Munck, R. and McConnell, G. (2009) 'University strategic planning and the foresight/futures approach', *Planning for Higher education*, 38, pp. 31–40.

Murphy, J. P. (1990) 'Pragmatism from Peirce to Davidson'.

Murphy, T. (2018) 'Criteria for Enabling policy. National Forum for the Enhancement of Teaching & Learning.

Murphy, T. and Maguire, T., (2018). A summary of the National Forum's Review of the Existing Higher Education Policy Landscape for Digital Teaching and Learning in Ireland. DBS Business Review, 2.

National Forum for the Enhancement of Teaching and Learning in Higher Education (2014) 'Principles and First Insights from the Sectoral Consultation on Building Digital Capacity in Irish Higher Education', *National Forum for the Enhancement of Teaching and Learning in Higher Education*. Available at: https://www.teachingandlearning.ie/publication/principles-and-first-insights-fromthesectoral-consultation-on-building-digital-capacity-in-irish-higher-education/ (Accessed: 30 January 2020).

National Forum for the Enhancement of Teaching and Learning in Higher Education, (2015)"Strategic and Leadership Perspectives on Digital Capacity in Irish Higher Education," in *teachingandlearning.ie*. Available at: https://www.teachingandlearning.ie/publication/strategic-and-leadershipperspectives-on-digital-capacity-in-Irish-higher-education/. (Accessed June 27, 2020)

National Forum for the Enhancement of Teaching & Learning in Higher Education (2015) 'Teaching and Learning in Irish Higher Education: A Roadmap for Enhancement in a Digital World 2015-2017', *National Forum for the Enhancement of Teaching and Learning in Higher Education*. Available at: https://www.teachingandlearning.ie/publication/teaching-and-learning-in-irishhighereducation-a-roadmap-for-enhancement-in-a-digital-world-2015-2017/ (Accessed: 30 January 2020).

National Forum for the Enhancement of Teaching and Learning in Higher Education (2018) "Building Digital Capacity in Irish Higher Education 2013-18," in *teachingandlearning.ie*, Available at: https://www.teachingandlearning.ie/publication/building-digital-capacity-in-irishhigher-education-2013-18 (Accessed June 26, 2020),

National Forum for the Enhancement of Teaching and Learning in Higher Education (2019) *NF_Strategy_2019-21_AW-Web.pdf*. Available at: https://www.teachingandlearning.ie/wp-content/uploads/NF_Strategy_2019-21_AWWeb.pdf (Accessed: 31 January 2020).

National Forum for the Enhancement of Teaching and Learning in Higher Education, (25020)"Irish National Digital Experience (INDEx) Survey: Findings from students and staff who teach in higher education," in teachingandlearning.ie. Available at: https://www.teachingandlearning.ie/publication/irish-national-digital-experienceindex-surveyfindings-from-students-and-staff-who-teach-in-higher-education/. (Accessed June 27)

NIDL (2019) *Mission | Digital Learning | Blended Learning | Online Learning | eLearning | Ireland*. Available at: https://www.dcu.ie/nidl/about/mission.shtml (Accessed: 22 April 2020).

Nkuyubwatsi, B., (2014). Cultural translation in massive open online courses (MOOCs). EMOOCs, pp.122-129.

NUIG (2020) *Courses - NUI Galway*. Available at: https://www.nuigalway.ie/courses/ (Accessed: 11 May 2020).

NUIG and HEA, I. H. E. (2019) *NUI-Galway-Mission-Based-Performance-Compact20182021.pdf*. Available at: https://hea.ie/assets/uploads/2017/04/NUI-GalwayMission-BasedPerformance-Compact-2018-2021.pdf (Accessed: 7 February 2020).

NUIM (2020) *Explore Our Subjects | Maynooth University*. Available at: https://www.maynoothuniversity.ie/study-maynooth/find-course (Accessed: 11 May 2020).

NUIM and HEA, I. H. E. (2019) *Maynooth-University-Mission-Based-Performance-Compact2018-2021.pdf*. Available at: https://hea.ie/assets/uploads/2017/04/Maynooth-University-Mission-BasedPerformanceCompact-2018-2021.pdf (Accessed: 11 May 2020).

Noakes, L., & Wincup, E. (2004). Criminological research: Understanding qualitative methods. London: Sage.

OECD (2005) E-learning in tertiary education: where do we stand? Paris: OECD/CERI
Schiffman, Stephen, Vignare, Karen & Geith, Christine (2007) Why do higher education institutions pursue online education? Journal of Asynchronous Learning Networks Vol 11 No 2, pp61-71 http://www.sloanc.org/publications/jaln/v11n2/pdf/v11n2_schiffman.pdf

O'Brien, C. E. E. (2019) *Trinity College Dublin drops 44 places in world university rankings*, *The Irish Times*. Available at: https://www.irishtimes.com/news/education/trinity-college-dublin-drops-44-placesin-world-university-rankings-1.4015187 (Accessed: 28 January 2020).

O'Neill, S., Murray, S. and Conboy, K., (2009). A Delphi study on collaborative learning in distance education.

O'Mahony, P. (2015) *Dotcom bubble: lessons to learn from the greatest market mania of recent times*, The *Irish Times*. Available at: https://www.irishtimes.com/business/personal-finance/dotcom-bubble-lessons-tolearn-fromthe-greatest-market-mania-of-recent-times-1.2131991 (Accessed: 6 April 2020).

O' Shea, S. and O' Hara, J., (2020). The impact of Ireland's new higher education system performance framework on institutional planning towards the related policy objectives. *Higher Education*, *80*(2), pp.335-351.

Onwuegbuzie, A. J. and Johnson, R. B. (2006) 'The validity issue in mixed research', *Research in the Schools*, 13(1), pp. 48–63.

Orlikowski, Iv. and Baroudi, J. J. (1991) 'Studying Information Technology in Organizations: Research Approaches and Assumptions', p. 39.

Orr, Weller, F. (2018) *Models for online, open, flexible and technology enhanced higher education across the globe – a comparative analysis - Open Research Online*. Available at: http://oro.open.ac.uk/55299/ (Accessed: 6 August 2018).

Ossiannilsson, E., Williams, K. and Brown, M. (2015) 'Quality models in online and open education around the globe: State of the art and recommendations', *Distance Education*, p.54.
Patton, M. Q. (1990) *Qualitative evaluation and research methods*. SAGE Publications, inc.

Ozga, J., (2000) Education: New Labour, New Teachers. *New managerialism, new welfare,* p.222.

Parker, N. K. (2004). The Quality Dilemma in Online Education. In T. Anderson. and F. Elloumi (eds.). Theory and Practice of Online Learning. Athabasca, Canada: Athabasca University.

Pedersen (2009) *Encyclopaedia of Political Science,* London: Sage.

Peet, R. and Watts, M., (1993). Introduction: development theory and environment in an age of market triumphalism.

Picciano, A. G. and Seaman, J. (2009) *K-12 Online Learning: A 2008 Follow-Up of the Survey of US School District Administrators.* ERIC.

Pister, K. (1999) 'The university of the future: Place, process or paradigm', *What kind of university*, pp. 229–239.

Plomp, T. and Pelgrum, W. J. (1993) 'Restructuring of schools as a consequence of computer use?', *International Journal of Educational Research*, 19(2), pp. 185–195. doi: 10.1016/08830355(93)90027-H.

Plowden (1967) 'Children and their Primary Schools'. Department of Education and Science.

Popescu, M.-L. (2014) 'e-Learning in European Higher Education', J*ournal of Information Systems*, p. 11.

Porter, M.E., (2008) The five competitive forces that shape strategy. Harvard business review, 86(1), pp.25-40. (Accessed: 22 May 2020).

Power, M.J., O'Flynn, M., Courtois, A. and Kennedy, M., (2013). Neoliberal capitalism and education in Ireland. Institute for Education Policy Studies.

Power, M. and Vaughan, N. (2010) 'Redesigning Online Learning for Graduate Seminar Delivery', *International Journal of E-Learning & Distance Education / Revue internationale du e-learning et la formation à distance*, 24(2). Available at: http://www.ijede.ca/index.php/jde/article/view/649 (Accessed: 5 February 2019).

