What do we mean by innovative teaching? A phenomenographic study of academics' perspectives

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ABSTRACT

Innovative teaching is a pervasive term in UK higher education discourse, particularly in strategy and marketing, yet 'innovation' is a contested term (Smith, 2011; Wolff, 2008). Educators are frequently encouraged to engage in innovative teaching, but what this looks like in practice and whether there is a shared understanding in the context of higher education is less clear. If innovative teaching is currently seen as a strategic aim by many universities, then realising this aim requires an understanding of what educators perceive innovative teaching to mean for their practice. By challenging the assumption there is a shared understanding of what innovative teaching means to practitioners this thesis aims to redress the lack of discussion and academic voice on this issue.

This study uses a phenomenographic approach to explore the qualitatively different ways educators perceive and understand innovative teaching. Thirteen academics representing a variety of disciplines and teaching experience at a UK higher education institution were interviewed. Analysis using phenomenographic principles led to the development of a compound outcome space with four qualitatively different ways of experiencing innovative teaching underpinned by three qualitatively different ways of experiencing the novelty aspect of innovative teaching. The salient characteristics of each perspective are discussed along with the critical differences and relationships between them.

The findings of this research contribute new knowledge on academics' perceptions of innovative teaching, providing insights to inform discussion and strategy regarding innovative teaching both within institutions and in the wider HE community. The concept of a compound outcome space is an original presentation of phenomenographic findings and is a contribution to relatively small body of literature on the methodological detail of phenomenographic analysis. Innovative teaching is an area of current prominence and discussion in the higher education sector, and I present this thesis as a contribution to a limited body of literature on the subject offering insights to further the debate.

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LIST OF ABBREVIATIONS:

BERA	British Educational Research Association
GDPR	General Data Protection Regulation
GOS	Graduate Outcomes Survey
HE	Higher Education
HEA	The Higher Education Academy
NSS	National Student Survey
NTFS	National Teaching Fellowship Scheme
OfS	Office for Students
QAA	The Quality Assurance Agency for Higher Education
R&D	Research and Development
REF	Research Excellence Framework
SCL	Student centred learning
SoTL	Scholarship of teaching and learning
T&L	Teaching and learning
TEF	Teaching Excellence and Student Outcomes Framework
TEL	Technology enhanced learning
UK	United Kingdom
UKPFS	UK Professional Standards Framework

CHAPTER 1: INTRODUCTION

1.1 Purpose of this thesis

The overarching aim of this thesis is to contribute new knowledge to our understanding of innovative teaching as a concept in policy and practice in higher education (HE) in the United Kingdom (UK). To do so this study uses a phenomenographic approach to explore academic's perceptions of innovative teaching. The focus of the research is to establish critical variation in perceptions of innovative teaching and to discuss implications of this deeper understanding for policy and practice of innovative teaching in higher education. In addition to practitioners themselves, key stakeholders who would have interest in these findings and consequent implications for practice include students, parents, professional development coordinators, HE managers and policy writers and employers.

1.2 Context of the study

Innovation is high profile in the priorities of governments, businesses, universities, public services and civil society (OECD, 2015b). Innovation is also a pervasive term in higher education discourse, it is in numerous university strategies, in various HE departmental and job titles, was in the name of the UK government ministry responsible for HE when this research commenced and there is a significant body of related literature. Yet innovation is a contested and political term (Godin, 2014; Smith, 2011; Wolff, 2008). Casanovas (2010, p.73) suggests a widely accepted definition of innovation is 'the adoption of an idea or behaviour that is new to an organization'. Though what this looks like in practice and means in the context of teaching in HE is less clear. The apparent assumption there is shared understanding of the term innovation as used in HE strategy, policy and practice is therefore questionable.

Despite frequent use of the terms, many research studies in education do not define innovation or innovative teaching. Others such as Thurlings, Evers and Vermeulen (2015) and Wolff (2008) comment that there is no clear agreed definition in literature on innovation and educational change. Wolff's (2008,

p.1185) study contrasts the use of the term innovation as a 'rhetorical device in marketing campaigns' or strategy with something that is locally defined by a community of practice. Smith (2011, p.435) notes that without any definition the term innovation can become a 'vehicle for managerialism' serving a particular agenda. From this perspective innovation is a means to create and maintain competitive advantages as universities move into an increasingly globally competitive, knowledge-based marketplace (Johannessen, Olsen and Lumpkin, 2001). The rhetoric is one of making a case for innovation, which is not a value-free position, and critics challenge that innovation can be seen as 'one of a host of business-related words that form part of the ideologically-laden, knowledge-economy focused, managerial discourse that has 'captured' higher education' (Smith, 2011, p.428). Zhu *et al*. (2013) discuss how definitions vary between considering outcomes of innovative teaching (impact on students) and innovative aspects of the teaching process such as methods and techniques. The only consistency in definitions seems to be an aspect of 'newness' though this is not simple either as 'what is new, how new and new to whom?' (Johannessen, Olsen and Lumpkin, 2001, p.21). Hannan (2005) also suggests innovation can be something that is established elsewhere but seen as new in the specific circumstances. With such a variety of definitions the terms innovation and innovative teaching are problematic in discourse as there is no clear shared understanding. Smith (2011, p.434) found evidence of this when the definitions of innovation given by academics she interviewed were as 'diffuse and slippery as those found in the literature'. She further proposes 'it becomes impossible to discuss innovation in any meaningful way' without a concrete definition (p. 435). This demonstrates the contested nature of the terminology around innovative teaching and that further research into people's understanding of the concept would be valuable.

1.2.1 Policy context

This section outlines the UK higher education policy context at the time the research took place which frames participants contributions. As a phenomenographic study of innovative teaching the local policy context is an important background to the participants' contributions, but it is not a primary

focus as the participants drew on their full experience of HE teaching, which collectively is international in context. Also, the key factors discussed below are relevant in various international contexts. In 1998 devolution in the UK separated out English, Scottish, Welsh and Northern Irish higher education into related but differentiated systems. These devolved systems have differing legislation and policy governing higher education, creating varying policy contexts to HE teaching in each of the devolved nations. Where there is differentiation, this section focuses on the English policy context as this is where the participant institution is located.

UK higher education has gone through periods of significant change in recent history as a result of policy changes. From the perspective of innovative teaching perhaps the most impactful changes are the gradual move towards marketisation of higher education, the introduction of student contribution to tuition fees and an increased concern for quality and standards following the Dearing report of 1997 (NCIHE, 1997). This stimulated a national debate about issues in higher education in the context of globalisation and developing 'a learning society'. Focal issues included the funding of higher education – particularly students' responsibility for contributing towards the cost of their education; quality and standards of provision and professionalisation of higher education teaching (Barnett and Hallam, 1999).

Quality assurance

Growing concerns regarding the quality and standard of higher education provision have led to increasing accountability for institutions to meet government metrics. The Dearing report expressed this as concerns that expansion of higher education led to 'more means worse' as resources do not increase in line with student number increases (NCIHE, 1997, p.37). The report gave the Quality Assurance Agency for Higher Education (QAA) 'the remit of providing assurance on standards and quality' and generated an evolution of policies that led to the current UK Quality Code for Higher Education (King, 2019, p.10). The Quality Code is a summary of expectations for standards and quality of UK higher education providers are expected to meet 'in order to ensure they are achieving the outcomes that are expected of them' (QAA, 2018, p.4). The Higher Education and Research Act 2017 (2017) established the Office for Students (OfS) (merging

previous regulatory bodies) to act as the regulator and competition authority for higher education in England (Department for Education, 2018). Duties of the OfS include 'the need to promote quality' the need to encourage competition between English higher education providers' and 'the need to promote value for money' (*Higher Education and Research Act*, 2017, s. 2(1)). Their responsibilities include the administration of the Teaching Excellence and Student Outcomes Framework (TEF) and the register of higher education providers (Department for Education, 2018). These examples highlight the increasing regulatory framework surrounding concern for quality in UK HE, particularly in England.

Development of technology has enabled large-scale capture and analysis of data regarding students and higher education. This has facilitated an increased emphasis in policy on data and metric focused approaches to evaluation and comparison of institution performance and quality across the sector (Esposito and Stark, 2019; Williamson, 2019). Metrics such as the National Student Survey (NSS); the Research Excellence Framework (REF); the TEF and the Graduate Outcomes Survey (GOS) are strongly influential with regards the quality assurance and marketisation of higher education. Metrics are used by the government, media, students and public to judge and rank institutions and courses, they can also be used by institutions to evaluate staff. This reflects the wider cultural shift to a 'society of rankings' as a way to make sense of complex information to aid decision making (Esposito and Stark, 2019).

The robustness of the evaluation metrics and whether they actually measure appropriate characteristics is an aspect of serious concern for achieving the intended regulation of quality provision. For example, they usually only measure those aspects which are easily quantifiable (either directly or by proxy) and disregard aspects of HE quality which are intangible assets yet matter (Robertson, Cleaver and Smart, 2019). Though they have become more pervasive and influential, ranking systems are 'hugely controversial and very much criticised in all areas' (Esposito and Stark, 2019, p.4). Despite the contention and flaws, metrics are now fundamental to accountability and governance and strongly influence higher education institution's strategy and management processes. This can be seen as part of wider cultural trust and accountability shift regarding institutions

and organisations (O'Neill, 2017). Metrics are a driver for internal change and an opportunity for innovation as institutions aim to improve their outcomes. From a perspective of innovative teaching, incentives to improve metric outcomes offers the potential to drive significant change and innovation, both intended and unintended. However, they can generate among practitioners 'a fear of failure, of criticism from peers and the media and of blaming and shaming' which leads to a risk averse culture restricting innovation (Locke, 2014, p.13).

Marketisation

HEIs have become increasingly subject to market forces as successive governments have used regulatory and funding frameworks along with financial incentives to move towards a demand-led open higher education market. The Dearing report first introduced the notion of students as customers of higher education, which was further developed by the inclusion of students and universities in the Consumer Rights Act of 2015 (McCaig, 2018; Bunce, Baird and Jones, 2017).

More recently the Higher Education and Research Act of 2017 (2017) introduced the risk of institutional failure and market exit, the intention being to create a fee differential by encouraging student consumer behaviour to force weaker providers to charge lower fees or lose market share. This could result in an institution becoming unsustainable, in which case the government would not prop up a failing institution but allow them to exit. This would also create space for 'innovative' new private (for-profit) providers (McCaig, 2018).

As a response to this increasingly competitive climate, institutions have developed sophisticated branding and marketing strategies as they seek to differentiate their offer and position themselves as the institution of choice for their target prospective students. These marketing materials often contain terms such as innovative courses, innovative teaching methods, or innovative university in a bid to appeal to students and their parents. What is meant and understood by the institution, the student and other stakeholders by these claims is not clear yet is important to this marketized approach.

A knowledge economy

The rise of the notion of the global knowledge economy and a concern for creating economic advantage has increasingly influenced perspectives on the role of higher education with regard graduates and the labour market. (Thompson, 2019). Governments see a need to enhance the employability of graduates and maximise talent to meet the demands of employers for highly educated, skilled and competent employees. For example, the Dearing report included employers as stakeholders in higher education and directed that courses should be developed to better meet employer requirements for graduate capabilities in 'personal transferable skills' such as 'communication skills; numeracy; use of information technology; and learning how to learn' (NCIHE, 1997, pp.34, 133). This focus has continued in following government reviews and a recognition that individuals are more likely to make career changes away from their initial qualification has increased the focus on high-level generic skills and personal attributes (HEA, The Pedagogy for Employability Group, 2014)

This employment focused aspect of graduate outcomes as a core principle of higher education has continued, influenced particularly by the introduction of student fees. Governments intended students to use information and metrics on which subject areas are in greatest demand by employers to influence their choices. This would create a better match between labour market demands and graduate supply (Gunn, 2018; Department for Business, Innovation and Skills, 2016). In response a key approach higher education institutions take in offering students opportunity to develop into work-ready graduates is the inclusion of industry focused experience, for example work experience, live projects and simulations. A significant recent development for UK HE has been the introduction of degree apprenticeships. Degree apprenticeships were launched in 2015-16 by the government to further strengthen the links between higher education and employers /employment needs (Hubble and Bolton, 2019). An apprenticeship levy was introduced in the *Finance Act* (2016) to fund apprenticeship training and incentivise large businesses to create apprenticeship opportunities. These developments, particularly the different needs of apprenticeships, offer opportunity for innovative teaching.

In summary, institutions are negotiating increasingly complex and fluid funding arrangements and increased competition through marketisation and quality assurance measures. This constant atmosphere of change has influenced the culture of teaching in higher education institutions and the environment in which innovative teaching takes place as each shift offers opportunities and barriers to innovate in teaching. In addition to the policy developments discussed above, changing priorities on agendas such as enterprise, decolonising the curriculum, inclusivity and diversity, and sustainability all offer opportunity for innovation in teaching. This landscape incentivises institutions to develop creative solutions and innovate to define their offer to attract students and position themselves in the market. It also encourages individual educators to explore and develop their teaching practice, offering opportunity for innovative teaching.

> *'...if UK higher education is going to prosper in the contemporary world, it is going to have to become messier, less precious, more flexible, and significantly more co-operative. What is more, unlike many other intractable problems for higher education, the solution to this problem is in our hands. It will mean not colluding with resistance to change inside the academy.' (Watson, 2015, p.561).*

1.3 Researcher positionality

As a professional doctorate, this research is situated in my professional practice context. This section intends to elucidate my positionality in the research by discussing my personal and professional context influences on the research design. I am currently a Learning Developer with a focus on digitally enhanced learning in a large post-92 higher education institution in the UK and have worked in education for nearly 20 years. My role includes a variety of responsibilities around supporting and enhancing learning design, professional development for teaching academics, and developing and supporting digitally enhanced learning. Often this involves supporting innovative teaching initiatives and facilitating wider adoption of innovative and good practice.

Having worked in multiple education settings and been a part of the technology enhanced learning community for a significant period, I have seen the phrase 'innovative teaching' used frequently in strategy and marketing, at conferences and in published work. I came to question what was meant by this term as it

became apparent to me through interactions with colleagues and my own experiences that people did not consistently view innovative teaching in the same way. For example, I was involved in implementing a type of tool at one institution that was heralded as an innovation when I had been involved in implementing a similar tool at another institution years previously so did not myself consider it particularly innovative. At conferences some would talk of a presentation as innovative whereas others dismissed it as nothing new. When offering workshops and training in innovative pedagogy and software tools the responses and engagement of colleagues is varied. This led me to question the apparent assumption that we have a shared understanding of what the term innovative teaching means in policy and practice. To me it seemed there was variation in colleagues' perceptions, but it was unclear exactly what these variations were. This situates my research rationale in my own professional context as I wanted to explore this issue further and develop my understanding of what people felt the term innovative teaching meant to them. Would there be variation in what innovation means, how it is perceived? If so, what is this variation and what does that mean for practice? As a learning designer and staff developer what would this mean for my practice and the communities of which I am a part?

My professional context and personal rationale for the study influenced the design in several ways. My interest in the topic as discussed above shaped the focus for the research project. I chose to situate the study in the HE context in which I work and therefore to interview teaching academic colleagues. Being a colleague to my participants, some of whom I had an established working relationship with and others I had not previously met had ethical implications for the study (discussed further in chapter 3). I expected to find variation but did not know what this may look like.