Prescott S., (2020). How States and Districts Can Advance Open Education with CARES Act Funding. [Blog] *New America*, Available at: <http://newamerica.org/education-policy/edcentral/how-to-advance-oer-with-cares/> [Accessed 21 February 2021].

Prinsloo, P. *et al.* (2015) 'Big (ger) data as better data in open distance learning', *The International Review of Research in Open and Distributed Learning*, 16(1).

PWC (2019) *Skills for Industry Strategy Promoting Online Training Opportunities for the Workforce in Europe.* EU Commission. Available at: https://op.europa.eu/en/publication-detail/-/publication/5433a0eb-f54c-11e9-8c1f-01aa75ed71a1?fbclid=IwAR2wABorW0TAkooSq_Kt6uldNyXWEk9nB0SLVmiuZ_XIy4WpcrCn0pe2Cv8 (Accessed: 30th January 2020)

Research & Markets, R. & M. (2018) *E-Learning - Global Market Outlook (2017-2026) Research and Markets*. Available at: https://www.researchandmarkets.com/reports/4655779/e-learning-global-marketoutlook2017-2026 (Accessed: 13 February 2020).

Rizvi, F., & Lingard, B. (2009). *Globalizing education policy*. London, England: Routledge

Roberts, C. M. (2010) *The dissertation journey: A practical and comprehensive guide to planning, writing, and defending your dissertation*. Corwin Press.

Roberts, K.A. and Wilson, R.W. (2002) ICT and the research process: Issues around the compatibility of technology with qualitative data analysis. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 3, No. 2).

Roumell, E. A., & Salajan, F. D. (2016). The evolution of U.S. e-learning policy: A content analysis of the national educational technology plans. *Educational Policy*, *30*, 365-397. doi:10.1177/0895904814550070

Salmon, G. (2005) 'Flying not flapping: a strategic framework for e-learning and pedagogical innovation in higher education institutions', *Research in Learning Technology*, 13(3). doi: 10.3402/rot. v13i3.11218.

Salmon, G., Gregory, J., Lokuge Dona, K. and Ross, B., (2015). Experiential online development for educators: The example of the Carpe Diem MOOC. *British Journal of Educational Technology*, *46*(3), pp.542-556.

Salmon, G., Nia, M., and Edirisingha, P. (2010). Developing a five-stage model of learning in "Second Life". Educational Research, 52(2), 169-182. doi: 10.1080/00131881.2010.482744
Schensul, J. J. and Le Compte, M. D. (1999) *The Ethnographer's toolkit: A seven volume set on ethnographic methods. Walnut Creek*. CA: Altamira Press.

Schwab, K., (2016). WORLD ECONOMIC FORUM. The Fourth Industrial Revolution: what it means, how to respond. *Luettavissa: https://www. weforum. org/agenda/2016/01/thefourth-industrial-revolution-what-it-means-and-how-to-respond. Luettu*, *29*, p.2019.

Scott, P. (1998) 'Decline or transformation? The future of the university in a knowledge economy and a post-modern age', *The university and the knowledge society*, pp. 13–30.

Seaman, J.E., Allen, I.E. and Seaman, J., (2018) Grade Increase: Tracking Distance Education in the United States. *Babson Survey Research Group*.

Shah, D. (2018). "By The Numbers: MOOCs in 2018". Class Central, December. Available at: https://www.classcentral.com/report/mooc-stats-2018/. (Accessed 15th June 2020).

Shanghai Open University (2020) *The History of Shanghai Open University* Available at: https://global.sou.edu.cn/overview/history/ (accessed 15 June 2020)

Sharples, M., de Roock, R., Ferguson, R., Gaved, M., Herodotou, C., Koh, E., Kukulska-Hulme, A., Looi, C.K., McAndrew, P., Rienties, B. and Weller, M., (2016). *Innovating pedagogy 2016* (pp. 1-47). The Open University.

Siemens, G., Gašević, D. and Dawson, S. (2015) 'Preparing for the digital university': p. 234.

Singh, V. and Thurman, A., (2019) How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education*,*33*(4), pp.289-306.

Simonson, M., Smaldino, S. and Zvacek, S. M. (eds) (2014) *Teaching and learning at a distance: Foundations of distance education.* 3rd edn. North Carolina: IAP.

Soeiro, A., (2019) Promoting online training opportunities for the workforce in Europe.

Solas (2015) lifelonglearningq42014May2015.pdf. Available at: http://solas.ie/solaspdflibrary/lifelonglearningq42014May2015.pdf (Accessed: 31 January 2020).

Solas (2016) LifelongLearningReport2016.pdf. Available at: http://www.solas.ie/SolasPdfLibrary/LifelongLearningReport2016.pdf (Accessed: 31 January 2020).

Solas (2017) lifelonglearninginirelandquarter42017.pdf. Available at: https://www.solas.ie/f/70398/x/a932359906/lifelonglearninginirelandquarter42017.p dk (Accessed: 11 May 2020).

Silver C. (2018) CAQDAS at a Crossroads: Choices, Controversies and Challenges. In: Costa A., Reis L., Souza F., Moreira A. (eds) Computer Supported Qualitative Research. ISQR 2017. Advances in Intelligent Systems and Computing, vol 621. Springer, Cham. https://doi.org/10.1007/978-3-319-61121-1_1

Solas (2019) lifelonglearning2019.pdf. Available at: https://www.solas.ie/f/70398/x/d773e39d8a/lifelonglearning2019.pdf (Accessed: 11 May 2020).

Stake, R. E. (1995) *The art of case study research*. Sage.

Stalker, L. L. H. (2009) 'A tale of two narratives: Ontological and epistemological narratives', *Narrative Inquiry*, 19(2), pp. 219–232.

Starbuck, W. H. (1976) *Interacting processes as organization designs. The management of organization design*.

Stoessel, K., Ihme, T.A., Barbarino, M.L., Fisseler, B. and Stürmer, S., (2015). Sociodemographic diversity and distance education: Who drops out from academic programs and why? *Research in Higher Education*,*56*(3), pp.228-246.

Study Portals, O. C. (2020) *Find and compare online Bachelor and Master degree programmes as well as PhDs and short courses from top universities worldwide - DistanceLearningPortal.com*. Available at: https://www.distancelearningportal.com/ (Accessed: 11 May 2020).

Schwartz-Shea P, Yanow D (2012) Interpretive research design: concepts and processes. Routledge, London

Tait, A. and O'Rourke, J. (2014) '1 Internationalization', *Online Distance Education: Towards a Research Agenda*, p. 39.

Taylor, B. (2018) 'Comparing Learning Theories 1'. Available at: http://www.bethanytaylorid.co.uk/portfolio/comparing-learning-theories/

Taylor, J. C. (2001) 'Fifth generation distance education', *Instructional Science and Technology*, 4(1), pp. 1–14.

Taylor, P. C. and Medina, M. (2011) 'Educational Research Paradigms: From Positivism to Pluralism', p. 15.

TCD (2020) *Study - Trinity College Dublin*. Available at: https://www.tcd.ie/study/ (Accessed: 11 May 2020).

TCD and HEA, I. H. E. (2019) *Trinity-College-Dublin-Mission-Based-Performance-Compact-2018-2021.pdf*. Available at: https://hea.ie/assets/uploads/2017/04/TrinityCollege-Dublin-Mission-Based-PerformanceCompact-2018-2021.pdf (Accessed: 7 February 2020).

Tedlock, B., (2000) Ethnography and ethnographic representation. *Handbook of qualitative research*, *2*(1).

The Irish Times (2001) *Caution on e-learning*, *The Irish Times*. Available at: https://www.irishtimes.com/caution-on-e-learning-1.302537 (Accessed: 10 April 2020).

Thompson, J. D. (1967) 'Organizations in action. New York: McGraw-Hill', *Thompson Organizations in Action1967*.

Tornatzky, L. G., Fleischer, M. and Chakrabarti, A. K. (1990) *Processes of technological innovation*. Lexington books.

Trowler, P., (2014). *Doing insider research in universities*. Createspace Independent Publishing...

Turnbull, N. (2008) 'Harold Lasswell's "problem orientation" for the policy sciences', *Critical Policy Studies*, 2(1), pp. 72–91. doi: 10.1080/19460171.2008.9518532.

Twigg (2003) 'Models for online learning', *Educause review*,*38*, pp.28-38.

Tynan, B. and Lee, M. J. (2009) 'Tales of adventure and change: academic staff members' future visions of higher education and their professional development needs', *On the Horizon*, 17(2), pp. 98–108.

UCC (2020) *Courses*, *University College Cork*. Available at: https://www.ucc.ie/en/study/courses/ (Accessed: 11 May 2020).

UCC and HEA, I. H. E. (2019) *University-College-Cork-Mission-Based-Performance-Compact2018-2021.pdf*. Available at: https://hea.ie/assets/uploads/2017/04/University-College-Cork-Mission-BasedPerformanceCompact-2018-2021.pdf (Accessed: 11 May 2020).

UCD (2020) *University College Dublin - Study at UCD*. Available at: https://www.ucd.ie/studyatucd/ (Accessed: 11 May 2020).

UCD and HEA, I. H. E. (2019) *University-College-Dublin-Mission-Based-Performance-Compact2018-2021.pdf*. Available at:https://hea.ie/assets/uploads/2017/04/University-College-Dublin-Mission-BasedPerformanceCompact-2018-2021.pdf (Accessed: 11 May 2020).

UCL (2018) *Designing programmes and modules with ABC curriculum design*, *Teaching & Learning*. Available at: https://www.ucl.ac.uk/teachinglearning/casestudies/2018/jun/designing-programmes-and-modules-abc-curriculum-design (Accessed: 22 May 2020).

UL (2020) *Courses by discipline | UL Undergraduate Courses*. Available at: https://www.ul.ie/courses/courses-discipline (Accessed: 11 May 2020).

UL and HEA, I. H. E. (2019) *University-of-Limerick-Mission-Based-Performance-Compact2018-2021.pdf*. Available at: https://hea.ie/assets/uploads/2017/04/University-of-Limerick-Mission-BasedPerformanceCompact-2018-2021.pdf (Accessed: 7 February 2020).

Umashankar, V. and Dutta, K. (2007) 'Balanced scorecards in managing higher education institutions: An Indian perspective.', *International Journal of Educational Management*, 21(1), pp. 54–67.

Ummanel, A., McNamara, G. and Stynes, M., (2016) The career paths of primary school principals in Ireland. *Irish Educational Studies*, *35*(1), pp.57-71.

UN, G. A. (1948) 'Universal declaration of human rights'.

Von Prondzynski, F. (2011) *Hunt fails to deliver on great expectations*, *The Irish Times*. Available at: https://www.irishtimes.com/news/education/hunt-fails-todeliver-on-greatexpectations-1.1278272 (Accessed: 22 January 2020

Vygotsky, L. S. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.

Walsh, J. and Loxley, A. (2015) 'The Hunt Report and higher education policy in the Republic of Ireland: "an international solution to an Irish problem?"', *Studies in Higher Education*, 40(6), pp. 1128–1145. doi: 10.1080/03075079.2014.881350.

Walsham, G., (1995) Interpretive case studies in IS research: nature and method. *European Journal of information systems*, *4*(2), pp.74-81.

Webb, J., (2004). Organizations, self-identities and the new economy. *Sociology*,*38*(4), pp.719-738.

Weller, M., Jordan, K., DeVries, I. and Rolfe, V., (2018). Mapping the open education landscape: citation network analysis of historical open and distance education research. *Open Praxis*, *10*(2), pp.109-126.

Weller, M. (2018) 'Twenty Years of Edtech', *Educause Review Online*, 53(4), pp. 34– 48.

Wenger, E. (1998) 'Communities of practice: Learning as a social system', *Systems thinker*, 9(5), pp. 2–3.

Williams, J., Blackwell, S. and Whelan, B. J. (2004) Survey Assessments of the Information Society in Ireland. Dublin, Economic and Social Research Institute.

Willis, J. (2007) *Foundations of Qualitative Research: Interpretive and Critical Approaches*. 2455 Teller Road, Thousand Oaks California 91320 United States: SAGE Publications, Inc. doi: 10.4135/9781452230108.

Winn, W. (2002) 'Research into practice: Current trends in educational technology research: The study of learning environments.', *Educational Psychology Review,* 14(3), pp. 331–351.

Yale Poorvu Centre (2018) *Teaching and Learning Frameworks | Center for Teaching and Learning*. Available at: https://poorvucenter.yale.edu/BackwardDesign (Accessed: 16 February 2019).

Yam, S. and Rossini, P., (2011) *Online learning and blended learning: which is more effective?* (Doctoral dissertation, Pacific Rim Real Estate Society-PPRES).

Yeates, N. (2001) (eds) Stephen Castles and Alastair Davidson, Citizenship and Migration: globalisation and the politics of belonging, London, Macmillan, 2000, vii Journal *of Social Policy*. Cambridge University Press, 30(2), pp. 361–391. doi: 10.1017/S0047279401246297.

Yin, R. K. (2015) *Qualitative research from start to finish*. Guilford Publications.

Yvonne Feilzer, M. (2010) 'Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm', *Journal of mixed methods research*, 4(1), pp. 6–16.

Zawacki-Richter, O. and Naidu, S. (2016) 'Mapping research trends from 35 years of publications in Distance Education', *Distance Education*, 37(3), pp. 245–269. doi: 10.1080/01587919.2016.1185079.

Zawacki-Richter, O., (2009) Research areas in distance education: A Delphi study. *International Review of Research in Open and Distributed Learning*, *10*(3).

Zawacki-Richter, O. and Anderson, T. eds., (2014). Online distance education. *Towards a Research Education. Canada: AU Press, Athabasca University*.

APPENDIX

Appendix A - Classification of Online Learning

Classification	Online Content
Face –to –Face	Zero to 29% of the content is delivered online
Blended	Between 30% and 80% of course content delivered online
Online	At least 80% of the course content is delivered online

(Allen and Seaman, 2016):

The Babson Report is a comprehensive annual survey of education in the US. IT has used consistent definitions of online, face-to-face and blended learning courses since 2003 (Allen and Seaman, 2016**).**

Appendix B - Ethics Documentation

B.1 Recruitment Letter

Date 2019

Letter of Research Recruitment

Dear…….,

I am writing to you to request an interview as part of my dissertation to complete my EdD through the DCU Institute of Education. I am currently in Year 3 of this programme. This requires completion of a 50,000 words dissertation on an education based topic. My topic is: To examine the translation of policy into practice in promoting access to higher education in Ireland, through new models of online learning.

Professor Mark Brown and Dr. Martin Brown are my research supervisors. The research problem I am seeking to answer is to examine as to whether there is a gap between rhetoric, practice and policy in promoting access to higher education through new models of online learning. I am researching this through investigating three overarching themes

To investigate how the Irish policy environment has responded to the emergence of new models of online learning. To analyse how the Irish University sector has responded to the opportunities and challenges presented by the emergence of new models of online learning. To explore how one Irish university has harnessed the potential of new models of online learning.

As part of the process I hope to conduct a series of qualitative interviews with professional experts, like yourself, in the field of Higher Education. These interviews would be audio recorded, would last about one hour and would take

place at a time and place convenient to you. All transcripts would be made available to you for clarification and correction. As the pool of suitable interviewees is limited it would not be possible to anonymise participants.

A copy of the final results would be made available. DCU GDPR procedures would be fully complied with and you would retain the right to with draw from the research at any point in time.

Please let me know if you agree to participate and we can arrange a suitable time and place to conduct the interview.

Yours sincerely,

Colum Foley

Chair-Postgraduate Programmes

Open Education, National Institute for Digital Learning (NIDL),

Dublin City University,

Dublin 9,

Ireland.

Dublin City University

Plain Language Statement Introduction to Research Study

The research title is:

The Rhetoric Policy Practice Gap: A Study of Online Learning in Irish Higher Education.

The Principal Investigator for this research is Colum A. Foley who can be contacted at colum.foley@dcu.ie.

His phone number is :01-7008323. Colum Foley is an Assistant Professor and Chair of DCU Connected

Postgraduate Programmes presented by the Open Education Unit which is part of the National Institute for Digital Learning at Dublin City University. The Open Education Unit support the Principal Investigator to complete this programme. The study is the research contribution to the Doctorate in Education Programme presented by the Institute of Education at Dublin City University.