As discussed further in chapter 3, my physical sciences and teaching background influenced my choice of methodology which in turn shaped the research questions. My early research training was in a positivist paradigm, entrenched to the extent that paradigms were never considered as there was no recognition of alternative approaches. I subscribed to these values and ways of thinking including objectivity; empirical evidence; control; correct techniques/answers; consistency;

reproducibility and generalisable principles. These also fitted with my environment and culture, so I had little reason to question them. However, I did begin to question some of the more absolute principles, particularly objectivity as I critically explored emotive subjects with contradictory findings, questionable data, and funding correlations. Pursuing a career in education did not notably expose or challenge any of these assumptions, perhaps partially because I taught science and then moved into TEL which is dominated by people from a similar background. Increasing involvement in learning design and pedagogy may have softened the edges of these views, but not in an explicit way. Having been exposed to the concepts of ontology and epistemology in the taught phase of the doctoral programme, I embarked on a challenging personal journey of negotiating a threshold concept and getting to grips with multiple perspectives. My paradigm shift has influenced both the design of the research and the writing of this thesis. I could have undertaken a research study that sat comfortably within my original positivist leanings but instead I chose to embark on an interpretivist approach for several reasons. I saw it as an opportunity to learn and try something new, to challenge myself and my preconceptions. It appealed to my frustrations with the limitations I perceived in some of the claims of positivist research, for example the prevalence of survey-based statistical studies in TEL that I felt often didn't get into the detail and complexity of issues I faced in practice. Choosing an interpretivist approach gave me an opportunity to take an in-depth explorative approach to my area of interest, though the extent to which I was able to shift my perspective influenced which research approach philosophical positions I could reasonably align with.

Staff development is an important part of my role and influences what I consider to be key areas of impact for the research findings. These examples are not intended to provide an exhaustive list of my personal and professional background influences on the research design, findings and thesis, as such a list would be impossible to create. However, by acknowledging these it is intended to provide the reader with the ability to determine what influence these contextual factors may have had on the research.

1.4 Defining terms

This thesis uses key terms which may be used ambiguously in the sector or carry different meanings in different contexts. In the interest of clarity this section briefly explains how I am using them in the context of this research and thesis.

1.4.1 Innovative teaching

The definitions of innovation and innovative teaching are core aspects of this study and are discussed in chapter 2. However, I made an active choice to use *innovative teaching*, as opposed to *innovative pedagogy* or *innovative teaching and learning* or other ways to express innovation taking place in an HE teaching context. In the initial proposal the study used *pedagogic innovation* as the preferred term to indicate a broad inclusion of theory and practice of teaching, learning and associated processes of guiding to learn (Beetham and Sharpe, 2013). However, on reflection I felt this term may become a barrier to participants or focus their responses in a particular way. The term *pedagogy* can be seen as focusing on the theoretical approaches to teaching so may have directed participants' thoughts in this direction. It is not in my experience used comfortably in common conversation among teaching academics so I was concerned it may create a barrier for participants who were not familiar with the term and its meaning. I therefore chose to use the more common term *teaching* in interviews. Though this is not without problems as it could focus participants' conversation on the applied side of the role. I chose innovative *teaching* not innovative *teachingandlearning* (presented intentionally as a single word) because I agree with Biesta's (2015) arguments that the phrase has become burdened with assumptions of cause and effect, and that keeping the two concepts as intentionally separate is valuable in thinking more deeply about each concept and the relationships between the two. From this viewpoint, it is innovative *teaching* that is the appropriate word to use for this study. Also *teaching* is a term more easily identified with by wider stakeholder groups. Consequently, *teaching* is used in this thesis to refer to the professional practice of those engaged in a teaching role.

1.4.2 Those teaching

The participants in my study were all academics in a higher education institution with responsibility for teaching students. The literature uses a variety of terms to refer to the person teaching students in a HE context, e.g., academic, lecturer, faculty, teacher. Though subtly different, these terms can be read as synonymous in the context of referring to the work of others in this thesis. However, for my own contribution I have chosen to use the terms *academic* and *practitioner* synonymously. How we identify ourselves professionally is complex and all labels contain assumptions, history and implications. I recently ran a poll in a workshop for this and the responses were a fairly even spread across several options indicating this is an area of complexity among HE professionals. *Academic* and *lecturer* are the two most common titles in UK HE literature. Although *academic* can carry connotations of being traditional, research focused and out of touch, as illustrated by this quote from one of my participants who did not identify with being called an academic:

> *'...when we use academic in common speech, you know when we're in the pub and somebody makes an argument, 'oh it's just academic' meaning it has no real relevance to what we're talking about (participant 01).*

I chose to use it as I feel it is a broader term encompassing more facets of the role than *lecturer*. *Lecturer* can carry connotations of a narrow didactic old-fashioned delivery model which does not suit the context of this thesis. Where context allows, I have favoured the term *practitioner* over *academic*. Though it is a bland term devoid of the inherent context of other options, it also loses some of the baggage. I feel it is appropriate for the active essence of innovation and encompasses a broad feel. Besides, it is not only academics who teach in UK HE but for example: library and careers professionals, doctoral and peer students, technical specialists and external contributors.

1.5 Phenomenography as an approach for exploring variation

This research study is undertaken within an interpretivist paradigm using phenomenography as the research approach. Phenomenography is an empirical research approach designed to explore the qualitatively different ways in which people experience and understand a phenomenon (Marton and Booth, 1997). In

the instance of this study, the qualitatively different ways academics experience innovative teaching. These different ways of experiencing, or conceptions of the phenomenon are represented by a finite number of categories of description. The relationships between these categories of description are also analysed and presented as an outcome space (Marton and Pong, 2005). The focus on variation in the phenomenographic research approach was later developed by Marton into variation theory of learning (see Marton, 2015).

Phenomenography is an established approach for exploring the domain of education, having been developed within the discipline. It has developed and grown in popularity since early studies in the 1970s identified deep and surface approaches to learning (Tight, 2016). The body of phenomenographic research into learning explores the world of the learner and highlights how individuals bring their own experiences, motivations, conceptions, perceptions and intentions into any learning situation. It is a collective representation, so the categories of description do not represent individuals and individuals may express different descriptions at different points in time. The outcome space attempts to understand how the phenomenon appears to the participant and is therefore a second order perspective. Whereas a first order approach would look directly at what the phenomena is (Marton 2015).

The approach is fundamentally concerned with revealing variation in the ways a phenomenon is experienced within a sample population. This focus on variation is well suited for exploring perceptions of innovative teaching given the contested nature of the concept. The research approach is also closely associated with an interest in seeking to improve the learning experience (Tight, 2016). Phenomenography as a research approach is therefore a good fit for investigating academics' perspectives of innovative teaching and providing answers to the research questions below. The rationale for my choice of research approach and the details of phenomenography are further expounded in chapter 3.

1.6 Research questions

Alvesson and Sandberg (2011) propose that challenging assumptions underlying existing literature leads to more interesting research. The assumption that there is

shared understanding of the term 'innovative teaching' as used in higher education strategy, policy and practice is questionable, as is the assumption that widespread adoption of innovative teaching is considered desirable. This study has the following aims:

1. To problematise the assumption that there is a single unified concept of innovative teaching and that this is shared among academics.
2. To critically explore literature around the concept of innovative teaching in HE and relating to themes that emerge from the data.
3. To explore how innovative teaching is perceived by academics in UK HE and identify conceptual frameworks using a phenomenographic approach.
4. To contribute academics' views to the literature discussion, which are currently underrepresented.

My main research question is:

> ***What are the qualitatively different ways academics perceive/ experience innovative teaching?***

With the following subsidiary questions:

- In what ways do academics describe innovative teaching and what it means to them?
- What are the critical ways these perceptions vary?
- How do these different perceptions relate to each other?
- How can this understanding be used to inform practice?

These questions were asked in a particular place and time, giving a context of situated meaning and delimitations to this research and thesis. Though participants were all from one institution the examples discussed covered several institutions as participants talked about previous experiences. Data collection for this study took place in Autumn 2018 and analysis in 2019, therefore this thesis is written in the context of that time frame. Impacts of the Covid-19 pandemic and resultant policy/practice changes are therefore outside the scope of this thesis. The questions were addressed by way of qualitative interviews with 13 academic staff at a single UK HE institution.

1.7 Thesis structure

The chapters of this thesis are arranged as follows:

Chapter 1 has introduced this research study and thesis, offering a rationale for why this undertaking is relevant and timely. It provides a context of innovative teaching as a policy and strategy imperative and raises questions for implications of this in practice. It also situates the study in my personal and professional background. The chosen research approach of phenomenography is introduced, and the research questions are presented.

Chapter 2 provides a context and rationale for the project in relation to previous research through a discussion of relevant literature. It begins with an outline of how the literature search was undertaken. I then briefly explore the concept of innovation and the current popularity of this term in UK culture. This is followed by a discussion on aspects of teaching in HE relevant to the study. Focusing in on the topic of this study I synthesise key literature on innovative teaching in higher education. In doing so I explore key themes in the current literature to provide a framework for this study's contribution to the area.

Chapter 3 explores the choices I made in designing my research study and the rationale behind them. Beginning with considerations in choosing a research approach, this is followed by a discussion of my philosophical position and the influence of each on the other is discussed. I explore the details of Phenomenography as a research approach and the importance of reflexivity in the research process. This is followed by a discussion of research methods I used to collect data. I then turn to a discussion of the pertinent ethical considerations for this research project.

Chapter 4 gives a detailed account of the highly iterative process of phenomenographic analysis I undertook to extract meaning from the data I gathered. First some considerations common to qualitative analysis are discussed. Then I explain my chosen position on variations in phenomenographic practice. Each of the stages of the analysis process is then discussed in turn. The unit of analysis in this study is practitioner's descriptions or conceptions of innovative teaching. The focus of the analysis is an exploration of the critical, qualitatively

distinct, variation in the ways practitioners describe they experience innovative teaching.

Chapter 5 presents the outcomes of my data analysis in keeping with the lens of the phenomenographic approach. First, I present the outcome space as a representation of the qualitatively distinct categories of description of ways practitioners experience innovative teaching, and the categories relationships to each other. I explain the visual representation and hierarchical nature of the categories of description. I then describe the salient features of each of the categories themselves in turn, using selected quotations from the interviews to illustrate the category. Finally, I explore the relationships between the categories of description and how these illustrate shifts in ways of experiencing innovative teaching.

Chapter 6 discusses these findings in detail, exploring what was found and offering comments in relation to previous research that was discussed in chapter 2. The significance of the study findings and implications for practice are highlighted. Informed by the findings and in response to the professional practice nature of this doctorate, a framework to aid discussion of innovative teaching among practitioners and inform staff development is presented.

Chapter 7 concludes this thesis by summarising the key findings of the research and the study's original contribution of new knowledge to current understanding of innovative teaching and to phenomenography as a research approach. It also considers limitations of the study and opportunities for future research. Finally, it offers some personal reflections on undertaking this doctoral research study.

CHAPTER 2: LITERATURE CONTEXT

2.1 Introduction

Having provided an overview of the study in the previous chapter, this chapter provides a context for the project in relation to previous research through a discussion of relevant literature. It offers a rationale for the research question and chosen approach in relation to current understanding of innovative teaching. The substantive literature search was undertaken in two stages to fit with the research methodology: early in the study design to refine the topic area and shape the research question; then following the analysis of data once the outcomes illuminated key areas to explore in greater depth. This is an established approach to help avoid the findings of previous studies influencing my subconscious as I analyse the data. As interpretivist, exploratory research the literature is seen as positioned alongside the data as opposed to purely a background to the study.

This chapter begins with an explanation of how the literature search was undertaken. I then briefly explore the notion of innovation and the rise in popularity of this term in UK culture. This is followed by a discussion on aspects of teaching in HE relevant to the study. Focusing in on the topic of this study I consider key literature on the topic of innovative teaching in higher education. In doing so I explore key themes in the current literature to provide a framework for this study's contribution to the area. These key themes are: innovative teaching as a label; understanding innovative teaching; innovative teachers; and cultivating innovative teaching.

2.2 Defining the literature context

As discussed in the introduction chapter innovation has become a popular term in higher education. This is illustrated by journal titles that contain the word innovation, including 'International journal for innovation education and research'; 'Innovations in education and teaching international' and 'International Journal of Educational Research and Innovation'. It is also evident in the large number of journal articles and books that use phrases such as 'pedagogic innovation', 'innovative approach' or 'innovative teaching' in titles, abstracts and

tags. Consequently, it would be unrealistic for a work of this scope to conduct a complete review of literature in this cross-disciplinary field. Instead, literature which is key to the themes of this project has been selected, discussed and synthesised to provide a comprehensive scholarly context for this research.

This chapter draws on a range of different sources to provide a relevant context for the study. Some are peer reviewed journal articles and organisation reports, these form the core of the literature context. Others are thought and opinion pieces which have been useful in shaping thinking and framing discussion in the area. As the context of this research is UK higher education, I have focused the literature considered relevant to this study to those that had a similar context. For example, I included studies relating to higher education but generally not those relating to compulsory education. I included studies on innovative teaching relating to higher education in a global context due to the limited number of relevant studies, but I focus on literature where the higher education culture is similar. I have also limited the literature to that available in English as auto-translation tools are not yet reliable enough and the risk of misinterpretation is too high for a study of this nature.

I was guided in conducting my enquiry of the literature by sources such as Savin-Baden and Major (2013) and Silverman (2013) and followed a considered process of searching the literature, selecting studies, organising the information and presenting this discussion. To search current literature, I used databases such as British Education Index; Education Research Complete; Scopus and Google Scholar. I used search terms including core words and synonyms for example, 'innov* AND teaching' and 'innov * AND pedagogy'. I also collected studies through reverse and forwards citations and included some material previously obtained through my professional interest in the area. Although I did not limit my searches by date, to ensure my discussion is current, I did prioritise studies published within the last 10 years, as is common practice (Savin-Baden and Major, 2013). This thesis is written in the context in which the data collection and analysis took place in 2018/2019, therefore more recent publications written in a different (largely Covid-19 affected) context are not included. Due to Covid-19 restrictions the second stage literature search was focused on materials available through

online means. This only had a minor impact as many publishers made content more readily available through institutional agreements, though unfortunately some print-only books could not be accessed.

2.3 Considering innovation

Innovative activity is arguably as old as humankind itself, however scholarly interest in innovation as a phenomenon is relatively recent, having principally developed from the late 20th century. Much of this research is focused on the role of innovation in economic and social change, and on innovation processes in a business context. (Fagerberg, Mowery and Nelson, 2006). For the context of this research the primary focus is on innovation as a concept and how this may relate to the concept of innovative teaching as expressed by the research participants. Consequently, this literature section will focus on the conceptual aspects of innovation. It is beyond the scope of this thesis to discuss business and economic models and theories of innovation, or the relationship between universities and industry regarding knowledge exchange and research and development to facilitate socioeconomic innovation.

Innovation is high profile in the priorities of governments, businesses, universities, public services and civil society (OECD, 2015a). Innovation is a current popular term or buzzword, with generally positive and desirable connotations around progress, but it hasn't always been this way. In the seventeenth century it was an offensive, accusatory, or pejorative term with serious consequences (Godin, 2014). The concept of innovation was associated with heresy, revolution, selfishness and the destruction of good established order. The cultural context changed in the late eighteenth and early nineteenth century as attitudes towards change, progress and the future changed. As a result, the use and meaning of the word innovation gradually altered to become a positive term (Godin, 2014). Innovation as a concept is a social construct, its meaning dependant on the society and time in which it is used. A socially constructed concept is linked to the social, political and economic context, embedded in the relationship between thought and lived experience (Godin, 2015).