The Research Supervisors are:

Professor Mark Brown his contact address is mark.browm@dcu.ie

Dr Martin Brown his contact address is martin.brown@dcu.ie

This research aims to examine whether there is a gap between rhetoric, policy and practice in promoting access to higher education through new models of online learning. In short does the "walk" match the "talk" when it comes to accessing higher education through online learning in Irish Higher Education.

This would be done by investigating:

How the Irish policy environment has responded to the emergence of new models of online learning?

How the Irish university sector has responded to the opportunities and challenges presented by the emergence of new models of online learning.

How one Irish university has harnessed the potential of new models of online learning.

Research would be conducted using a three phased approach:

Phase 1:

Interviews would last approximately 1 hour It is possible that the researcher may request a follow-up interview for clarification of some points.

The researcher would request that interviews be recorded (audio only) in order to facilitate data gathering and subsequent data analysis. Participants retain the right to decline the researcher's request to record an interview.

Interviews would take place during 2019.

Participant Risks

It is not envisaged that there are any major risks to participants arising from involvement in the study. The aim of the research is to gain insights from the participants and every precaution would be taken not to embarrass or damage the reputation of participants in any way. With this in mind full transcripts of interviews would be made available to interviewees for correction or clarification.

Participant Benefits

The study results would be available to the participants and may be beneficial in promoting online learning in Higher Education in the future.

Confidentiality

All aspects of the project including the results would be confidential within the limitations of the law.

Anonymity

The data collected would be analysed by the principal researcher alone.

Participants' actual names would be protected.

Interview notes and/or transcripts would be held by the principal researcher and stored in a secure location.

Data Destruction

Research data would be retained for five years from the date of final submission after which all electronic and paper based data would be destroyed.

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

B.3 Informed Consent Form

DUBLIN CITY UNIVERSITY

Informed Consent Form

Research Study Title - The Rhetoric Policy Practice Gap: A Study of Online Learning in Irish Higher Education.

The Principal Investigator for this research is Colum A. Foley

Colum Foley is Assistant Professor/Chair of DCU Connected Postgraduate Programmes presented by the Open Education Unit which is part of the National Institute for Digital Learning at Dublin City University. The study is the research contribution to the Doctorate in Education Programme presented by the Institute of Education at Dublin City University. The Research Supervisors are: Professor Mark Brown, Dr Martin Brown.

Clarification of the purpose of the research The purpose of this research is to review the evolution of government policy on online learning with a view to making recommendations as to what best practice internationally proposes incorporating the lessons learned by an early adopting university in Ireland in this area, to contribute to shaping policy in the future. This is significant because DCU has committed as part of its current strategic plan Talent, Discovery and Transformation (DCU, 2017) to set out as a task the implementation of a Digital Campus Vision. This aims to establish DCU as an integrated, digitally connected university through an advanced network of connected infrastructure, digital platforms and people. This

would contribute to increasing life -long learning and opening access to higher education in Ireland.

Confirmation of particular requirements as highlighted in the Plain Language Statement

Participants would be required to be available for at least one face-to-face interview

Interviews would last approximately 1 hour

It is possible that the researcher may request a follow-up interview to clarify issues that may arise.

The researcher would request that interviews be recorded (audio only) in order to facilitate data gathering and subsequent data analysis. Participants retain the right to decline the researcher's request to record an interview.

Interviews took place during 2019.

Participant – please complete the following

(***Circle Yes or No for each question)***	Yes	No
I have had an opportunity to ask questions and discuss this study		
I have received satisfactory answers to all my questions		
I am aware that my interview would be audio- recorded		

Confirmation that involvement in the Research Study is voluntary

I may withdraw from the Research Study at any point.

Advice as to arrangements to be made to protect confidentiality of data

All aspects of the project including the results would be confidential within the limitations of the law.

Any other relevant information

As the Interview sample pool is small, although interviewee identities would not be revealed, it may not be possible to fully anonymize them

Signature:

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Dublin City University

Research Debrief Document

The Rhetoric Policy Practice Gap: A Study of Online Learning in Irish Higher Education.

Thank you for participating in this study.

The general purpose of this research is to investigate promoting access to higher education in Ireland by utilizing new models of online learning. All data collected during the research process would be protected in accordance with DCU GDPR policies and would remain confidential to the study. Should you wish any information you have provided to be removed from the study you retain the right to have this done on request?

The research process now enters the analysis phase of the research. Should you wish to receive a copy of research results once this has been completed please advise the Principal Investigator Colum Foley. If you have further questions about the study, please contact Colum A. Foley, Postgraduate Programme Chair, Open Education Unit, Dublin City University at colum.foley@dcu.ie

In addition, if you have any concerns about any aspect of the study, you may 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

B.5 Research Permission Letter

8th June 2019

Dear Mr Kelly,

As part of my research for my Doctorate in Education I wish to interview a number of DCU employees on the topic of Online Education.

Professor Mark Brown and Dr Martin Brown of DCU Institute of Education, are my supervisors.

All DCU Ethics including PDGR requirements will be observed. The interviews will be audio recorded with full transcripts being provided to interviewees for review in relation to accuracy and clarity.

All participants will participate freely and have the right to withdraw from the research at any time.

As part of the process I understand permission must be sought from Professor Gilfoyle. With this in mind I enclose a letter of request.

Yours sincerely

Colum Foley

Chair-Postgraduate Programmes

Open Education, National Institute for Digital Learning (NIDL), Dublin City University, Dublin 9, Ireland.

Phone: +353-1-7008323

eMail: colum.foley@dcu.ie

Skype: columfoley1

Website Open Education: www.dcu.ie/openeducation

Website NIDL: www.dcu.ie/nid

B.6 Research Approval Letter

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

DCU

Mr Colum Foley
Open Education Unit

28th June 2019

REC Reference: DCUREC/2019/105

Proposal Title: The Rhetoric, Policy Practice Gap: A Study of Online Learning in Irish Higher Education

Applicant(s): Mr Colum Foley

Dear Colum,

This research proposal qualifies under our Notification Procedure, as a low risk social research project. Therefore, the DCU Research Ethics Committee approves this project.

Materials used to recruit participants should state 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

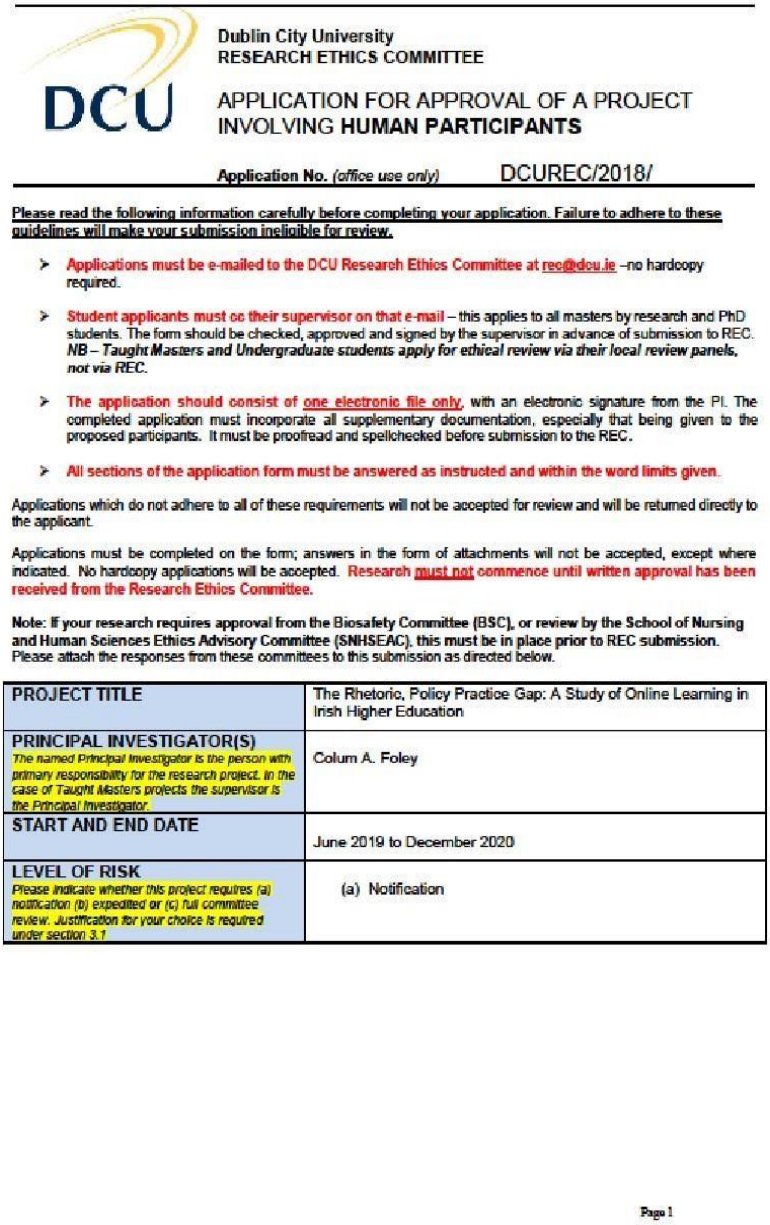
Dr Mark Philbin
Interim Chairperson
DCU Research Ethics Committee

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

B.7 Research Approval Application



Dublin City University
RESEARCH ETHICS COMMITTEE

APPLICATION FOR APPROVAL OF A PROJECT INVOLVING **HUMAN PARTICIPANTS**

Application No. *(office use only)* DCUREC/2018/

Please read the following information carefully before completing your application. Failure to adhere to these guidelines will make your submission ineligible for review.

- **Applications must be e-mailed to the DCU Research Ethics Committee at rec@dcu.ie** –no hardcopy required.
- **Student applicants must cc their supervisor on that e-mail** – this applies to all masters by research and PhD students. The form should be checked, approved and signed by the supervisor in advance of submission to REC. ***NB – Taught Masters and Undergraduate students apply for ethical review via their local review panels, not via REC.***
- **The application should consist of one electronic file only**, with an electronic signature from the PI. The completed application must incorporate all supplementary documentation, especially that being given to the proposed participants. It must be proofread and spellchecked before submission to the REC.
- **All sections of the application form must be answered as instructed and within the word limits given.**

Applications which do not adhere to all of these requirements will not be accepted for review and will be returned directly to the applicant.

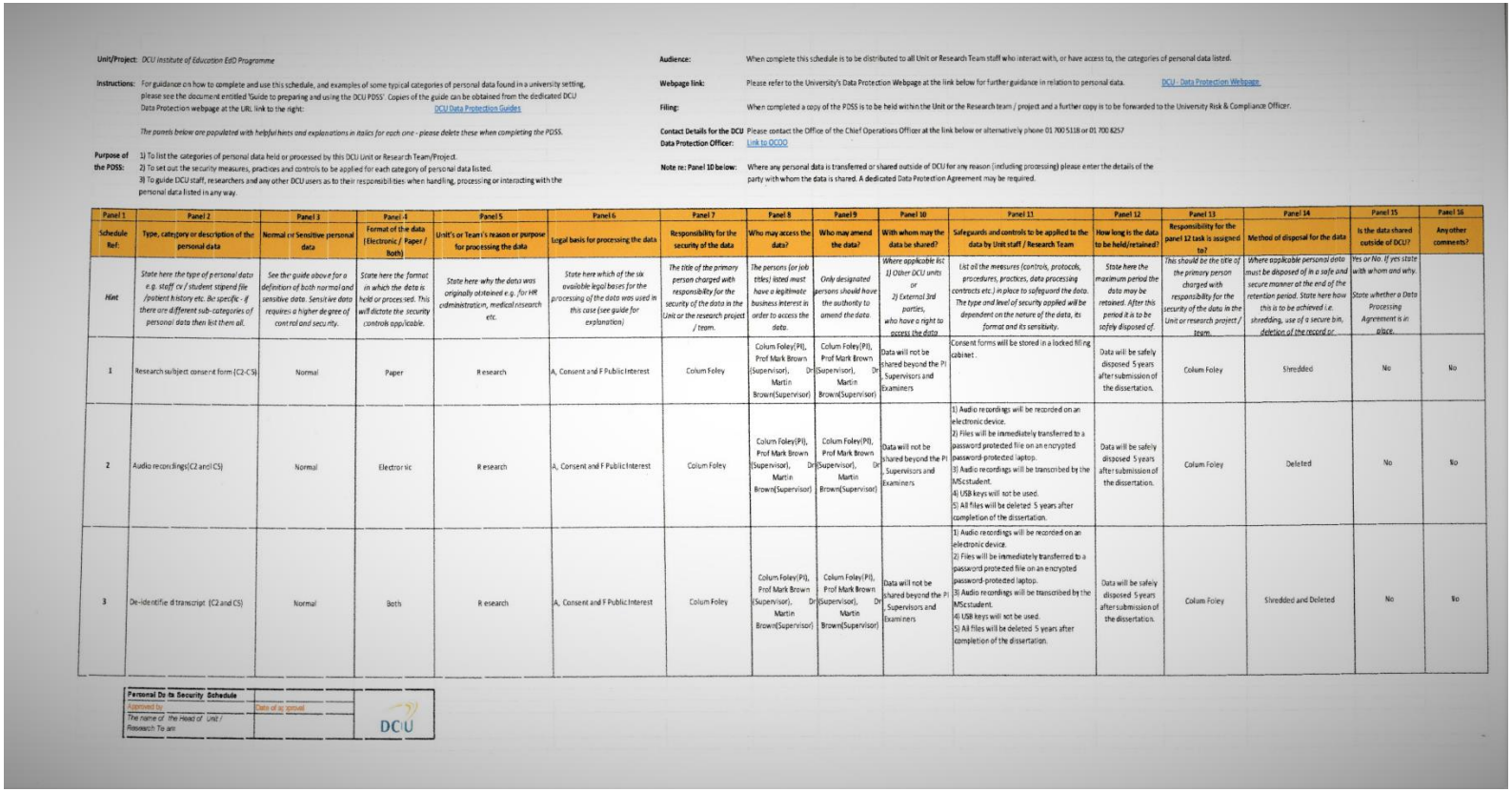
Applications must be completed on the form; answers in the form of attachments will not be accepted, except where indicated. No hardcopy applications will be accepted. **Research must not commence until written approval has been received from the Research Ethics Committee.**

Note: If your research requires approval from the Biosafety Committee (BSC), or review by the School of Nursing and Human Sciences Ethics Advisory Committee (SNHSEAC), this must be in place prior to REC submission. Please attach the responses from these committees to this submission as directed below.

PROJECT TITLE	The Rhetoric, Policy Practice Gap: A Study of Online Learning in Irish Higher Education
PRINCIPAL INVESTIGATOR(S) *The named Principal Investigator is the person with primary responsibility for the research project. In the case of Taught Masters projects the supervisor is the Principal Investigator.*	Colum A. Foley
START AND END DATE	June 2019 to December 2020
LEVEL OF RISK *Please indicate whether this project requires (a) notification (b) expedited or (c) full committee review. Justification for your choice is required under section 3.1*	(a) Notification

Page 1

B.8 Personal Data Security Schedule (PDSS)



Unit/Project: *DCU Institute of Education EdD Programme*

Instructions: For guidance on how to complete and use this schedule, and examples of some typical categories of personal data found in a university setting, please see the document entitled 'Guide to preparing and using the DCU PDSS'. Copies of the guide can be obtained from the dedicated DCU Data Protection webpage at the URL link to the right: DCU Data Protection Guides

The panels below are populated with helpful hints and explanations in italics for each one - please delete these when completing the PDSS.

Purpose of the PDSS: 1) To list the categories of personal data held or processed by this DCU Unit or Research Team/Project.
2) To set out the security measures, practices and controls to be applied for each category of personal data listed.
3) To guide DCU staff, researchers and any other DCU users as to their responsibilities when handling, processing or interacting with the personal data listed in any way.

Audience: When complete this schedule is to be distributed to all Unit or Research Team staff who interact with, or have access to, the categories of personal data listed.