During the twentieth century the concept of innovation became primarily focused on technological innovation and gained an economic dimension. It also became imbued with a sense of dreams and imagination which cemented the positive connotation. It has come to expresses our notion of human-made, deliberate change and encapsulates a cluster of ideas including change, novelty, reform, revolution and invention. It has perhaps become idealised as a panacea to socioeconomic problems and those using the term innovation usually have an agenda (Godin, 2015, 2020). This can be seen in the use of innovation as a key aspect of national and international strategy and policy, for example:

> *'...innovation is a key driver of productivity, growth and well-being, and plays an important role in helping address core public policy challenges like health, the environment, food security, education and public sector efficiency. Innovation-led productivity growth will become even more important in the future to address key challenges like ageing populations and climate change.' (OECD, 2015b, p.1)*

At present, in the early twenty first century, this meaning of innovation has continued as the dominant meaning in political discourse, for example the UK 2021 Innovation Strategy places innovation in the centre of the solution for the Government's current agendas (Department for Business, Energy & Industrial Strategy, 2021). Though Swann (2014) proposes this should be termed *business* innovation, to allow for alternative considerations or contexts of innovation to be discussed, that distinction is rarely made in policy. Innovation now appears as an imperative beyond the usual areas of science, technology and research and development (R&D) in domains including the environment, health and the public sector. Drivers for innovation around challenges such as the environmental crisis and ageing populations are also being recognised, as opposed to primarily a desire for economic growth (OECD, 2015a). However, some have sought to contest this economic panacea ideology discourse of innovation which has 'led to the transformation of the concept from a means to an end to an end in itself' (Godin, 2016, p.550), and to promote critical debate. For example, the journal *NOvation – Critical Studies of Innovation* seeks to 'contribute to the rethinking and debunking of innovation narratives...' (Novation). Godin (2015) argues that critical and

reflexive analysis of innovation are rare and that many studies published on the topic each year take the concept for granted and carry an assumption that innovation is always good. This value judgement, that narratives on innovation are to some extent caught up in an uncritical perpetuation of ideology, resonates with my personal views on the dominant rhetoric I encounter in the technology enhanced learning (TEL) professional community and is a part of my motivation to undertake this study, as discussed in chapter 1.

2.3.1 Defining innovation

Definitions are a useful starting point in discussions of a concept, though an aim of this thesis is to explore how the conceptual meaning of innovation, specifically innovative teaching, is complex, contested and goes beyond mere definitions. Definitions can be broad and inclusive, which risks being providing little meaning, or detailed and too complex to make useful sense outside of narrow contexts (Dodgson and Gann, 2010).

Example of a broad definition include 'the adoption of an idea or behaviour that is new to an organization' (Casanovas, 2010, p.73) and 'ideas successfully applied' (Dodgson and Gann, 2010, p.13). Dodgson and Gann discuss how their definition is useful in that it covers a wide context, but is confusing as it involves interpretation – e.g., what does success mean? what is an idea? Each of the terms in the definition can have varied interpretations and be contextually dependant. An interesting note to this definition is that there is no explicit mention of newness, though this is implied in ideas.

The term innovation can indicate both an activity and the outcome of the activity, i.e., innovation as an action, a process undertaken and an innovation as a result, which adds complexity to the meaning and definition of the term. Innovation activity refers to the developmental activities, resources, enablers and contingent parts that are committed with intent to result in an innovation. The outcome or innovation product is a new product or way of working that has been implemented and differs significantly from previous products or processes (OECD/Eurostat, 2018). Highlighting this, Tidd and Bessant (2013, p.19) actively align their interest with the process of innovation and define innovation as 'a

process of turning opportunity into new ideas and of putting these into widely used practice.'

Attempts to define and measure innovation include the *Oslo Manual* which provides internationally agreed methodological guidelines for the collection and use of data on business innovation (OECD/Eurostat, 2018). As the purpose is to measure innovation, they state this has influenced how they have chosen to define innovation and they provide a variety of contextual definitions. That definitions of a concept can be intentionally shaped to suit specific purposes speaks to the complexity and subjectivity of how concepts are used and understood. It also points to the foregrounding and backgrounding of different aspects of a concept in different ways of experiencing it, as is central to the phenomenographic method, which is discussed in chapter 3.

One cannot discuss innovation without including Joseph Schumpeter's seminal work on innovation and entrepreneurship in the context of economics. Schumpeter defined innovation as putting together new combinations of existing materials and/or forces to produce something that is then commercially applied. The change must be discontinuous, not an incremental improvement (Schumpeter, 1934)[1]. Schumpeter's influence can be seen as the basis for one of the most widely used general definitions of innovation, which is as follows:

> *'An innovation is a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process) (OECD/Eurostat, 2018, p.20).*

In this definition the generic term "unit" is used to describe the actor responsible for innovations. The UK Innovation Strategy takes the above definition and expresses it as:

> *'We define innovation as 'the creation and application of new knowledge to improve the world'. It is this process which drives*

[1] Schumpeter's original work 'The Theory of Economic Development' was published in 1911 in German and the first English translation was published in 1934. The book I used is a reprint of the 1934 English translation published in 1983. Following UWE Harvard guidance, I use 1934 as the citation year.

> *human progress. … Innovation turns great ideas into value, prosperity, productivity and wellbeing. It is the mechanism by which we adapt to new opportunities and challenges' (Department for Business, Energy & Industrial Strategy, 2021, p.11).*

These definitions clearly indicate the socioeconomic and government policy contexts in which they are used. If this is the dominant discourse around us, how do individuals in different contexts interpret and apply the concept of innovation to their context? This is my question for the context of innovative teaching.

2.3.2 Aspects of innovation

Key components of innovation as a concept are novelty, knowledge, utility, implementation and value creation. Knowledge is considered the basis from which innovation occurs. Implementation and utility relate to the need for the innovation to be put to use, as opposed to being an idea or invention. Value creation is considered the goal of undertaking innovation (OECD/Eurostat, 2018).

One of the central aspects of innovation is newness or novelty, to innovate derives from the Latin innovare which means to make something new (Tidd and Bessant, 2013). The Oslo Manual distinguishes three types of novelty: an innovation can be new to the firm, new to the market or new to the world (OECD/Eurostat, 2018). The first concept covers the diffusion of an existing innovation to a firm – the innovation may have already been implemented by other firms, but it is new to the firm. Innovations are new to the market when the firm is the first to introduce the innovation on its market. An innovation is new to the world when the firm is the first to introduce the innovation for all markets and industries (OECD/Eurostat, 2005). This illustrates that the novelty aspect of innovation is context dependant.

Schumpeter classified of five types of innovation – (1) new products; (2) new methods of production (or process); (3) the exploitation of new markets; (4) new sources of supply; and (5) new ways to organise business. (Swedberg, 2000; Schumpeter, 1934) Tidd and Bessant (2013, p.24) arrange these in terms of 'four dimensions of innovation space' and acknowledge that the division between the categories can be blurred:

- "product innovation' – changes in the things (products/services) which an organization offers;

- ‘process innovation’ – changes in the ways in which they are created and delivered;
- ‘position innovation’ – changes in the context in which the products/services are introduced;
- ‘paradigm innovation’ – changes in the underlying mental models which frame what the organization does.’

This variation in types or ways of considering innovation offers a rich resource for applying these principles to the consideration of innovative teaching.

Schumpeter (1934) also proposed the notion of disruptive innovation, which is currently a well-used phrase in education, particularly around digital education. Disruptive innovation is when the process of innovation breaks the equilibrium of a system from within the existing structure, destroying the old and creating a new system. He also makes an interesting note, to counter other economic theories of his time, that it is rarely the consumer that drives innovation but usually the producer who innovates and then the consumer is ‘taught to want new things’ i.e., the innovation (Schumpeter, 1934, p.65). This has interesting bearing on the rhetoric in HE that students expect or demand innovative teaching approaches.

Despite the dominant rhetoric of innovation as a positive force for socioeconomic development and solving the world’s problems, there is a muted recognition that innovation as a solution is not without disadvantages. There is acknowledgement that it is difficult to turn the ideology and imperatives into action and outcomes. Innovation is an ‘enormously complex and uncertain process’ with ‘no easy recipe for success’ (Tidd and Bessant, 2013, p.79). It is difficult to measure innovation and ascertain direct impact and innovation is not a simple linear process (OECD, 2015b). Innovation can also have negative consequences as ‘all change, however much it might be deemed as good by the cognoscenti, destroys something’ (Kirton, 2003, p.7). For example, while innovation may create new jobs, it can also contribute to job destruction (Schumpeter, 1934). Innovations are risky as they involve a variety of types of risk (e.g., demand risk, business risk, contextual risks). The nature of innovation means some of these will be unknown and cannot be measured or easily predicted. Consequently, many innovations fail. Failure has a personal cost for the innovator, so innovators need to develop strategies to deal

with this. There is also cost to the organisation, so it is important to recognise failure as an opportunity for learning and development (Dodgson and Gann, 2010). The consequences of failure must be tolerated within the organisational framework for innovation to be supported.

Negative consequences of innovation are generally considered in terms of risk management and mitigations, again illustrating the predominantly positive perception of innovation as the view is to encourage innovation whilst managing the risks as opposed to questioning the innovation. Aside from possible health and safety issues with science and technology innovation, there are potential risks to markets, social and cultural implications, and ethical issues to consider. For example, the challenge of job destruction mentioned above is mitigated in policy by discussing skill development and redeployment of workers, though that response is arguably an oversimplification of the issue. Risk management and risk governance are therefore considered important companions to innovation (OECD, 2015a). This concern of risk and risk management has a significant impact on cultures of innovation and the local attitudes towards this in an institution could have significant bearing on enabling innovative teaching.

2.3.3 Related concepts

Innovation has strong links and overlap with concepts such as enterprise, entrepreneurship, creativity, adaption and change. It is beyond the scope of this thesis to explore each of these in detail, however, some pertinent features are discussed briefly in this section.

Invention - The first area of potential confusion to highlight is the relationship between innovation and invention. The distinction is that invention is a new idea for a product, process or service, whereas innovation has an application dimension – it is the idea worked out in practice for the first time or applied commercially (Fagerberg, Mowery and Nelson, 2006).

Entrepreneurship - is another concept closely related to innovation, and arguably one also suffering a similar political ideology discourse. Schumpeter's work highlights the close relationship between innovation and entrepreneurship. Schumpeter uses innovation as a noun – it is a thing, but there is seemingly no

innovator as a role or innovation as an activity in his key work of 1911, The Theory of Economic Development. Instead, he frames these as the entrepreneur and entrepreneurship: 'The carrying out of new combinations we call "enterprise"; the individuals whose function it is to carry them out we call "entrepreneurs".' (Schumpeter, 1934, p.74). This could be a matter of translation as the original was written in German or could be an indicator that language use has changed over time. Texts on innovation and entrepreneurship can be seen to use these terms synonymously to suit their focus – e.g., Schumpeter's five types of innovation (Fagerberg, Mowery and Nelson, 2006) or Schumpeter's five types of entrepreneurship (Swedberg, 2000). This kind of synonymising adds confusion on the difference between closely related concepts and is an indicator to why phenomenographic enquiry into people's lived experience of such concepts may find variation.

Creativity - is another complex concept with varying definitions that has led to confusion in literature, particularly regarding its relationship to innovation where the terms are often used synonymously (Von Stamm, 2008; Kirton, 2003). Kirton (2003, p.136) argues creativity, problem solving, and decision making are synonymous as all involve 'creation and resolution of novelty' and that creativity itself as a term is too ill defined and subjective to use in academic discussion. However, Von Stamm (2008) argues there are fundamental differences, that creativity underpins innovation. They maintain that creativity is usually related to the generation of ideas or novelty and innovation has an application/implementation dimension (as discussed above). In this thesis I align with Von Stamm's position and consider creativity and innovation as different concepts.

Adaption - Kirton's adaptors and innovators theory (1976) highlights the difference between an innovation and an adaption. It has been well used in organisational leadership literature in discussing cognitive style, creativity and problem-solving (Stum, 2009). The theory relates to cognitive style and 'is founded on the assumption that all people solve problems and are creative', however their preferred approach to doing so varies (Kirton, 2003, p.4). It argues that 'everyone can be located on a continuum ranging from an ability to "do things better" to an

ability to "do things differently," and the ends of this continuum are labelled adaptive and innovative, respectively.' (Kirton, 1976, p.622). 'One way of summing up these differences is to say that the more adaptive prefer to solve problems by the use of rules and the more innovative do so despite the rules.', where 'rules' are used represent all cognitive structure. (Kirton, 2003, p.4). This continuum poses an interesting challenge when discussing innovation and how people may or may not consider their teaching practice to be innovative.

2.3.4 Section summary

This section has briefly discussed some key features of innovation relevant to this research study. I began with an overview of how innovation has become a high profile and political term in current UK discourse. I then discussed some of the challenges of defining innovation as a concept and the significance of contextual meaning. Key aspects, or ways of thinking about of innovation pertinent to this study, such as novelty, product innovation and process innovation were then summarised. Finally, some concepts closely related to and sometimes confused with innovation were outlined. This section has considered innovation as a concept to provide a background on how these perceptions of innovation may influence the academics' perceptions of innovative teaching.

2.4 Teaching in higher education

The previous section considered innovation as a concept in broad terms as discussed in innovation literature. It is clear from the discussion that innovation takes place in a context, and this context gives meaning to the concept of innovation in that area. The context of innovative teaching is education, and for the purposes of this thesis UK higher education specifically. Therefore, the following sections explore some of the pertinent aspects of teaching in contemporary UK HE to provide a contextualised backdrop to practitioners conceptual understanding of what innovative teaching means to them.

2.4.1 The changing higher education landscape

Today's students, their university experience and the structures that enable it are not the same as they were 50 years ago, not the same even as when many of today's lecturers were themselves students. The landscape of UK higher education

has changed following societal and government policy changes such as the marketisation of higher education, an increased focus on meeting industry needs, the introduction of student fees and increasing accountability for government defined outcomes, as outlined in chapter 1. There has also been a significant societal change with the development of technology, there is a strong rhetoric of the notion that the world of the 21st century in which graduates will make their way is significantly different to that of their predecessors. At the time of writing, we are a fair way into the 21st century yet many of the discussions about the issues and shape of this new era that took place around the turn of the century are still valid. Government, policy and societal change have influenced changes in student and other stakeholder expectations of their higher education experience. In response expectations on academics as teaching professional have increased and professional development teams have endeavoured to meet these needs. This changing landscape has offered both opportunity and challenges for innovative teaching. This section explores some of these influences on the current UK higher education context in more detail.

> *The world of the twenty-first century into which graduates will have to make their way is likely to be one of ever-widening uncertainty, challenge and conflict, bearing on the three domains of knowledge, action and self. … Graduates will be expected continually to reinvent themselves as well as their environment. (Barnett and Hallam, 1999, p.149)*

2.4.2 Professionalisation of higher education teaching

As a consequence of policy and cultural changes discussed previously in section 1.2 and throughout this chapter, teaching in higher education has gained in prominence across all disciplines, not just those with an established interest in teaching practice. As recognition and understanding of pedagogy has grown in the sector, it has been recognised that most lecturers are employed for discipline research or industry professional expertise and that effective teaching is a different skill set which needs to be learned. To address this need and to avoid lecturers assuming they can automatically teach effectively, or simply teach how they were taught, training programmes and qualifications have been introduced in the UK. However, it can be a challenge to professional identity for those who are research

experts, or accomplished industry professionals in their discipline, to embrace an additional identity as a teacher and as a non-expert student of teaching, as they embark on becoming teaching professionals. The journey of learning and becoming a teacher offers opportunity to innovate, to 'create new combinations' in a teaching context, particularly as professionals bring their knowledge and experience from other contexts into their teaching practice.

One of the key themes of the Dearing report was about enhanced professionalisation of teaching (Watson and Bowden, 2007). Professionalisation is the process by which an occupation with variable practice gains recognition of professional status with universal and enforceable standards, norms of practice and ethical code, usually involving qualifications or accreditation and a governing body (Callaghan, 2014). This theme of professionalising teaching continued in policy in the 2003 government White Paper 'The Future of Higher Education' (Department for Education and Skills, 2003) which raised a concern that many higher education teachers had received no formal training and that there were no nationally recognised professional standards for higher education teaching. They intended to establish 'new professional standards for teaching' and for all new teaching staff in higher education to have accredited training by 2006 (Department for Education and Skills, 2003, p.46). This has not happened as intended but the professionalisation of teaching is advancing.