Webpage link: Please refer to the University's Data Protection Webpage at the link below for further guidance in relation to personal data. DCU - Data Protection Webpage

Filing: When completed a copy of the PDSS is to be held within the Unit or the Research team / project and a further copy is to be forwarded to the University Risk & Compliance Officer.

Contact Details for the DCU Data Protection Officer: Please contact the Office of the Chief Operations Officer at the link below or alternatively phone 01 700 5118 or 01 700 8257
Link to OCOO

Note re: Panel 10 below: Where any personal data is transferred or shared outside of DCU for any reason (including processing) please enter the details of the party with whom the data is shared. A dedicated Data Protection Agreement may be required.

Panel 1	Panel 2	Panel 3	Panel 4	Panel 5	Panel 6	Panel 7	Panel 8	Panel 9	Panel 10	Panel 11	Panel 12	Panel 13	Panel 14	Panel 15	Panel 16
Schedule Ref:	**Type, category or description of the personal data**	**Normal or Sensitive personal data**	**Format of the data (Electronic / Paper / Both)**	**Unit's or Team's reason or purpose for processing the data**	**Legal basis for processing the data**	**Responsibility for the security of the data**	**Who may access the data?**	**Who may amend the data?**	**With whom may the data be shared?**	**Safeguards and controls to be applied to the data by Unit staff / Research Team**	**How long is the data to be held/retained?**	**Responsibility for the panel 12 task is assigned to?**	**Method of disposal for the data**	**Is the data shared outside of DCU?**	**Any other comments?**
Hint	*State here the type of personal data e.g. staff cv / student stipend file /patient history etc. Be specific - if there are different sub-categories of personal data then list them all.*	*See the guide above for a definition of both normal and sensitive data. Sensitive data requires a higher degree of control and security.*	*State here the format in which the data is held or processed. This will dictate the security controls applicable.*	*State here why the data was originally obtained e.g. for HR administration, medical research etc.*	*State here which of the six available legal bases for the processing of the data was used in this case (see guide for explanation)*	*The title of the primary person charged with responsibility for the security of the data in the Unit or the research project / team.*	*The persons (or job titles) listed must have a legitimate business interest in order to access the data.*	*Only designated persons should have the authority to amend the data.*	*Where applicable list 1) Other DCU units or 2) External 3rd parties, who have a right to access the data*	*List all the measures (controls, protocols, procedures, practices, data processing contracts etc.) in place to safeguard the data. The type and level of security applied will be dependent on the nature of the data, its format and its sensitivity.*	*State here the maximum period the data may be retained. After this period it is to be safely disposed of.*	*This should be the title of the primary person charged with responsibility for the security of the data in the Unit or research project / team.*	*Where applicable personal data must be disposed of in a safe and secure manner at the end of the retention period. State here how this is to be achieved i.e. shredding, use of a secure bin, deletion of the record or*	*Yes or No. If yes state with whom and why. State whether a Data Processing Agreement is in place.*	
1	Research subject consent form (C2-CS)	Normal	Paper	Research	A, Consent and F Public Interest	Colum Foley	Colum Foley(PI), Prof Mark Brown (Supervisor), Dr Martin Brown(Supervisor)	Colum Foley(PI), Prof Mark Brown (Supervisor), Dr Martin Brown(Supervisor)	Data will not be shared beyond the PI Supervisors and Examiners	Consent forms will be stored in a locked filing cabinet.	Data will be safely disposed 5 years after submission of the dissertation.	Colum Foley	Shredded	No	No
2	Audio recordings(C2 and CS)	Normal	Electronic	Research	A, Consent and F Public Interest	Colum Foley	Colum Foley(PI), Prof Mark Brown (Supervisor), Dr Martin Brown(Supervisor)	Colum Foley(PI), Prof Mark Brown (Supervisor), Dr Martin Brown(Supervisor)	Data will not be shared beyond the PI , Supervisors and Examiners	1) Audio recordings will be recorded on an electronic device. 2) Files will be immediately transferred to a password protected file on an encrypted password-protected laptop. 3) Audio recordings will be transcribed by the MSc student. 4) USB keys will not be used. 5) All files will be deleted 5 years after completion of the dissertation.	Data will be safely disposed 5 years after submission of the dissertation.	Colum Foley	Deleted	No	No
3	De-identified transcript (C2 and CS)	Normal	Both	Research	A, Consent and F Public Interest	Colum Foley	Colum Foley(PI), Prof Mark Brown (Supervisor), Dr Martin Brown(Supervisor)	Colum Foley(PI), Prof Mark Brown (Supervisor), Dr Martin Brown(Supervisor)	Data will not be shared beyond the PI , Supervisors and Examiners	1) Audio recordings will be recorded on an electronic device. 2) Files will be immediately transferred to a password protected file on an encrypted password-protected laptop. 3) Audio recordings will be transcribed by the MSc student. 4) USB keys will not be used. 5) All files will be deleted 5 years after completion of the dissertation.	Data will be safely disposed 5 years after submission of the dissertation.	Colum Foley	Shredded and Deleted	No	No

Personal Data Security Schedule		
Approved by:	Date of approval:	DCU
The name of the Head of Unit / Research Team		

Appendix C – Interview Questions

Interview Questions

1) **To investigate how the Irish policy environment has responded to the emergence of new models of online learning.**

- What is your knowledge of policy supporting online learning in the Irish and/or?

  European context?

- How has this evolved
- What are the main influences?
- Who have been the major influencers
- Where do you think policy is heading?
- What type of online models are suitable in this environment?

2) **To analyse how the Irish university sector has responded to the opportunities and challenges presented by the emergence of new models of online learning.**

- What influence if any have national and European policy initiatives had on the growth of online learning in your institution?
- Is this important, if so why?
- What are the enablers / barriers to development? - Is there collaboration in the sector in this area?
- Where would it go next
- How does this compare to developments at second level?
- Is there any co-ordination in the approach?
-

3) To explore how one Irish university has harnessed the potential of new models of online learning.

Why has your institution invested in the area of online learning?

- What are the main outcomes you want to achieve through online?
- learning?

- What are the driving forces for your institution in this area?
- What factors have helped to enable the growth of online learning in your institution?
- What have been some of the major barriers to the growth of online learning in your institution?
- What do you see as the future of online learning?
- What areas are not suitable for online learning?
- Are there areas particularly suited to online learning
- What single change would you make to advance online learning in Ireland
- Is there a disconnect between the formal and the informal use of online learning

Appendix D - Document Comparison Framework

	DOCUMENT COMPARRISON FRAMEWORK		
1	NAME		
2	REFERENCE		
3	DATE		
4	COUNTRY		
5	Type of Document		Strategy
			Action Plan
			Draft Strategy/Policy/Action Plan
			Discussion Paper
			Evaluation Report
			Background Paper
			Book
6	Major Themes		
7	Category of Document		Policy
			Background Paper
8	Scale of Project		Local
			Regional
			National
			Supranational
9	Budget/Funding		
10	Timeframe		
11	Target Audience		Early Childhood
			Compulsory Schooling
			Post Compulsory Schooling
			Higher Education
			Vocational Education
			Community-based Education
			Small and Remote
12	Sponsoring Agency		
13	Author		
14	Contact Details		
15	Co-Authors		
16	Aims/Objectives		
17	Areas of Priority		
18	Key Action Points		
19	Procedures and Responsibility for Implementation		
20	Procedures and Responsibility for Monitoring & Evaluation		

Document Comparison Framework (Continued)

21	Partnerships with Others Regarding Implementation		
22	Relationship to Other Policies		
23	Summary of Document		
24	Relevance to Irish Context		
25	Actions/Strategies Related to Dept Enterprise & Skills		
26	Actions/Strategies identified for other Sub groups		
27	Feedback Provided: Yes/No /N.A		
28	Link		
29	Cross References		
30	Drivers		Social
			Vocational
			Economic
			Commercial
			Marketing
			Cost Effectiveness
			Transformational
			Pedagogical

Appendix E - Performance Compact Reviews

Objective 1

DCU has as its goals for Objective One:

Goal One: To ensure that our graduates are equipped with the appropriate skills, across a range of dimensions, to flourish in the rapidly evolving workplace.