The Higher Education Academy (HEA), originally the Institute for Learning and Teaching established in response to the Dearing Report and now known as Advance HE, was established in 2003 to create a single agency with a mission to 'use its expertise and resources to support individual staff, disciplinary and interdisciplinary teams, and HE communities and institutions in general to enhance the quality and impact of learning and teaching.' (Brooks, Baird and Shenstone, 2014, p.25). This involved the creation of the UK Professional Standards Framework for Teaching and Supporting Learning (UKPSF) and the Fellowship of the HEA scheme, alongside the National Teaching Fellowship Scheme (NTFS) which had been launched in 2000 (Skelton, 2004). These frameworks are widely regarded in UK higher education as the core framework for teaching accreditation, professional development and professionalisation. One of the aims stated in the

UKPSF is to foster 'dynamic approaches to teaching and learning through creativity, innovation and continuous development' (AdvanceHE, 2011, p.2) showing the relevance of innovation to considerations of quality teaching. However, innovation is not mentioned in the details of the framework.

Though teaching is the core business of most UK universities, at least in financial terms, there has long been a perception of research being more important than teaching, exacerbated by the impact of the REF. The TEF was a government intervention intended to redress this perceived imbalance and improve standards of teaching across the English HE sector. The rationale being that once something becomes a metric it becomes important, as discussed in sections above (Gunn, 2018; Department for Business, Innovation and Skills, 2016). Though Goodhart's law argues the opposite in that 'when a measure becomes a target, it ceases to be a good measure' (Strathern, 1997, p.308) as it will become a goal in itself and potentially gamed (Muller, 2019). Metrics can promote a view of teaching that is data-driven and commodified, and influence how good practice is conceptualised (Hall and Smyth, 2016). The rationale for the TEF indicates an assumption that the quality of teaching is inconsistent across the higher education sector and that 'bad' practice needs to be exposed, the 'good' rewarded and the overall quality raised.

> *"For too long, teaching has been regarded as a poor cousin to academic research. The new Teaching Excellence Framework, which we promised in our manifesto, will hard-wire incentives for excellent teaching" (Department for Business Innovation and Skills, 2015, p.8).*

However, there is much debate on what 'excellent' teaching looks like, how it can be defined and measured as it is a contested and value laden concept that is context specific (King, 2022; Ashwin, 2017; Skelton, 2004). I will not enter into that debate here, but the discussion has raised the profile of the scholarship of teaching and learning (SoTL) which has influenced approaches to professional development of higher education teachers. The UKPSF is underpinned by a SoTL philosophy and has the potential to foster developments in practice as it promotes a research approach to teaching practice, often driven by problem solving (Fanghanel *et al.*, 2016).

It is logical to propose that to have an understanding of innovative teaching; academics must first have a concept of teaching. Commonly these are placed on a continuum between, teacher-centred and student-centred or knowledge transmission and learning facilitation, conceptions. A teacher's approach to learning, course design and methods employed are strongly influenced by their pedagogical orientation and have an impact on student learning (Kember and Gow, 1994). Following on from this Long, Cummins and Waugh (2017, p.180) comment 'there is a strong relationship between instructors' pedagogical beliefs and their use of pedagogical innovations'. Pedagogy is a term with layers of meaning where the common simple definition that it is the theory, method and practice of teaching oversimplifies the realities. Beetham & Sharpe (2013, p.3) summarise that to discuss pedagogy initiates a 'dialogue between theory and practice, as well as between learning and teaching'. If innovative teaching is grounded in evidence about how people learn then academics views on pedagogy are likely to influence how they perceive innovative teaching.

The professionalisation of teaching in higher education and the growth in both awareness of pedagogy and the scholarship of teaching and learning create opportunities for innovative teaching as individual, institutions and the wider sector consider what teaching should or could look like.

2.4.3 Student expectations

Policy changes by UK governments, as discussed in chapter 1.2.1, have led to a change in student attitudes towards their university education. Most notably the introduction and increase of tuition fees for full-time undergraduate domicile students and the marketisation of HE. As a consequence of these shifts and the rhetoric around them, students are widely perceived as developing an increasingly consumerist and transactional mindset towards their higher education experience (Bunce, Baird and Jones, 2017). Consumerisation can be defined as 'a social phenomenon that empowers buyers and consumers, keeping a check on companies to ensure that the customers receive quality products and or services at the correct price' (Jabbar *et al.*, 2018, p.86). This changes the relationship dynamic between higher education institutions and their students. It also has an impact on the perceptions of academics and the staff culture in the institution as they may

feel disempowered and under pressure to keep the students happy in order to receive high student satisfaction ratings. However, there is a perception among some academics that good evaluations mean you have not challenged students sufficiently as good learning experiences often make them uncomfortable (Boden, 2019).

Higher Education provides a service (intangible and to some extent co-constructed) not a product (tangible). Yet some students perceive themselves to be purchasing the product of a degree (Jabbar *et al.*, 2018), as opposed to paying for an educational service in which they are active participants. This can lead to a sense of academic entitlement, which can be defined as 'the tendency to possess an expectation of academic success without a sense of personal responsibility for achieving that success' (Chowning and Campbell, 2009, p.982). An increasingly consumer-orientated student mindset correlates with an increased focus on getting a good degree classification and career but has a detrimental effect on their developing an identity as learners and consequently their academic performance because seeing themselves as consumers promotes a passive and instrumental approach to learning. (Bunce, Baird and Jones, 2017). This shift is being intentionally challenged in some contexts with the Student as Producer project at the University of Lincoln one such example, 'emphasizing the role of students as collaborators with academics in the production and representation of knowledge and meaning.' (Neary, 2014, p.28).

This student as consumer landscape creates a challenging environment for teaching and learning as students with this attitude are unlikely to seek out or engage with pedagogy that places more responsibility on them for their own learning and outcomes. Coupled with staff feeling pressured to achieve high student satisfaction ratings, the potential is for a 'conspiracy between teacher and taught for a risk-free, non-challenging learning environment' (Barnett and Hallam, 1999, p.147). A move in this direction would not ultimately meet the needs of students or industry and risks compromising academic standards for higher education. As 'if we take the risk out of education, there is a real chance that we take out education all together. Yet taking the risk out of education is exactly what teachers are increasingly being asked to do.' (Biesta, 2015, p.1). Institutional

responses to student as consumer and associated academic entitlement mindsets are in jeopardy of encouraging a risk averse culture which is detrimental to innovative teaching as innovation involves unknown risk (Naidoo and Williams, 2015). This is particularly concerning as the portrayal of an increasingly dominant consumer orientated mindset among students is likely to be an oversimplification of the complex reasons students engage with their higher education experience in the way that they do (Budd, 2017; Ashwin, Abbas and McLean, 2016).

Student expectations have also changed around how their university experience is delivered. Many full-time students undertake part-time work or have caring responsibilities so are more judicious about what constitutes valuable use of time. Also, students who commute to campus or juggle other responsibilities need to feel the provision they receive makes the best use of their time, and that for sessions on campus their time spent attending is worthwhile (Thompson, 2019). As discussed above the development of digital in society has also had an impact on student expectations of their university experience, though not necessarily in the ways institutions may assume. All these changes in student expectations offer opportunity to think differently about course delivery and innovate in teaching approaches.

2.4.4 The rise of digital tools

The development of digital technology from personal computers to the internet, to participative web 2.0 and beyond, have transformed both society and industry. There has been global impact of innovation and digitalisation on most sectors of industry and commerce and on people's daily lives. (OECD/Eurostat, 2018). Naturally, this transformation has also impacted higher education, though many argue this has happened at a frustratingly slow pace (Singh and Hardaker, 2014). Though prone to hype, there is a strong relationship between technology and innovation, including innovative teaching. New tools offer new opportunities for teaching, and teaching needs can drive the development of new tools.

The growth of digital tools and of social media in wider culture gave rise to the notion of 'digital natives' (Prensky, 2001) - a generation of incoming students who were competent, confident digital users with high demands for an integrated

digital education experience. Now largely discredited in favour of a more complex and nuanced picture, this principally ideological rhetoric has had significant influence on institutional priorities and perspectives on innovative teaching (Selwyn, 2009). Stanton and Stanton (2013) reported that much of the research on digital tools in education is small case study implementations with success frequently measured in student feedback and practitioner reflections. Consequently, this preference towards a certain approach to research may not be robustly challenging the assumptions and rhetoric of the area.

Empirical research instead shows a socio-economic digital divide in access to technology, as highlighted in recent needs around home schooling during the Covid-19 pandemic. There is also evidence that young people's digital engagement is centred around gaming, messaging and media consumption rather than developing a collaborative co-constructed individualised reality (Selwyn, 2009). Students do not necessarily have high levels of digital skills or the ability to transfer affinity for using digital in a social context to doing so in an educational context. They value non-digital interactions and may not wish to have their educational digital self integrated with their personal digital self. This more complex picture of student perspectives and use of digital tools has implications for innovative teaching as it challenges assumptions and suggests careful planning and support is required to successfully integrate digital.

The relationship between digital tools and pedagogy is not simple. Tools in themselves are just that, tools, they do not by themselves lead to changes in pedagogy. However, digital tools can offer the opportunity to think about practice differently which can lead to changes in pedagogy. This is an area of particular interest regarding innovative teaching as there is debate as to whether enacting the same pedagogy through a new digital tool is innovative teaching, or if a change in pedagogy is necessary for it to truly be innovative teaching. Using technology also has challenges, though many practitioners believe using digital tools could enhance student learning and engagement in their courses, they do not do so because of the perceived cost of personal time and effort and the risk of technology failing (Stanton and Stanton, 2013). This is particularly pertinent if

there is a risk averse culture in the institution or if such investment of personal resources is not recognised or rewarded.

2.4.5 Section summary

This section has briefly discussed some of the pertinent aspects of teaching in contemporary UK HE to provide a contextualised backdrop to practitioners conceptual understanding of what innovative teaching means to them. Current approaches to teaching in higher education have been influenced by policy changes (see chapter 1 for a discussion of key areas) including the expansion of higher education and widening participation; the requirements of graduate attributes fitting for changing workforce demands and the impact of technology. Changing policy and cultural expectations through increased use of metrics and rankings, and the introduction of tuition fees have further impacted institutional priorities and the teaching context. Institutions are negotiating increasingly complex and fluid funding arrangements and increased competition through marketisation. Students arrive with different expectations and prior experiences, and the demands on academics to become 'excellent' teachers has increased. This landscape compels institutions to develop creative solutions and innovate to define their offer to attract students and position themselves in the market. It also encourages individual educators to explore and develop their teaching practice, offering opportunity for innovative teaching.

2.5 Innovative teaching in higher education

This discussion of contextual literature has thus far considered literature on innovation as a concept in a general sense and recognising that innovation has meaning in the particular context in which it is enacted, this chapter has also considered some key aspects of UK higher education that gives innovative teaching as explored in this study its context. I now focus on the literature specifically considering innovative teaching in higher education that highlights the pertinent debates in the area to which this study contributes.

Current UK higher education rhetoric positions innovative teaching as something to be strategically encouraged and marketed, used to enhance reputations both of institutions and practitioners. As illustrated by statements like 'Innovative

teaching is a necessity for all teachers in order to meet the educational needs of the new generations.' (Zhu *et al.*, 2013, p9). This has naturally led to an increase in education literature using the term 'innovative', as illustrated by the Ngram below (fig. 2-1). However, there are relatively few studies that explore innovative teaching in higher education as a topic, and most that do focus on implementation of educational technologies (Fraser, 2019).

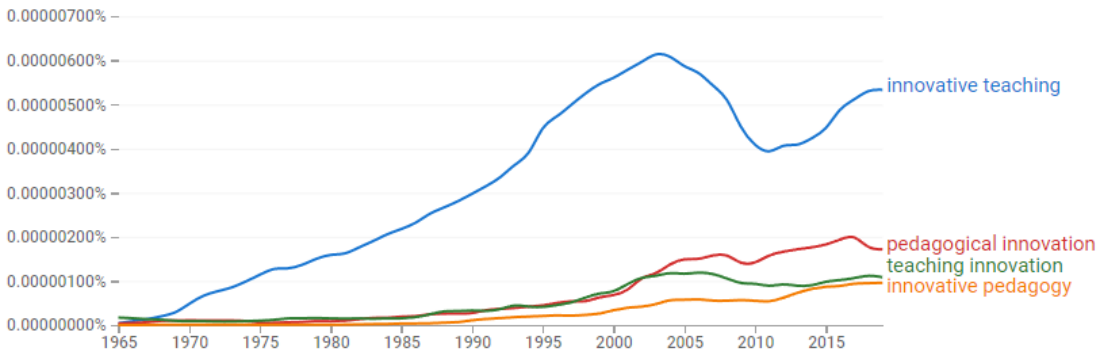


Figure 2-1 Ngram showing increase of use in literature of innovative teaching variants (A Google Books Ngram displays the percentage occurrence of a phrase in a corpus of books https://books.google.com/ngrams/info)

Despite frequent use of the terms many studies do not define innovation or innovative teaching. Others such as Thurlings, Evers and Vermeulen (2015) and Wolff (2008) comment that there is no clear agreed definition in literature on innovation and educational change. Wolff's (2008) study contrasts the use of the term innovation as a 'rhetorical device in marketing campaigns' and strategy with something that is locally defined by a community of practice. Zhu *et al.* (2013) discuss how definitions vary between considering outcomes of innovative teaching (impact on students) and innovative aspects of the teaching process such as methods and techniques. The only consistency in definitions seems to be an aspect of 'newness' though this is not simple either as 'what is new, how new and new to whom?' (Johannessen, Olsen and Lumpkin, 2001, p.21). Hannan (2005) also suggests innovation can be something that is established elsewhere but seen as new in the specific circumstances. With such a variety of definitions the term 'innovation' is problematic in discourse as there is no clear shared understanding. Smith (2011, p.434) found evidence of this when the definitions of innovation given by academics she interviewed were as 'diffuse and slippery as those found in the

literature'. She further proposes 'it becomes impossible to discuss innovation in any meaningful way' without a concrete definition (p. 435).

Academics are key stakeholders in this discourse, yet their views are notably underrepresented in this area of literature and a significant area for further research (Kopcha, Rieber and Walker, 2016; Schweighofer and Ebner, 2015). The research including academic perspectives falls mainly into two categories: case studies of specific innovations/ implementations and survey-based research. Case studies can offer rich perspectives of experience but are limited to the context of a specific innovation rather than perceptions of pedagogical innovation adoption as a concept (e.g., Long, Cummins and Waugh, 2017; Miller and Bull, 2013; Connolly, Jones and Jones, 2007). Statistical surveys offer a more generalised view, but outcomes are shaped by individuals identifying themselves within a set of preconceived categories and do not allow for articulation of the depth or complexity of their own perception (e.g., Zhu and Engels, 2014; Jenkins *et al.*, 2011). It is well established in literature that 'lack of time' is the main factor cited by individuals as hindering engagement with innovative teaching (Singh and Hardaker, 2014; Jenkins *et al.*, 2011). However, it is widely considered in time management literature that 'lack of time' really means something is a low priority as it is usually a result of choices and prioritising (e.g., Scott, 2018). Also, those who do engage with innovative teaching do not always have specifically allocated workload or resource to do so (e.g., Fraser, 2019). Jenkins *et al.* (2011, p.462) make the point that a lack of time could be 'a metaphor for a range of other barriers' to engaging with innovation. To understand the complexities of an individual's perspectives behind this acceptable disclaimer requires further research. This study by intentionally focusing on academics' views helps address this gap in the literature.

Phenomenography is an established method for research in an education context, having been developed in an education setting. However, I was unable to find any literature considering innovative teaching using phenomenography as the methodology. Consequently, the literature discussed in this section draws on a variety of traditions to establish the literature context from which a research question appropriate for a phenomenographic approach can be formed. That no

published study has explored innovative teaching through a phenomenographic lens provides clear opportunity for this work to contribute original knowledge to the field.

In exploring the literature on innovative teaching, I identified five themes into which the literature could be grouped: innovative teaching as a label; teaching innovation as a subject, cultivating innovative teaching; understanding innovative teaching and innovative teachers. Naturally, the boundaries between these groupings are blurred and some articles could be placed in multiple groups. My search found the prevalence of articles in the order presented, meaning there are many articles that use innovative teaching as a label and very few that consider characteristics of innovative teaching and innovative teachers themselves. Teaching innovation as a subject is not an area relevant to this study as it is a different concept so it will not be discussed further in this thesis, though it was discussed by some participants in my interviews. The other groups listed above I shall discuss in more detail below using selected articles as illustrative examples.

2.5.1 Innovative teaching as a label

I found, as Godin (2015, p.2) comments 'innovation is also often just a word, or rather a label.'. By far the majority of literature related to innovative teaching are the journal articles and other sources that use the term as a label in the title, abstract or tags but do not follow up on it in the body of the work. Labels such as an 'innovative project' (Ozolins, Elmqvist and Hörberg, 2014), an 'innovative methodology' (Flanagan and Wilson, 2018), an 'innovative teaching method' (Colleran-Santos, 2014), an 'innovative model' (Fidalgo-Blanco *et al.*, 2017), or an 'innovative approach' (Katz *et al.*, 2019; Lengetti *et al.*, 2018). These articles give no definition, context, or explanation to their use of the phrase and often it only appears in the introduction and/or conclusion, if in the main body of the article at all. This indicates an assumption on the part of the authors that we all share their definition of innovative teaching and would agree with them that it is an appropriate descriptor for their object of discussion.

For example, Bajada, Kandlbinder and Trayler's (2019) paper 'A general framework for cultivating innovations in higher education curriculum' by the title seems to be

a highly relevant article for exploring innovative teaching and the word innovation is heavily used in the abstract. However, they do not define or explain what they mean by the phrase 'curriculum innovation' (or variations thereof) and for the majority of the article, they favour the phrase 'curriculum change'. The closest they come to an explanation is when using an example in the statement 'introducing pedagogical innovations like inquiry-based learning.' (p467) when discussing curriculum project goals or aims. It is unclear in articles such as this whether the authors are perhaps confusingly using 'innovation' synonymously with 'change', or possibly favour 'innovation' in the more visible parts of the article to appeal to the current political draw of the term.

Another example is when one reads an article on something labelled as innovative teaching, only to find that it is something you do not consider innovative at all. Yet clearly the authors did consider it innovative to have used the label. This highlights the need to challenge the assumption of a shared, universal understanding of innovative teaching and to explore in more depth how the concept is experienced and understood by academics.

2.5.2 Understanding innovative teaching

Understanding what is meant by the term innovative teaching is the core focus of this thesis and is fundamental to clearly communicating use of the term in any of the ways discussed above. However, the body of literature on this aspect of innovative teaching is notably smaller than the other themes. There are different ways to approach investigating what a term or concept means to those using it. Several studies, discussed in turn below, take the approach of defining the characteristics of innovative teaching as a way of understanding what it means to practitioners. These can be defined at a granular level or grouped to form themes or aspects of innovative teaching. Even within the domain of characteristics of innovative teaching there are different ways of framing the concept.

Walder (2014) takes innovative teaching as a process and defines the themes as novelty, change, Techno-pedagogy, reflection, improvement, application and human relations (meaning related to the teacher). They summarise their findings in a very detailed definition of innovative pedagogy as:

> *It is a new way of teaching, unlike those commonly used; it is bespoke and surprises students. Consequently, it heralds a change driven by a transitory adaption to pedagogical objectives and the new student profile. It stems from a reflection that is pedagogical, intellectual, creative, psychological and sustained, and that shapes itself progressively through a multi-level and multi-impact process linked both to the audience and the discipline or the technology and that aims to improve quality, like a desire to make the subject understood and foster success. Unlike technological innovation, the innovation is only pedagogical if it is constructed by pedagogical thinking, in particular in human relations at the will of the personality of the devoted professor. (Walder, 2014, p.200)*

The focus of novelty here is on student perceptions of what is normal teaching, and by extension what the academics (the participants) consider normal practice. The contrasting of innovative teaching to whatever is considered normal practice is a strong theme I will return to in the discussion chapter. This definition also links to closely related concepts such as change and creativity. Boden (2019) also explores the process that academics undertake to innovate in their teaching. However, I find it unclear how her study distinguishes innovative teaching from good teaching practice as it appears to describe a developmental cycle for improving teaching practice rather than an innovation cycle. It is possible she is using the term innovate to mean the process by which academics become excellent or exemplary teachers in their area, which is either a very different use of the term or perhaps tending to the innovative as a label category above. She includes the implementation of original and previously known approaches to create change. Given that the definitions in section 2.3 above include a requirement for newness this inclusion of previously known practices is particularly interesting.

Jaskyte, Taylor and Smariga (2009) do not explain how they arrived at their themes but group granular responses into: teaching methods/style, teacher personality, relationships with students, classroom environment, staying up to date on recent developments in the field and effectiveness of teaching methodology, which appear to have an application focus. These above studies different angle of interest – characteristics of a process of innovative teaching or characteristics of innovative teaching as a product - clearly emphasise different aspects of the concept. Fraser (2019) takes a different angle again by

understanding innovative teaching as a scale of influence, from 'innovative deliver: individuals who are 'innovative in the way they deliver an educational experience to their students', through 'implementer of innovations' who influence others to adopt their innovations, to 'innovative policy maker' people in positions of leadership who can implement large scale innovation top down (p1382). She notes the attributes required for each level may differ. This study highlights the contextual nature of perspectives of innovation. These different angles on understanding innovative teaching enhance our understanding of the concept overall, yet the discrepancies could create confusion in discussions with practitioners and creating strategy/ staff development interventions. These studies focus on the commonality of responses among participants and seek to explore the essence of what innovative teaching is. There is an assumption that holistic definition incorporating all these characteristics will lead to a better understanding. This study therefore offers an original contribution in taking the view that exploring that variation in participants' responses will add understanding to the area.

2.5.3 Innovative teachers

Though they state they are exploring perceptions of innovative teaching, Jaskyte, Taylor and Smariga (2009) actually present their results as characteristics of innovative teachers. The subtlety of the shift occurs during interviews where participants that needed prompting beyond the initial request to list characteristics of innovative teaching '…were asked to list the kinds of characteristics they would look for in an award recipient.' (P113). This illustrates the clear link but subtle difference between innovative teaching as a practice, and those who enact it as innovative teachers. It is important to note there is a difference. Those who practice teaching that could be considered innovative may not identify as innovative teachers, and those who do identify as innovative teachers may not always undertake innovative teaching. Also, the characteristics of teacher and teaching are again related yet distinct, for example 'gets students to learn how to construct knowledge themselves' and 'is open to new ideas', the top two ranked characteristics in Jaskyte, Taylor and Smariga's (2009, p.114) study could not be directly applied to innovative teaching as a concept.

Fernández-Cruz and Rodríguez-Legendre (2021) explored the innovation competence profile of 1404 academics in HE. Many disciplines have competency profiles (e.g., digital competencies, entrepreneurial competencies, various health care professional competencies), but it was interesting to see this approach applied to an innovative teaching context. They employed a statistical questionnaire methodology using a self-rated questionnaire with pre-defined categories. Their conclusion was that 'the innovation competence profile of university teaching staff remains below the expectations and requirements, including governmental, for optimum teaching/learning outcomes for students.' (p7) and they gave a strong directive for institutions making change to support development innovation in staff. Clearly positioned with an aim of improving competency and facilitating staff development this perhaps reflects political imperatives discussed above.

Though based in compulsory education, Thurlings, Evers and Vermeulen (2015) undertook a literature review to explore teachers' innovative behaviour. Like myself they found few studies to consider. A significant part of the study is comparing definitions of innovative behaviour, an interesting outcome of which is that they 'consider creative behavior as a term that can be used interchangeably with innovative behavior' (p.442). They explored factors which may positively or negatively influence, factors that mediate and factors that do not affect teacher behaviour. For individual factors they distinguished categories of personality, trait and competence. In summary this more closely resembles a discussion of enablers and barriers (see section 2.5.4 below) than an exploration of innovative behaviour.

Fraser (2019) found that focusing on innovative teaching can have a negative impact on academics' career progression as it was often done at the cost of producing more valued or prestigious discipline research outputs. In the context of an environment where innovative teaching in itself is not valued or rewarded, self-sacrifice is a characteristic of innovative teachers. She identified key personal qualities such as: 'big picture thinking, energetic, enthusiastic, proactive and resilient' (Fraser, 2019, p.1379). She notes a synergy between these and characteristics in literature on teaching excellence and ponders if these are innate or developed through experiences. Ultimately, she concludes that though

characteristics may pre-dispose people to be successful innovators, innovative teaching is ultimately the result of intentional, determined, sacrificial effort. Though personal characteristics are not a focus of this research, they nevertheless are likely to interact with how a person experiences innovative teaching.

2.5.4 Cultivating innovative teaching

The most significant body of literature exploring innovative teaching considers enablers and barriers to innovative teaching (e.g., Gregory *et al.*, 2015; Singh and Hardaker, 2014; Martinez-Garcia *et al.*, 2012). This is unsurprising as a complex array of factors influence innovation and the way it impacts society, which it is important to research and understand (OECD/Eurostat, 2018). Often framed in matters of institutional culture the position is usually that of considering how to create an environment to better support innovative teaching. In the context of this study, this maps to Sagy, Hod and Kali's (2019, p.850) definition of teaching culture as 'the beliefs, values and behaviors a person or a group of people have with regards to their own teaching or learning in specific contexts'. The articles discussed above generally took their findings and concluded on how these could be used to influence an education culture that would better support innovative teaching.

There is a prevalence in the literature to start from a position that innovative teaching is currently insufficiently incentivised and supported and that this should change. This reflects the wider society rhetoric on innovation previously discussed and illustrated by the following quote from the OECD in a publication titled 'The Innovation Imperative':

> *'Governments play a key role in fostering a sound environment for innovation, in investing in the foundations for innovation, in helping overcome certain barriers to innovation, and in ensuring that innovation contributes to key goals of public policy.' (OECD, 2015a, p.11)*

There is an assumption that more innovative teaching is desirable and achievable given a change of culture. For example, Bajada, Kandlbinder and Trayler (2019, p.465) argue 'There are few incentives for academics to engage deeply with

innovative curriculum design initiatives' and such work is often unrewarded and unresourced.

There is also strong perception in the literature that teaching is less valued by academics and higher education institutions than discipline research (Boden, 2019; Fraser, 2019; Bager-Elsborg, 2018). Though this is not always the case, the perception has a significant impact on discussions of teaching in higher education, and consequently innovative teaching. Some advocate a greater recognition of the scholarship of teaching and learning (SoTL) to help address this issue (e.g., Fraser, 2019). Boyer's (1990) seminal work on scholarships in academia advocated for a more comprehensive model of four scholarships: the scholarship of discovery, integration, application and teaching. This model has been embraced by the academic community around the world as a philosophy, intended to raise the value of SoTL with regards discipline research, though there is debate as to whether it has impacted value judgements and promotion procedures (Uzoka *et al.*, 2013). However, some argue that the rise of SoTL and a lack of clarity on the terminology regarding scholarship and research in this context has actually contributed to the challenges of pedagogic research gaining equal status with discipline research (Cotton, Miller and Kneale, 2018). This has created perceptions of a tension between formal educational research and SoTL among some practitioners, though there is some debate as to whether this distinction is artificial and unhelpful (Larsson *et al.*, 2020). Either way, pedagogic research is commonly perceived as being of less value than discipline research, particularly in research assessment metrics (Cotton, Miller and Kneale, 2018). Nevertheless, Boyer's work has been fundamental to the rise in scholarship of teaching and learning as an institutional value (Starr-Glass, 2011). Boyer (1990) included learning design and curricular innovation as an example of scholarship of integration. He views the scholarship of integration as interpreting, connecting and synthesising knowledge across disciplines This clearly links to Schumpeter's 'new combination' definition of innovation.

Cultivating innovative teaching is not just about creating an environment where innovative teaching occurs, but these innovations need to become widely embedded and transform practice to be effective and meet strategic aims (Smith,

2011). Wisdom *et al*. (2014) describe adoption of innovation as the decision to proceed with implementation, where implementation (predicated on decision to adopt) is the process of translating research into embedded improvements in practice. They argue 'The better the process of adoption can be understood, the more likely adoption challenges can be addressed' thus leading to implementation and embedded practice. (p482). This view forms the basis for most of the literature on the adoption of innovative teaching and by association creating cultures that cultivate innovative teaching. As mentioned previously there is a commonly held view in the literature, particularly among the technology enhanced learning (TEL) community, that the process of embedding teaching innovations is 'slow and often disappointing' (Singh and Hardaker, 2014). Though factors that drive change are complex (Zhu, 2015) drivers for innovative teaching discussed in the literature seem to be either related to individual or organisational perspectives. Individual drivers such as enthusiasm and curiosity are not only a motivation for those who develop innovations (Thurlings, Evers and Vermeulen, 2015) but also those who are swift to adopt the innovations of others. The prevalent aspect though is that of institutional imperatives. This perspective views innovation as a means to create and maintain competitive advantages as universities move into an increasingly globally competitive, knowledge-based marketplace (Johannessen, Olsen and Lumpkin, 2001) as discussed sections 1.2 and 2.4.

2.5.5 Section summary

This section has considered four broad categories of literature relating to innovative teaching in higher education. I have discussed the use of innovative teaching as a label and how studies using the term without defining or clarifying their intentions creates confusion. I then explored two areas critical to this study, understanding innovative teaching and innovative teachers by considering specific studies in depth. Finally, I have considered the aim of the majority of the research in the area in contributing to building a culture of innovative teaching in individual institutions and across the sector. The lack of literature in the key area of understanding innovative teaching, coupled with a tendency in current studies to pursue a holistic description of innovative teaching as opposed to seek variation

in perceptions, highlights the opportunity for this study to contribute to our knowledge and understanding of the area.

2.6 Summary

This chapter has discussed key literature relevant to the context of this study to provide a framework for the research discussed in the rest of this thesis. I have explained how the literature search was conducted and then considered three pertinent areas of literature. First an overview of innovation was provided highlighting the political nature of the term in recent UK discourse. This was followed by exploring some key aspects of teaching in higher education relevant to the consideration of innovative teaching. These provide a context for change and institution imperatives for innovative teaching. Finally, I turned to the corpus of literature on innovative teaching itself. This was discussed under four themes: innovative teaching as a label which focused on the uncritical use of the term in titles and abstracts; cultivating innovative teaching which considers the focus of a significant proportion of studies on the topic of improving the institutional and sector culture to better support innovative teaching; innovative teachers which discussed example studies on characteristics of innovative teachers; and understanding innovative teaching, the area central to this study, discussing key studies that have previously researched characteristics of innovative teaching.

This discussion of the literature context framing this study has addressed the first two aims of this study:

1. To problematise the assumption that there is a single unified concept of innovative teaching and that this is shared among academics.
2. To critically explore literature around the concept of innovative teaching in HE and relating to themes that emerge from the data.