Goal Two: To increase the number of students entering undergraduate and postgraduate teacher education programmes, in line with national strategies for growth in teacher supply

UCC proposes two goals:

Goal One: Implement an academic strategy to deliver an outstanding, student-centred teaching and learning experience with a renewed, responsive, research.

Goal Two: To be a leading university for research, discovery, innovation, entrepreneurship, commercialisation and societal impact.

UCC addresses these issues with two strategic priorities:

Strategic Priority One: Work with organisations including industry, the professions and the wider community to ensure that our graduates have the adaptable expertise required to excel in changing work contexts, and that our programmes would be responsive to societal needs and meet professional accreditation requirements" and Action 2.1 'Provide students with opportunities to engage with learning communities outside of their discipline through internships, placements and/or volunteering activities

Strategic Priority Two: UCD would continue to recognise the importance of the employability of our students and adopt as appropriate to each discipline employability statements in line with High Level Goals.

MU gives strategic objectives:

Strategic Objective 1.1: We would further develop the unique Maynooth undergraduate curriculum, offering students new fields of study and subject combinations, greater choice of electives, additional opportunities to develop critical and analytic skills, and an enhanced range of co-curricular and extra-curricular experiences, all with the objective of providing a strong talent pipeline combining knowledge, skills & employability and responding effectively to the needs of our enterprise, public service and community sector

Strategic Objective 1.2: We would enhance the attractiveness, sustainability and flexibility of our taught Master's portfolio, enabling an increase in taught Master's enrolments from 1,000 to 1,400, with a balance of full-time and part-time provision.

Trinity College Dublin Trinity links to goals in its strategic plan:

Goal 1- Strengthen Community,

Goal 3-Renew the 'Trinity Education'

Goal 5-Build Valuable Partnerships and

Goal 6-Research for Impact, links directly with Key System Objective 1. Its goal in this regard is: Priority 1: Deliver the first phase of the E3 Institute — the Learning Foundry which would increase STEM students in the university by 50% over ten years

NUI Galway sets out two goals:

Goal One: A New Employability Award, piloted successfully with 56 students in 2017/18, ensures that all students on programmes that do not include a formal work placement would have the opportunity to undertake work-based learning via the

Award. The Employability Award would be fully rolled out to undergraduate students by the end of AY 2020/21.

Goal Two: A New Campus Jobs project to recognise student work on campus would be launched in 2018-19. Campus Jobs – employing students on-campus for part-time and temporary work has been shown to increase student engagement, retention and employability and currently almost 200 undergraduate students are employed in a variety of casual roles across the University.

UL commits to:

Provide a seamless and flexible set of programmes, UL is combining its graduate school and CPE into a single body under the Dean of Graduate and Professional Studies allowing tailoring of its education and training to the needs of postgraduate students be they full- or part-time.

Liaising with key employers to develop Executive Education and other CPD offerings in line with the National Skill Strategy targets. UL also works with specific sectors through partnerships. The provision of Co-ops would be expanded to include PG programmes. UL would grow its flexible learning offer (part-time, blended, distance, low residency and fully online, work-based learning and cumulative degrees) to support the needs of a diversity of learners and especially mature learners.

Objective 2 refers to the important area of internationalisation and Objective 3 considers the relationship between education, research and industry. While both these areas are important and interesting, they do no relate directly to this research so they are not reviewed here

Objective 4

DCU addresses this objective with a strategic goal:

Goal 1: Over the course of the compact, DCU would develop and implement a Widening Participation Strategy that would build on and extend our existing wide-ranging outreach and access initiatives targeted at underrepresented groups in society. We would endeavour to systematically reduce the barriers to participation /by mature, second-chance, and lifelong learners as well as students with specific disabilities (e.g. autism, deafness) through:

Development of a Widening Participation strategy (2018)

Implementation of an evidence-based project to rectify barriers to participation.

Identification of a clear set of metrics to underpin measurement of widening participation initiatives

Development of new entry routes with FE partners

A review and enhancement of our Access programme (addressing socioeconomic disadvantage)

The establishment and roll-out of specific actions underpinning our designation as the world's first Autism-friendly University

UCC addresses this objective with a strategic goal**:**

Goal 1: Implement an academic strategy to deliver an outstanding, student-centred teaching and learning experience with a renewed, responsive, research-led curriculum at its core. Under this goal UCC seeks to: Continue our commitment to widening participation and enhancing access for all students, fostering an inclusive environment that mainstreams diversity and equality.

UCD offers a strategic priority:

Strategic Priority 1: Develop and implement a suite of responses to widen access and ensure participation by diverse student cohorts, including students with disabilities, mature students, part-time students, students from communities experiencing disadvantage, Irish Travellers/ethnic minorities, lone parents, refugees, asylum seekers and those given leave to remain. This strategic priority is aligned with High Level Target 4: Sustain the expansion from underrepresented groups with 2,000 additional enrolments from socioeconomically disadvantaged groups and 1,000 from Further education access programmes. To achieve this target UCD would: ○ Expand activities to widen access. ○ Develop the University for all initiatives. ○ Develop a University Student Success Strategy by 2020.

MU addresses this objective with two strategic objectives**:**

Strategic Objective 4.1: We would build on our experience and achievements in supporting access, participation and success for students from diverse backgrounds to address other groups that face barriers to participation and success in higher education.

Strategic Objective 4.2: We would support our staff in making curricula, teaching and learning more inclusive, international and intercultural and would work to create an inclusive academic environment **TCD** proposes a strategic goal:

Strategic Plan Goal 1 Trinity seeks to enrol students with a broad range of talents and with the ability to engage with the kind of education the university offers. Their activities include outreach programmes and teacher professional development. It proposes:

Priority 1: Sustain the expansion from underrepresented groups with 2,000 additional enrolments from socioeconomically disadvantaged groups and 1,000 from further education access programmes

Priority 2: Increase enrolments from DEIS Schools by ensuring that every such school would be participating in a HEI-led access programme

NUIG proposes two strategic priorities:

Strategic Priority 1: Build on NUI Galway's commitment to support a diverse student body and create a culture of inclusivity, by increasing to 24% the percentage of students from traditionally under-represented groups entering undergraduate study, increased from 21% (2017/18 baseline), Vision 2020 target. This target would be achieved through a suite of different initiatives

Strategic Priority 2: NUI Galway would improve completion rates for students from disadvantaged cohorts and implement new data initiatives and indicators to drive student success.

Sub-level Strategic Initiatives:

(i) NUI Galway would have a Student Success Strategy in place by 2020.

(ii) NUI Galway would develop a data warehouse facility to support student success strategies.

UL also proposes two strategic priorities**:**

Strategic Priority 1 Access Limerick: The University focuses on the equality of opportunity through the strategic and coordinated work of three dedicated units: The Access Office to support the recruitment, progression and success of students from disadvantaged backgrounds; the Mature Students Office and the Disability Office.

This support is complemented by the UL Engage initiative, which includes a suite of broadening modules that fosters the engagement with communities including through volunteering opportunities.

Strategic Priority 2 Progression and Retention: P). To tackle the issue of progression of undergraduate students, UL is developing a range of approaches under the guidance of the newly appointed Vice President for Academic Affairs and Student Engagement.

Objective 5

DCU proposes two goals:

Goal 1: To establish a Professional Development Framework for Teaching and Learning: to enhance significantly the learning experience of our students During the lifetime of this strategy, DCU would develop a teaching and learning (T&L) enhancement framework, which shall comprise the following elements:

The development of a professional development framework for T&L.
The establishment of a new DCU award in Learning Innovation for HE.
A review of our assessment of teaching quality through a review of Quest and identification of more effective processes/instruments.
Provision of designated funding at school level for staff teaching development in disciplinary domains (to include fellowships)
Development of research-supported metrics of impact of T&L initiatives on student learning experience.
Goal 2: To renew and advance our Digital Teaching and Learning Strategy: to significantly increase our online provision. During the lifetime of our plan, DCU will build on its significant investment to date in Digital Teaching and Learning
(e.g. appointment of Ireland's first Chair in Digital Learning; establishment of the National Institute for Digital Learning; introduction of Digital Learning Portfolio for every student) and would deliver a step-change in its on-line programmes at both undergraduate and postgraduate levels. This would be achieved by:
Entering into a global strategic partnership with one of the leading online platforms worldwide. By creating a substantial, new university unit that would provide expertise in creating online programmes to academic staff in each of our five faculties.