It offers a rationale for the research question and chosen approach in relation to current understanding of innovative teaching. My research question of:

> *What are the qualitatively different ways academics perceive/ experience innovative teaching?*

will address gaps in the literature on understanding innovative teaching as this area is currently under researched and published works focus on achieving holistic description of innovative teaching whereas this study will focus on variation. That there is also currently a lack of phenomenographic studies on the topic of innovative teaching also gives a clear opportunity for this study to contribute original knowledge.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter explores the choices I have made in designing my research study and the rationale behind them. I begin with discussing my considerations in choosing a research approach. This includes outlining my choice to undertake qualitative research followed by a discussion of my philosophical position. I then explain why I chose phenomenography as my research approach and consider the interacting influences of these aspects. In the second section I explore the details of Phenomenography as a research approach and how this directed my research design. This is followed by a discussion of research methods I used to collect data in the third section. Finally, I turn to a discussion of the pertinent ethical considerations for this research project. Following Savin-Baden and Major (2013) I am using 'methodology' to refer to the study/analysis of the principles of research approach and methods; and 'research approach' to refer to the type of study undertaken.

3.2 Selecting an Approach

Undertaking research, particularly methodology, can be framed in terms of choices, be they conscious, complex, considered or otherwise. Considerations in choosing a research methodology involve ensuring congruence between ontology, epistemology, research questions, research approach, methods and analysis (Savin-Baden and Major, 2013). Though the outcome is usually presented as a neat flow from ontology to outcomes, in reality a researcher is more likely to start with their questions or favoured approach and then ensure the other aspects align in their research design choices. In my case an unrefined research question, followed by interest in a particular research approach were the drivers that informed the design of my study. As discussed in chapter 1 I had established that my research question would be about academic staff's perceptions of innovative teaching, yet there are various ways this question could be framed. So, I explored a number of different research approaches to see what would fit with my research aims and personal values to refine the research question and further direct my research design. This section tells the story of how my research design evolved.

3.2.1 Qualitative Research

From the outset I saw this research project as an opportunity to step into the world of qualitative research from my quantitative physical sciences background and expand both my understanding and skills. It is widely acknowledged that qualitative and quantitative research have contrasting characteristics (Savin-Baden and Major, 2013). Having become dissatisfied with the limitations of the largely survey-based research I was familiar with in my discipline of learning technology, I wanted to take an in-depth approach to explore how academics make sense and meaning of their lived experience of innovative teaching.

Staller (2010, p.1159) describes qualitative research as:

> *'an umbrella term used to cover a wide variety of research methods and methodologies that provide holistic, in-depth accounts and attempt to reflect the complicated, contextual, interactive, and interpretive nature of our social world.'*

Though the term covers a variety of approaches, Staller (2010) goes on to explain that what unifies them is a primary reliance on non-numeric data and a philosophical stance that is different to that of quantitative research. The debates on the difference in assumptions and values related to the differing philosophical stance of quantitative and qualitative research, sometimes known as the paradigm wars, is well debated in the literature (Bryman, 2008). Therefore, to better understand qualitative research and pursue my aim of designing a congruent study I needed to explore the concepts of ontology, epistemology and theoretical paradigms, which were all new to me.

3.2.2 Philosophical Stance

A significant part of my research journey has been a transition in philosophical paradigm which has been a challenging process but also one of discovery and broadening horizons. The inconsistencies between social science research texts in the consideration of philosophical paradigms has been a particularly frustrating part of the discovery journey. As a novice to the area with a mind accustomed to aiming for neat categories and clear definitions, the experience of finding terms

variously defined and used in the literature; and very blurred lines between schools of thought, was particularly difficult to negotiate.

As terminology regarding philosophical stance and methodology is not consistent in literature, I have chosen to follow definitions provided by Savin-Baden and Major (2013, pp.40 & 56):

- Ontology – philosophies that address the nature of reality (from realism to idealism).
- Epistemology – philosophies that address the nature of knowledge (from empiricism to existentialism).
- Paradigms – philosophical perspective that guides ontological, epistemological and methodological perspectives and consequently the research process (from positivism to constructivism).
- Research approach – the particular kind of qualitative research study undertaken, such as ethnography or phenomenology.

My early research training in the physical sciences was in a positivist paradigm, one so entrenched that the existence of alternative paradigms was never mentioned. Crotty (1998, p.27) explains positivism as

> *'a conviction that scientific knowledge is both accurate and certain. In this respect scientific knowledge contrasts sharply with opinions, beliefs, feelings and assumptions that we gain in non-scientific ways.'*

He highlights objectivity and the idea of uncovering meaning that is inherent in what is being considered, as opposed to interpretation or uncovering hidden meaning. Savin-Baden and Major-Howells (2013, p.19) articulate positivism as seeing knowledge as being 'something that is to be discovered, rather than something that is produced by humans' and that positivists seek reductive abstract and universal principles.

Embarking on social science research has revealed the dimensions of ontology, epistemology and philosophical paradigms that were previously unknown to me. Delving into philosophy was an unexpected journey that was unfamiliar and difficult. My certainty in what it is to know; my concepts of validity and truth; my

values of 'objectivity, precision and certitude' (Crotty, 1998, p.29) and many things besides were questioned and the world was suddenly less familiar. This experience I later recognised as cognitive dissonance associated with troublesome knowledge of a threshold concept (Meyer and Land, 2005). This experience of transitioning through the gateway of a threshold concept and the resultant transformation where it is impossible to unsee the new way of understanding has been very useful as an example in my teaching. I established that my ontological position is towards the realism side of the spectrum. I believe an external and knowable physical reality exists independent of individuals experiencing it, that the physical world is separate from human perception (Savin-Baden and Major, 2013).

> *'what is real are complex facts whose existence does not depend on being known, and, further, that knowledge is a relation between the person and these complex facts'. (Mackay, 1997, p.356)*

I was struggling to reconcile my views on an independent, external physical environment and a personal subjective interpretation of the world until I became aware of the realist notion of a separate 'physical reality' and 'social reality' (Savin-Baden and Major, 2013). Seeing the 'social world' as distinct from the 'physical world' allows me to consider positioning my epistemology and research paradigm differently in each 'reality'. I was thus enabled to explore alternative perspectives and consider aligning myself with an approach that I felt would better fit my changing position towards a more interpretivist paradigm of 'social reality'.

Interpretivism seeks 'culturally derived and historically situated interpretations of the social life-world' (Crotty, 1998, p.67). In the interpretivist paradigm reality is not observed but interpreted, a relationship exists between the researcher and that being studied. Given the intention of my project to gain understanding of human perspectives through a reflexive stance I feel that this paradigm most appropriately frames my view of the research. Also work based research is considered by many commentators to be best aligned with an interpretive theoretical paradigm (Costley, Elliott and Gibbs, 2010).

As I was exploring research paradigms concurrently with considering different research approaches, I found the process became iterative. My philosophical views

influenced my considerations of research approach, and the research approaches I found interesting influenced my philosophical positioning. The research approach I chose was Phenomenography, which is a non-dualist, interpretivist research approach:

> *'There is not a real world 'out there' and a subjective world 'in here'. The world is not constructed by the learner, nor is it imposed upon her; it is constituted as an internal relation between them. There is only one world, but it is a world that we experience…' (Marton and Booth, 1997, p.13).*

As my ontology was challenged so too was my epistemology. My understanding of knowledge being primarily rational and empirical from my physical sciences background was broadened to consider new options. The values and assumptions of my positivist training, largely reinforced by my environment and culture, have created well-worn thought patterns and assumptions, particularly around correct processes, validity, reliability, generalisation and neat order. I acknowledge that I am unlikely to have been entirely successful in recognising when I have returned to these patterns and some positivist ways of thinking may have influenced this research.

3.2.3 Choosing Phenomenography

I was captivated by the phenomenographic approach on reading how early studies used it to explore student's conceptions of learning and how these varied. It resonated with a fascination I have long had on misconceptions in science learning; how these arise and can be addressed in teaching. I identified with the discussion of the approach and the associated view on learning - an embryonic form of variation theory and wanted to explore further. (Marton developed his variation theory of learning from the premises of phenomenography, see Marton, 2015).

The object of study of phenomenographic research is described as variation in awareness, or ways of experiencing a particular phenomenon (Marton and Booth, 1997). I felt this focus on conceptualisation and variation in perceptions would be an interesting way to explore my topic of understanding academics' views on innovative teaching. Marton & Booth (1997, p.111) state 'At the root of

phenomenography lies an interest in describing the phenomena in the world as others see them, and in revealing and describing the variation therein'. Often a motivation for phenomenographers is to offer this understanding to inform teaching so people can be enabled to move from a less complex to a more complex/powerful conception of a phenomenon. Naturally, this motivation resonated with me as an educator.

Kinnunen & Simon (2012) note that phenomenography is especially suitable for research where there is little prior knowledge on the topic. Therefore, as my literature search found few published studies on understanding innovative teaching and none using phenomenography to explore it, phenomenography is good approach to use to explore the subject. It also offered a clear opportunity for this work to address a gap in the literature and contribute original knowledge to the field. Kinnunen & Simon (2012) further comment that as an inductive approach it offers researchers the opportunity to discover something 'truly unique by not restricting the researcher with prior theories or models' (p.212) though the outcomes should be related to literature after the analytical process is completed. Gaining a better understanding of variation in how academics experience innovative teaching as a concept would inform HE institutions in developing policy and practice. In the iterative nature of research design my interest in phenomenography influenced the refinement of my research questions and the rest of my methodological choices. As such the rationale for phenomenography being a good fit for the study is because the research was designed with this choice in mind, as opposed to looking for suitable approach to a pre-defined set of parameters.

Thematic analysis is perhaps the most similar alternative approach I considered, and from my review of the literature I propose is sometimes conflated with phenomenography. Thematic analysis is a "deliberate and rigorous" process that enables the "identifying, analysing and reporting [of] patterns (themes) within data" (Braun and Clarke, 2006, p.79). Though there are similarities, the two approaches have a significantly different focus and outcome. Thematic analysis approaches are focused on looking for commonality in the data set and key themes related to, but not necessarily of, the phenomena. Whereas

phenomenography is seeking to explore the critical variation of conceptions of the phenomena in the data set. Thematic analysis is an approach to data analysis, rather than a research approach, as such it is argued it can be used both with theory or as a theory free approach (Braun and Clarke, 2006). There could therefore potentially be an option of pairing thematic analysis with a phenomenographic theoretical framework, except that as they are looking for different things this does not in my view make congruent research. Also, phenomenography has a specific data analysis approach directed towards its unique outcomes.

Phenomenography is also distinct from phenomenology, another approach I could have chosen. Some texts classify phenomenography as a subset to phenomenology as both share the object of research as human experience of phenomena. Marton refutes this association, despite stating some terminology is borrowed from phenomenology (Marton and Booth, 1997). Harris (2011) discusses in detail how this borrowing and stretching of phenomenology terminology causes confusion. The key difference is that of purpose: phenomenology seeks to explore the structure and meaning, the essence of the phenomena as it is perceived; whereas phenomenography seeks to describe the critical aspects of variation of people's perceptions of the phenomena across a group (Larsson and Holmström, 2007; Marton and Booth, 1997). I chose not to undertake a phenomenological study investigating the meaning of innovative teaching as a phenomenon, but rather was interested in the variation of perceptions among academics.

3.2.4 Incorporating the Literature

How the literature search is approached is an aspect of methodology. A traditional positivist approach of thoroughly considering the existing literature to form a hypothesis that tests or builds upon the current established position is not a clear fit to more explorative interpretivist research. Some interpretivist researchers advocate the opposite, delaying the literature review until during or after data analysis. This is to ensure findings are not led by themes encountered in the literature and reduce the impact of researcher preconceptions. It is also because it is difficult to know in advance what will be relevant to explorative outcomes (Savin-Baden and Major, 2013; Hamill and Sinclair, 2010).

For this research I chose to do a two-stage literature search. As part of the research design process, I explored the literature around the key themes of innovative teaching to give a context to the research and to ensure the research questions would create new knowledge. However, as the phenomenographic approach is explorative I chose to leave a more detailed literature review until the outcomes of my research indicated what the critical aspects of the phenomena would be relevant to a discussion and to explore the associated literature at that stage. In this way the literature is alongside the data as opposed to purely a background to the data. I felt this was a more appropriate fit for the methodology.

3.3 Phenomenography

This section discusses phenomenography as a research approach. Considering its origins and philosophical stance, then exploring the key aspects that define the approach as unique and concluding with a discussion of quality and limitations in phenomenographic research. As phenomenography is a research approach (as opposed to a method) it encompasses both a distinctive theoretical position and methodological strategy for data collection and analysis (Tight, 2016; Marton and Booth, 1997; Svensson, 1997). Phenomenographic literature uses ways of experiencing, ways of seeing, ways of understanding and conceptions as synonyms (Marton and Pong, 2005), so this thesis does likewise.

Despite growing in popularity over recent years, phenomenography is still an 'minority interest' research approach (Tight, 2016, p.326) and authoritative sources are limited in number. Consequently, I found critical reading of studies was particularly necessary when seeking guidance for my methodological approach. Cibangu & Hepworth (2016) suggest there is a lack of critique of phenomenographic work and many studies that claim to be phenomenography are not well informed on the methodology. Like Larsson & Holmström, (2007), I found many studies claiming to be phenomenographic do not overtly demonstrate key aspects of the approach and often appear more akin to thematic analysis or other qualitative approaches, which can lead to confusion (e.g., Larsson *et al.*, 2020). Perhaps this is partially because as Åkerlind (2005c, p.322) notes 'phenomenographic contributions to the research literature are often assessed by journal reviewers without a clear awareness of the unique methodological

requirements of the approach.' Key authors such as Gerlese Åkerlind, John Bowden and Ference Marton have made efforts in recent years to clarify the details of a phenomenographic approach and I relied primarily upon these and related reputable sources.

3.3.1 The Origins of Phenomenography

Phenomenography was developed by a group of education researchers in Sweden in the 1970's investigating how students learn. It was developed in response to limitations found by the research group in the quantitative approaches that were dominant in educational research at the time. They wanted to see the phenomenon (usually a concept) from the perspective of the learner, in a move towards an interpretivist view of knowledge where context and experience became important factors in the learning experience, as opposed the dominant objective view which sought more generalised outcomes. (Marton and Booth, 1997; Svensson, 1997). The approach was developed from an empirical basis and though elements of an underpinning theory and philosophy are hinted at in early published works, these were not well expressed in the literature until the 1990's (Åkerlind, 2005c). Theoretical aspects of phenomenography were later developed by Marton as variation theory of learning (Marton, 2015).

3.3.2 Philosophical Stance in Phenomenography

Phenomenography as a research approach arose from an empirical research basis, not from a philosophical system. As such the assumptions and ideas that created the approach came first and the related philosophical position was clarified and developed from this (Svensson, 1997). As mentioned in section 3.2.2, phenomenography espouses a non-dualist ontology:

> *"There is not a real world 'out there' and a subjective world 'in here'. The world is not constructed by the learner, nor is it imposed upon her; it is constituted as an internal relation between them."*
> *(Marton and Booth, 1997, p.13).*

They go on to comment that though there is one world, we all experience it differently, as our experience of the world is partial. This leads to variation between people in how aspects of the world (the concept of innovative teaching for the purpose of this thesis) are seen or understood. Conceptions of the

phenomenon under investigation (innovative teaching) are constituted in the relationship between the person and the world. This relationship between experiencer (our academics) and the phenomenon being experienced (innovative teaching) is central to the expectation that the different ways of experiencing are logically related through the phenomenon being experienced. In other words, the phenomenographic categories of description, which are the expression of the different ways innovative teaching is experienced in the data, are logically related as they are all related to the phenomenon. This logical relationship enables the ways of experiencing (categories of description) to be arranged as a structural hierarchy of inclusiveness which is known as the phenomenographic outcome space. The hierarchy of inclusiveness is where some ways of experiencing are more complex than others and incorporate less complex ways of experiencing. (Åkerlind, 2005c; Marton and Booth, 1997).

Phenomenography is also a second order research approach; in that we can never experience others' experiences but only their description of their experience (Marton, 2015). In his detailed discussion on the ontology, epistemology and methodological assumptions of Phenomenography, Svensson (1997) states that phenomenography is situated in viewing knowledge as subjective and having 'a relational and holistic nature' (p.171). That 'knowledge fundamentally is a question of meaning in a social and cultural context.' but also that this meaning is related to 'entities or objects' that have a 'certain complexity' (p163). So, phenomenography is a research approach that is investigating other people's descriptions of how they see the world, influenced by how they recall and express their experiences and how these descriptions are understood by the researcher.

3.3.3 Using Phenomenography

Phenomenography is an empirical qualitative research approach that 'aims to investigate the qualitatively different ways in which people understand a particular phenomenon' (Marton and Pong, 2005, p.335). Phenomenography assumes that for any phenomenon of interest there is variation in ways of perceiving or experiencing it. However, this variation is limited and typically small in number (Tight, 2016). The aim is to explore the range of conceptions across a sample group, not conception(s) of an individual. Marton and Pang (2013, p.31) explain:

“phenomenography does not tell you what individuals’ ways of seeing something are. It tells you how their ways of seeing something vary”. Thereby leading to a better understanding of the phenomenon under investigation, in this case innovative teaching.

The distinct, qualitatively different ways of experiencing the phenomena present in the data are represented as categories of description. As phenomenography considers a way of experiencing as representing a relationship between the person experiencing and the phenomena being experienced, the categories of description are considered to be logically related through the common phenomena being experienced. Therefore, the categories of description are structurally related, typically in a hierarchy of inclusiveness. The hierarchy does not indicate that one conception is ‘better’ than another but that some conceptions are more powerful than others in that they are more complex and supersede others. This research outcome of a set of structurally related categories of description is called the outcome space (Åkerlind, 2005c; Marton and Booth, 1997). The outcome space is a core aspect of the phenomenographic research approach yet one that I have noted is not always explicitly presented in published studies. Possibly this is because ‘The structure of the outcome space represents one of the least understood aspects of phenomenography.’ (Åkerlind, 2005c, p.322).

The below diagram (figure 3-1) is an original contribution that partially illustrates what the outcome space represents to help explain this complex notion. The crystal represents the phenomena (in this case the complexity of innovative teaching) and the different facets of the crystal represent different aspects of the phenomena. The arrows represent the relationship between the person and the phenomena, indicating which aspects of the phenomena may be in focus and therefore inform their conception(s) of the phenomena. Phenomenography is interested in analysing the collection of arrows over a sample population, which reveal critically different ways of perceiving the phenomena. The outcome space is not describing the full expression of the phenomena itself (represented by the

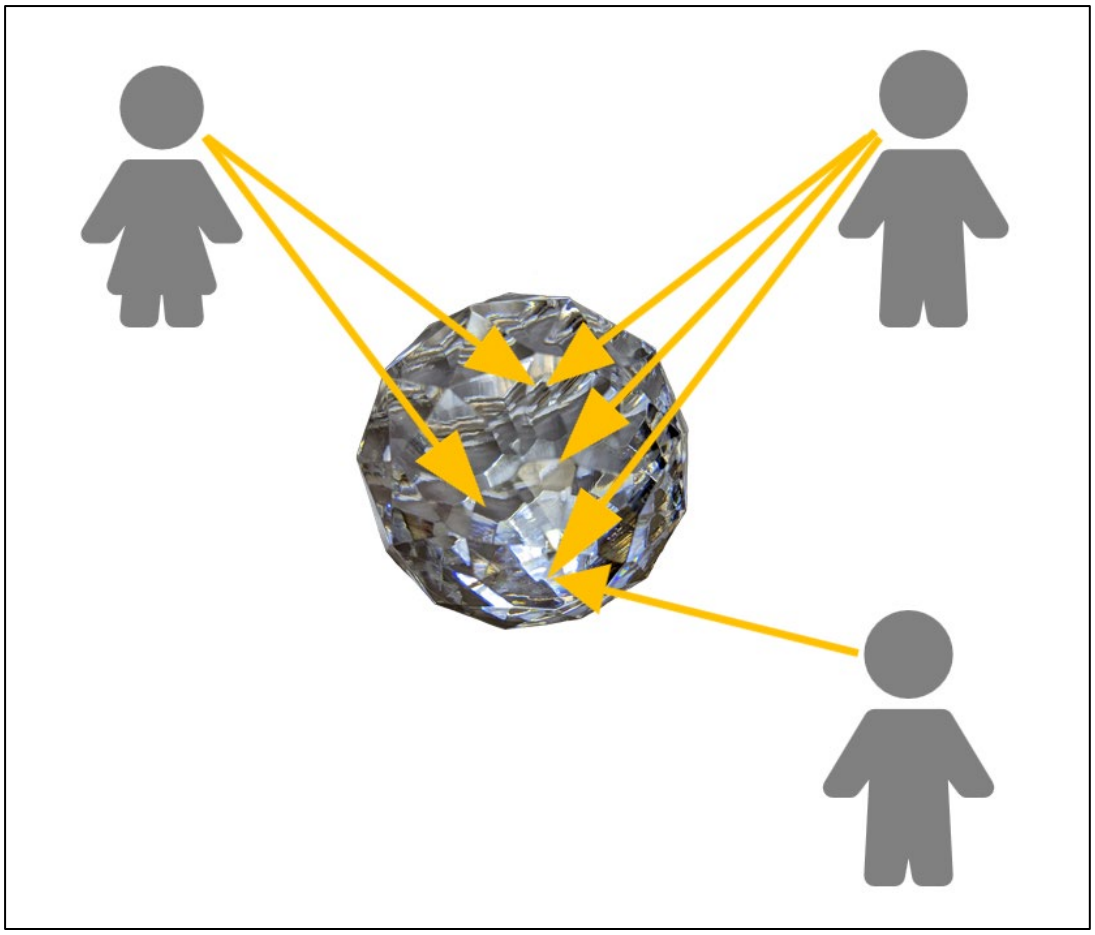


Figure 3-1: Illustration of variation in ways of experiencing a phenomenon

crystal), neither is it describing in full what an individual sees (a person may have more than one conception of the phenomena, represented by multiple arrows from an individual), it is looking at the qualitatively different ways of seeing something across the population, represented by the collection of arrows in the diagram. Like all representations this imagery has its limitations and one worth noting is that if we take the arrows to represent the critically different ways of perceiving the phenomena (i.e., the categories of description) then they would include various aspects of the phenomena but having a single arrow pointing to multiple facets of the crystal would create a very muddled image.

It is important to note that as the focus in on variation, categories usually describe only those aspects that seem 'critical in distinguishing qualitatively different ways of experiencing' (Åkerlind, 2005a, p.72) rather than the full details of a conception. The intention is to thereby to describe variation in terms of structurally related aspects that are critical in characterising different conceptions, potentially

providing insight into what may help individuals progress from less complete to more powerful conceptions. The above diagram is limited in that it cannot show more powerful conceptions incorporating less powerful ones.

Following the above principles of a phenomenographic research approach guided the development of my research question:

What are the qualitatively different ways academics perceive/ experience innovative teaching?

With the following subsidiary questions:

- In what ways do academics describe innovative teaching and what it means to them?
- What are the critical ways these perceptions vary?
- How do these different perceptions relate to each other?
- How can this understanding be used to inform practice?

3.3.4 Quality in Phenomenographic Research

As a qualitative research approach, phenomenography shares common concerns regarding quality considerations in interpretivist frameworks. This is a complex and much debated topic with little consensus on the issues (Maxwell, 2017; Savin-Baden and Major, 2013). I am using quality as an overarching term to include aspects such as validity, reliability, rigour, trustworthiness and authenticity. This section considers how these issues apply to and are addressed in this study.

Quality in qualitative research

Savin-Baden and Major (2013) advocate qualitative researchers not being bound to a set of criteria (this was particularly pertinent for me in my paradigm shift from qualitative to quantitative research values) but ensuring they have considered and communicated their perspective on quality in their particular research study. Morse *et al*. (2002) discuss the need to balance strategies for ensuring quality during the research process and strategies for a reader to evaluate the quality of a study. This section outlines my response to these two recommendations for this study.

The nature of qualitative research means that values and criteria of quality used to evaluate quantitative research such as validity and rigour are typically not appropriate to apply to qualitative research in the same way (Sin, 2010). Instead, 'qualitative research should be assessed on its 'own terms' within premises that are central to its purpose, nature and conduct' (Spencer *et al.*, 2003, p.4). Spencer, *et al.* (2003, p7) developed a set of guiding principles for assessing qualitative research quality from their review of the literature and further research. These are:

- '**contributory** in advancing wider knowledge or understanding about policy, practice, theory or a particular substantive field;
- **defensible in design** by providing a research strategy that can address the evaluative questions posed;
- **rigorous in conduct** through the systematic and transparent collection, analysis and interpretation of qualitative data;
- **credible in claim** through offering well-founded and plausible arguments about the significance of the evidence generated.'

For this study, the principles of contribution and claim are addressed in the discussion and conclusion chapters. The design is articulated in detail through the introduction, methodology and analysis chapters to show congruent design decisions. Conduct of the collection, analysis and interpretation of qualitative data are detailed in this methodology chapter and the analysis and findings chapters. All of these aspects were also guided by established phenomenographic practice.

Quality in phenomenography

The discussions of quality in phenomenography in the literature are bound up in the complexity of values regarding quality and what authors consider appropriate markers. Consequently, the issue has been addressed in different ways by authors including Sin (2010) Collier-Reed, Ingerman and Berglund (2009) Åkerlind (2005c) and Sandbergh (1997). Though Åkerlind (2005c) commented on how a lack of discussion on phenomenographic methodology in published literature

> *'...has led to a situation in which critiques of the research approach may be founded on misunderstandings of the nature of phenomenography ... and phenomenographic contributions to the research literature are often assessed by journal reviewers without*

a clear awareness of the unique methodological requirements of the approach.' (p322).

In discussing the issue of quality Åkerlind (2005c, p.330) notes that phenomenography 'has much in common with the assumptions underlying other qualitative research traditions, and thus draws on their practices, as well as having differences that necessitate its own set of practices'.

One criticism of phenomenographic validity relates to the consideration of interview data as a representation of reality, noting the potential difference between language and meaning and more specifically the relationship between oral discourse and conceptions. This challenges the assumption in phenomenography that the interview data provides direct access to the relationship between the participant and the phenomenon (the arrows in diagram 3.1 above) (Sin, 2010; Säljö, 1997). Ways to address these concerns that I employed are to ensure interviewees conceptual meanings are clarified and confirmed in the interview (Åkerlind, 2005a) and to exercise mindful awareness and exercise caution in interpreting interview data (Hammersley, 2003) as discussed further in chapter 4.

Another criticism of phenomenography is regarding the influence of the researcher's voice. Webb (1997, pp.200–201) raises concern over phenomenographers' 'prejudices' and states that 'phenomenographic explanation is prone to reproduction of the discourses it studies' as researchers are likely to reconstruct their understanding of the history of a concept into the categories'. Two strategies advocated in phenomenographic literature to ensure quality in this context are bracketing and reflexivity, discussed in turn below.

Bracketing, a concept borrowed from phenomenology, is one of the ways often mentioned in phenomenographic work of ensuring quality in the research outcome by limiting a researcher's own influence on the data. Bracketing is the concept of putting aside one's own preconceptions, beliefs and assumptions in order to approach the data and maintain a focus on the participants' accounts with a completely open mind Svensson (1997). I do not think this is realistic as I am not aware of my assumptions by the very definition of them being assumptions. I may

be able to suspend some of my more overt beliefs about the concept being studied but I don't believe it is possible to reach a completely neutral stance. By the nature of doing the research in the first place I have a personal interest and background in the subject. My transition from a positivist background also influences my views on this. I am hyper-aware of the limitations of trying to achieve any form of objectivity which bracketing appears to be aiming to achieve. Ashworth and Lucas (2000, p.297) in their detailed discussion of bracketing in phenomenography acknowledge that to totally bracket one's presuppositions is 'a counsel of perfection' and an 'absolute presuppositionless' state is impossible. They do however offer helpful guidelines to deal with these issues which I utilised.

Potential influence of the views and values of the researcher on interpretive research is well discussed in literature and relate to the concerns of Webb (1997) highlighted above. Reflexivity is an accepted and widely used method in qualitative research to 'legitimize, validate and question research practices and representations' (Pillow, 2003, p.175). The practice of reflexivity is when a researcher 'identifies his or her own preconceptions that are being brought into the research at the outset and then systematically questions at each stage of the research process as to how to minimize the effects and whether the effects have been sufficiently dealt with' (Sin, 2010, p.310) and documents these for the reader to make an informed judgement. It is about being 'critically conscious through personal accounting of how the researcher's self-location…position and interests influence all stages of the research process.' (Pillow, 2003, p.178).

I feel reflexivity in considering my responses and what they mean for my interaction with the data, and discussing this in my analysis, is a more robust way of recognising my preconceptions and influence on the research outcomes than attempting to bracket. In this project it will be important for me to be critically reflexive as to how my preconceptions and personal values may influence my approach throughout the study, especially in the data analysis. My research is located in my socio-cultural perspective, influenced by my understanding and experience. While reflexivity aims to consider these openly and mitigate their effect on the research, I acknowledge this is hard to achieve. I acknowledge that I have influence over the direction of the research, data collection and

interpretation. I do not seek to attempt to eradicate my voice but propose to adopt a continuous reflexive approach throughout the research and attempt to be open about the potential personal influence on the findings. My intention is to be open to what I may find, particularly the unexpected.

Other strategies I have used to ensure the quality of this study are methodological coherence, dense description methods, researcher positionality statement (guided by Savin-Baden and Major, 2013), and communicative and pragmatic validity checks as guided by Åkerlind (2005c).

3.4 Data Collection

This section details the methods I used to collect data. As discussed above, phenomenography as a distinctive research approach directs my strategy for data collection.

3.4.1 Selection of Participants

For phenomenographic studies it is important to select participants that are likely to represent variation concerning characteristics relevant to the research question. This usually leads phenomenographers to use purposive, maximum variation sampling as 'the key criterion for the data is that is has to capture the rich variation of experiences and conceptions within the sample group' Kinnunen & Simon (2012, p.201). In this study participants were selected for potential variation in their perspectives of innovative teaching. I find there is a tension in this approach in that one needs to speculate factors that may cause variation whilst not holding preconceptions of what the research will find. I chose to invite participants with variation in discipline, age, teaching experience and cultural background to increase the potential variation in the views expressed. I created a shortlist from a variety of sources including those involved in teaching and learning schemes; recommendations from colleagues and those with key words in their intranet profile. Invitation to participate was intended to both mitigate any apparent selection bias from voluntary respondents and to provide inclusion of participants with specific profiles that may contribute to variation in perspective. I then sent personalised emails inviting individuals to participate with the participant information sheet attached, a positive response was followed up with

request to return a consent form and fill in a profiling questionnaire. This process did not yield as many participants as I had hoped so I followed it up with a wider call for participants to relevant staff networks and at a teaching and learning event. I used the profiling results to select participants with varying backgrounds to then invite to interview. Typically, between 10 and 20 participants are interviewed in phenomenographic studies, it is a balance of gathering enough data to find variation whilst not overloading the researcher with too much data to analyse effectively (Tight, 2016; Åkerlind, 2005b; Trigwell, 2000). Bell (2016) points out that increasing sample size does not lead to an increased number of conceptions, as may be considered logical from other research traditions. Following the process above I interviewed 13 participants, this is the lower end of the recommended range, but Trigwell (2000) explains that intentionally selecting participants that are likely to describe an interesting or unusual conception means data from a smaller number of participants still provides a suitable range of conceptions. See appendix D for table of participants showing variation sampling, cultural background is not listed to protect identity.