UCC addresses this objective with one strategic goal**:**

Goal 1: Implement an academic strategy to deliver an outstanding, student-centred teaching and learning experience with a renewed, responsive, research-led curriculum at its core. Our strategies to achieve this goal are to:

Deliver inspired teaching, learning and assessment excellence, informed by world-class research, delivered by staff who are supported to continually develop professional practice.

Promote and strengthen the university's research mission through the curriculum.

Position interdisciplinarity as a core academic mission of the university.

Create credit-bearing opportunities for all students to access a breadth of learning and develop graduate attributes, including opportunities for students to engage with the creative arts and with language learning and discovery.

UCD proposes two strategic priorities would address this objective:

Strategic Priority: Action 1.6 states: Review our Quality Assurance framework in partnership with students, faculty, staff and external examiners, to ensure that programmatic reviews and strategic reviews of schools would further enhance our students' academic experience.

Strategic Priority 4 sets out to: Enable students to proactively manage their health and well-being, and develop the attributes required to make the most of their wider university experience is central to a quality student experience.

Initiative 1.1 Engage with QQI Institutional Review: Engage fully with the QQI Institutional Review planned for 2019.

Initiative 1.2 Enhance feedback systems: Prioritise enhancement of feedback systems and closure of the student feedback loop based on an analysis of module feedback and data from the ISSE.

Initiative 1.3 Redesign UCD's module feedback system by 2020

Initiative 1.4: Develop counselling and welfare services

Invest in a three-year project to enhance student counselling and wellbeing services (2018/19).

UCD Education Strategy, Action 1.3 states: Work with programme teams to incorporate blended learning, to create flexibility and anticipate the realities of future digital worlds. This priority is aligned with High Level Target 5: All HEIs to have in place policies for digital teaching and learning by 2019.

To achieve this target UCD proposes Initiative 2.1*: <u>Develop</u> UCD's Virtual Learning Environment:*

In 2018/19 UCD commissioned a virtual learning environment aligned to the current and future needs of the learners and staff. Outcomes associated with the VLE include: Provision of individual student-facing information regarding student engagement with the VLE and their success within their programmes and modules in advance of terminal assessments

A more consistent, accessible and personalised online experience that enables technological enhancement of education provision

Provision of academic, programme and support staff-facing information regarding student engagement such that students in danger of failing modules or failing to progress can be identified for support and appropriate intervention.

Develop a digital learning and teaching policy that collates aspects of existing regulations, policies and guidelines that relate to the online environment, by 2020.

MU proposes two strategic objectives**:**

Strategic Objective 5.1: We would further enhance our supports for teaching development and learning innovation.

Key initiatives

We will strengthen our capacity to support a culture of reflection and continuous improvement in teaching and learning practice and the adoption of innovative methodologies, through a seminar and masterclass series and a formal professional development programme.

We will establish a Teaching Innovation Fund and extend the current Teaching Fellowship programme to sponsor novel approaches to teaching and learning.

We would fund the development and launch of three blended e-learning programmes in the 2019-2021 period,

Strategic Objective 5.2: We would enhance our quality assurance and quality enhancement processes, and strengthen the link between quality enhancement and strategic planning.

Key initiatives

We will use the forthcoming CINNTE independent review of our quality assurance/quality enhancement processes to further develop a culture of continuous quality enhancement.

We would implement a faculty-level strategic planning process, to support the planned growth of the university, foster interdepartmental collaboration, promote quality enhancement, and link quality assurance/quality improvement processes to formal strategic planning.

We will establish annual quality enhancement themes derived from those recommendations within quality reviews that are best delivered at faculty or university level

Key performance indicators to be used include: Number of staff engaged with teaching development programmes; student progression rates; number of students enrolled to blended learning programmes; completion of faculty strategic plans; number of quality enhancement themes identified and developed.

TCD addresses this objective with a strategic priority:

Strategic Priority 1: Implement from 2018 Continuous Professional Development Framework for all academic staff:

Trinity has introduced a tenure track path to recruit early career academic staff. A development programme has been designed to support academic staff in the early period.

A blended learning course is available, enabling Professional Skills for Research Leaders.

The Momentum Programme, is also in place to support academics who are more established in their careers, in new leadership responsibilities.

The Trinity Education Project aims to encourage the adoption of new and relevant pedagogies, especially those relating to assessment, curriculum design and development, and the uptake of digital technologies.

#Trinity would continue to implement its major undergraduate change programme, which involves professional development of academic staff, and would seek opportunities to link the relevant professional development of its staff to the National Professional Development Framework.

NUIG addresses this objective with two strategic priorities:

Strategic Priority1: To ensure that staff who teach and design our programmes are provided with professional training and development opportunities, to ensure that our research-led teaching continues to generate a creative and stimulating environment, enriches the student experience and produces graduates of the highest quality (aligned to Vision 2020 objective).

Sub-level Strategic Initiatives

Align our existing professional development and training programmes for academic staff with the National Professional Development Framework

Recognise and reward leadership and the scholarship of teaching and learning through the introduction of a new professorial promotion route

Continuous Professional Development Framework for academic staff.

Strategic Priority 2: Review, revise and develop new curricula to ensure that our portfolio of programmes is innovative, responsive to local, national and international

demands, attractive to students and relevant to the needs of the modern learner (aligned to Vision 2020 objectives).

Sub-level Strategic Initiatives:

Student Engagement, Programme Development and Feedback:

Revised policy and guidelines on programme design, approval, development, and review which aims to embed best practice, clarify processes, and enhance the quality of provision. This would be achieved through inputs from relevant stakeholders including

The development of an effective, comprehensive programme review process which incorporates and integrates information gleaned from student and course team feedback, data on progression and performance. success.

Develop policy for digital teaching and learning by the end of 2018/2019, to include best practice guidelines for programme design and implementation, guidelines on data protection and 'digital wellbeing' requirements; principles of course design and assessment for online/blended learning programmes; supports for student digital skills development and certification. This policy would be informed by the work of the National Forum (e.g. Digital Roadmap, Leadership Perspectives review, Enabling Policies, etc.).

The continued development of Graduate Attributes at institutional, College, and discipline levels.

UL has two strategic priorities for this objective:

Strategic Priority 1: Improving progression and completion:

On-going implementation of Building on the work of the Centre for Teaching and Learning, targeted measures to support learners in areas with problematic non-progression rates would be developed and implemented through specific learner groups.

UL has established the Educational Assistive Learning Technology Centre. The Centre would be a key component in the development of technology assisted an enabled learning. It would be complemented by a Learning Innovation Commons that drives the development of respective academic staff competency through CPD.

A comprehensive Digital Learning Policy including lecture recording shall be implemented by 2019/20.

Strategic Priority 2 Common entry into undergraduate programmes:

UL has developed a number of common entry programmes, in engineering, arts and computer science.

Increase opportunities for interdisciplinary exchange and collaboration including opportunities for cross-fertilisation between

Expanding the number of transition modules offered to students to promote academic success and inclusivity.

Revising the final year project, which all students undertake. Specifically, we would introduce a range of alternative multi-modal and individually tailored formats that would match better with student talent and enhance employability and would strengthen the focus on research and entrepreneurship.

Developing opportunities to combine foreign languages with a wide range of disciplines. Expanding choice on the programme by offering more vocational/professional skills

Appendix F - Conference Papers

Foley, C.A. (2019). Online Learning: Moving from Optional Extra to a Must Have Teaching and Learning Option, Paper in the ICDE World Conference on Online Learning, Dublin, 4th November.

Foley, C.A. (2018) Is it time for the land of saints and scholars to teach globally online? Paper in PhD Symposium proceedings of the 10th EDEN Research Workshop, towards personalized guidance and support for learning. Barcelona, 24th October.

Foley, C.A. (2018). Online learning the gateway to lifelong learning in Ireland: rhetoric and reality? Paper in student session on Education & Learning, 1st Irish Postgraduate Research Conference (IPRC), Dublin, 8th November.

Word Count	65,660
References & Appendix	11,351
Total	54,309