3.4.2 Interviews

Typically, phenomenographic primary data is collected through semi-structured individual interviews. Given the philosophical underpinnings of phenomenography, interviews are a fitting method as asking people to speak in their own words about the phenomena is an effective way to collect rich and valid data (Kinnunen and Simon, 2012). Semi-structured interviews give a balance of keeping the interview sufficiently focused to generate appropriate data while allowing participants to express themselves with some freedom of direction and the researcher to ask follow-up questions.

I developed an interview schedule of questions and prompts (See appendix E) following examples in literature, particularly in Bowden and Green (2005) who include their reasoning and refinement of question wording. For example, they advise asking interviewees to describe examples of experience relating to the issue under consideration as the detail in the description often shows greater variation in ways of seeing and depth than when answering the direct 'what is x?' question. The interview questions included key questions to ask all participants, plus

optional prompts and follow-up questions to enable participants to offer clarification and further expression. My interview questions were tested in three pilot interviews, enabling me to both refine the questions and practice interview technique.

I found stepping into the role of researcher whilst interviewing colleagues quite strange and became very conscious of power balance and relationship dynamics. The pilot interviews gave me valuable opportunity to negotiate these ethical dimensions and consider appropriate mitigations (see section 3.5, ethics for further discussion). I also found it required significant self-discipline and concentration to remain present in the interview and not become distracted by a train of thought prompted by responses. Being experienced in non-research interviews I did not find it difficult to employ good listening techniques. However, it was more challenging to ensure I stayed to the questions and did not influence the interview. There were a couple of occasions early on where I found myself reflecting/summarising in my language rather than ensuring I used the participants' words (as recommended by Åkerlind, 2005b) so I was conscious of this going forward.

Following the pilot interview refinements, the same questions were used in each interview for consistency. The interviews were conducted between August and November 2018 as a snapshot in time. Interviews were conducted face-to-face at a time and location to suit the participant, within working hours on campus.

3.4.3 Transcription

The interviews were audio recorded and transcribed following the completion of all the interviews. I transcribed the interviews myself as an opportunity to become familiar with the data. Transcription is considered by some to be the first stage of data analysis as it is not a simple technical procedure but a form of interpretation in re-presenting speech as text. Transcribers make interpretive choices informed by their philosophical stance, research approach and aim of research in deciding what is included or excluded from the transcript and how it is recorded (Savin-Baden and Major, 2013; Bailey, 2008; Mishler, 1991). The audio recording is also a representation of the reality of the interview as it does not include non-verbal

communication. However, for the purposes of this analysis I do not consider this a significant problem as I conducted the interviews myself and the focus was on the dialogue, non-verbal cues supplemented the conversation but were not a key aspect in themselves as can be the case in other research.

Mishler (1991) also highlights the 'problematic relation between reality and representation, and between meaning and language' (p278). Aware of this challenge between the transcript representation and audio recording I noted audio timestamps throughout the transcription, so I would be able to go and listen to sections when necessary to check on potential ambiguities in the text. I transcribed verbatim, including hesitations and repetitions, using punctuation to indicate pauses. I felt this helped me to understand the data better as it indicated when a thought took time to formulate and express. I did not include my own active listening noises (mm, uhuh etc.). As Bailey (2008) points out it is necessary to strike a balance between the accuracy and usability of a transcript. However, when presenting illustrative quotations in the findings and discussion chapters I chose to prioritise readability and removed the repeated words, discourse markers, filled pauses and corrected words. To pseudonymise quotations I also removed contextual details, e.g., module and programme names, and replaced them with the generic term in square brackets. I ensured no meaning was lost or changed by this concern for clearly communicating my outcomes to the reader.

The transcripts were then analysed using phenomenographic analysis. My approach to data analysis for this study is discussed in Chapter 4.

3.5 Ethical Considerations

Ethical issues were considered throughout the research and writing process as ethics is an ongoing negotiation in all aspects of the research process from design choices, through methodologies and methods to writing (Sikes, 2006). My ethical decisions were guided by the British Educational Research Association (BERA) Ethical Guidelines for Educational Research (BERA, 2011, 2018) and other sources discussed further below and in the quality section 3.3.4 above. A guiding principle of an ethic of respect (BERA, 2018) was enacted throughout the research process. The formal institutional ethical approval process was completed prior to

participant recruitment. Documents required included an ethics application form, participant information sheet (see appendix B), participant consent form (see appendix C), data protection notice and interview protocol (see appendix E). A copy of the ethical approval notice is included in the appendixes (see appendix A). This process ensured due diligence was taken with regard to core ethical concerns such as informed consent, right to withdraw and data management. Ethical approval processes help to structure ethical considerations for a project but are not the end in themselves, consequently further ethical considerations are also discussed below.

As I applied for research ethical approval in early 2018 the *Data Protection Act* (2018), which is the UKs implementation of the European Union's (EU) General Data Protection Regulation (GDPR) was on the horizon, due to come into force in May (*Data Protection Act*, *2018*). As my data collection would take place under these new regulations, I felt I needed to take this into account in my ethics application. Unfortunately, at that time guidance was scarce and interpretation of the regulations was still being discussed. I conducted a significant amount of research to understand the regulations and changes as fully as possible which I feel gave me a deeper understanding of the issues than may otherwise have been the case. It had the added benefit of then being able to advise colleagues and develop GDPR guidance in my work role. I also completed a data management plan when this became an institutional requirement as a consequence of GDPR.

3.5.1 Due diligence

I use the term due diligence to group together established ethical considerations usually included in formal ethical approval processes such as informed consent, right to withdraw, privacy and data management. Potential participants were approached by email and sent a participant information sheet, with time to consider it and ask questions before agreeing to participate. Consent forms were shared on agreement to participate for information and to offer the opportunity to ask questions. Right of withdrawal of participation without consequence and timeframes for doing so were highlighted in the participant information sheet and the consent form. At the beginning of the interview consent and the right to withdraw were discussed before a paper copy of the consent form was then signed

prior to commencement of the interview. Informed consent, including the right to withdraw, was approached as an ongoing dialogic process throughout the interview. Informed consent is considered a cornerstone of ethical procedure as it 'respects the right of individuals to exert control over their lives and take decisions for themselves' (Cohen, Manion and Morrison, 2018, p.123). Though in some research contexts informed consent is not a simple consideration, for this study following I considered the above procedure was appropriate given the nature of the context (teaching in a UK HE institution) and participants (academics).

The principle of confidentiality aims to guard an individual's privacy and remove any connection between disclosure (in this case participant details and the interview content) and the individual (Hammersley and Traianou, 2016). Direct identifying personal data collection was kept to a minimum and only accessed by the researcher. Participants were all given pseudonyms (in the form of 'participant 01') from the outset in data processing and identifying data has been removed or changed in all research outputs. Complete anonymisation is difficult where specific contextual events are described, as Hammersley and Traianou (2016, p.127) note anonymity is a matter of degree as in reality 'identities will be more or less difficult to recognise for different audiences'. In response I have ensured as much contextual detail is removed or disguised (for example replacing a programme name with '[programme]') as possible without losing the meaning of the data. Data was stored in password protected institutional cloud storage (Office 365) and an encrypted, password protected data stick. Paper-based materials (signed consent forms) are stored in a locked cupboard in my work office. Following institutional data management guidance, it is planned that once the outputs are completed and data are no longer required for verification it will be destroyed as it is unlikely the data will be suitable for data repository. However, the possibility for data archiving was included in the consent form as advised by UK Data service.

3.5.2 Insider Research

As I am a researching professional practice situated within the context in which I work and interviewing fellow academics I consider this study to be insider research (Breen, 2007). Though Breen (2007) goes on to argue that the insider/outsider dichotomy is simplistic and a scale would be more useful, and Le

Gallais (2008) argues a researcher has multiple insider and outsider positions depending on identities shared with participants, I think this reference point is useful in considering additional ethical concerns particular to this situated research. In this context, though the BERA guidelines (BERA, 2011, 2018) are my overarching framework within which to consider ethical issues, these and external guidelines in general, can be considered limited when considering the particular complexities of insider research (Ryen, 2007).

A key aspect that makes insider research different to outsider research are the risks and considerations pertinent when researching colleagues with whom relationships exist prior to, during (but separate to) and after the research. Familiarity in existing relationships can pose risks with regard to access, obligation to participate, reciprocity, trust, unclear roles, background knowledge and distortion. There may be different vested interests in the outcome of the research and risks to participants in the disclosure of information for the project or in the impact of project outcomes. However, mutual interest in the subject and outcome can bring parity between researcher and researched and remove apparent power differentials. In the context of relationships that continue after the research project is concluded there are considerations for managing trust and confidentiality. The risks are not only to participants or influence on the research but to the researcher and how they handle information, relationships and tensions (Ben-Ari and Enosh, 2013; Floyd and Arthur, 2012; Unluer, 2012; Costley, Elliott and Gibbs, 2010; Sikes, 2006; Robson, 2002).

Insider research raises ethical considerations regarding power both in the management of relationships and information. Burke (1989) raised the issue of privileged eavesdropping where just by being in the environment one may overhear relevant information, however in my context this has not been given intentionally or with consent. In the interview context issues of power are particularly pertinent. Costley Elliott and Gibbs (2010) discuss the risk of using established rapport to gain unguarded confidences in interviews. There is also consideration to be made of the potential asymmetry of power in an interview (Floyd and Arthur, 2012). It could be considered that the power balance lies with the interviewer as they are asking the questions and gain information and yet

power also lies with the participants in whether they chose to respond and what they say. Respondents may also distort the information they present due to sensitivities within the context of the research (Mercer, 2007). For example, participants may wish to present a positive view of innovative teaching if they feel that is more acceptable.

Confidentiality and disclosure are also more complex in insider research. It is difficult to guarantee anonymity in context-based research and organisational anonymity is almost impossible (Floyd and Arthur, 2012). There is an increased risk in pre-existing relationships of accidental disclosure as colleagues may have high levels of trust and therefore disclose more or compromising information than they would otherwise. The researcher then has a responsibility to manage this both for the research and within the ongoing relationship and work context after the research has concluded (Floyd and Arthur, 2012; Sikes, 2006).

The areas of insider research ethical risk considered above are not discrete but overlap and interplay with each other. As such, strategies to address these concerns need to be holistic and continue throughout the research process and beyond. One such overarching framework is Costley and Gibbs' (2006, p.89) 'ethics of care'. This is an ethos of setting aside one's own concerns to empathise/act on behalf of another. In the context of this study, I have undertaken conscious consideration of the needs of others (mainly my participants) and how my research decisions and processes may affect them as individuals. Other strategies I found useful in addressing the ethical concerns of this study included taking a reflexive approach (discussed above) and ensuring a clear communication strategy.

3.6 Summary

This chapter has provided an overview of methodological considerations and the rationale behind my choices in research design. The flow from philosophical position, through research approach and research methods is shown as a congruent thread where an iterative process has ensured a harmony in the research design. Key aspects of the design including the details of phenomenography as a research approach, participant sampling and using

interviews were expounded. The discussion on quality, reflexivity and ethics of the research enables the reader to gain insight into my positionality and influence on the research and therefore the research outcomes. The detailed discussion of my data analysis in the following chapter further explores the research process I have followed and my thinking and decisions in the practical application of the above methodology.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter gives an account of the highly iterative process of phenomenographic analysis I undertook to extract meaning from the data I gathered from 13 participant interviews. Data analysis is the complex process of 'making sense of the data… of making meaning' (Merriam and Tisdell, 2016, p.202). It involves 'breaking data into meaningful parts for the purpose of examining them' and then putting it back together to answer the research question(s) (Savin-Baden and Major, 2013, p.434). My analytical process was guided by principles and examples in phenomenographic literature, though the limitations I found with these will also be discussed. I have chosen to reflect on this aspect of my research in detail as it was a substantial part of the study in both time and effort, and I wish to contribute to the discussion on undertaking phenomenographic analysis which I feel is under-represented in published material. This chapter by necessity presents a linear account of what was an iterative, complex and non-linear process.

4.2 Considerations in Interpreting Data

Analysis of data in an interpretivist paradigm is an active relationship between the researcher and the data. As discussed previously I have experienced several challenges in moving to an interpretivist approach from my post-positivist background and this shift in perspective on my relationship with the data was one of them. The tension between results presented as objective and the experience of producing them not being objective was a sense of discord I had with previous research and prompted my move towards interpretivist approaches. However, a sense of discord with one approach does not necessarily lead seamlessly to the embracing of an alternative. At times I struggled with the uncomfortable new approach and at times I had to step back and check my subconscious paradigm orientation.

One of the more fundamental perspective shifts is moving away from findings emerging or being present objectively in the data waiting to be discovered, towards an active construction of findings as a dialectic relationship between

myself and the data. When embarking on the study this sounded to me like a fairly logical shift, I was not prepared for the anxiety and confidence challenges this would entail. Reflexivity and clear exposition of the research process are ways to ensure quality in a phenomenographic study which I chose to adopt, as discussed in chapter 3.4.5. I also was mindful of checking my results against my own preconceptions and potential bias as much as possible. Before I began the analysis, I wrote down my own conceptions of innovative teaching for this purpose. I also kept notes throughout the process of my thinking, decisions and actions. Another significant aspect of the change in paradigms is learning to live with uncertainty, there is no longer a 'right way' but an appropriate, justified way; data analysis is messy, and outcomes take time to solidify. This sense of choice, uncertainty and ambiguity is not something I can yet say I am comfortable with.

The transcripts were analysed using phenomenographic analysis, which is an inductive method. Induction is a form of reasoning used to generate theoretical statements based on observations, as opposed to deduction where the theoretical framework is applied to the data. (Given, 2008). Ashworth and Lucas (2000) highlight this aspect in the context of phenomenography in the following advice.

> *It is helpful for researchers to consciously try to counteract the tendency to assimilate the descriptions by research participants into existing theoretical structures by looking for divergence, or emphasising differences and nuances (p.305).*

Given (2008) further comments that as inductions involve inference, generalised statements are not conclusive as a contradictory or contesting cases may exist. Qualitative researchers consequently understand outcomes in the context of the study described. The unit of analysis in this study is practitioner's descriptions or conceptions of innovative teaching. The focus of the analysis is an exploration of the critical, qualitatively distinct, variation in the ways practitioners describe how they experience innovative teaching.

4.3 Taking a stance in phenomenographic analysis

This section considers some variations in practice of phenomenographic analysis evident in the literature and details my chosen approach.

The agreed principles of phenomenographic analysis can be summarised as follows (Åkerlind, 2005c):

- Maintaining an open mind to minimise fitting data to predetermined views/theories or too rapid a foreclosure on the categories of description.
- Focusing on the collective experience – i.e., not focusing on individual transcripts or a category of description in isolation.
- Searching for key qualitative similarities within and differences between the categories of description.
- Combining the constitution of meaning and structure.
- A strongly iterative process; focusing on different perspectives, emerging categories of description and structure at different times.

However, she notes a criticism of phenomenography is that the published literature does not provide a clear framework for analysis and as a result differences in how these principles are enacted in practice have developed (Åkerlind, 2005c). Key areas of variation in the practice of these principles includes how much of the transcript is considered at a time and the relative priority of developing categories of description (meaning) and the relationships between them (structure).

Marton and Booth (1997) describe separating utterances of relevance from the transcript and placing them in a 'pool of meaning', whereas Bowden (2005) advocates considering all utterances of interest in situ in the transcript – i.e., considering the context of the whole transcript. The approaches differ on the weight given to the context of the quotes, where the whole transcript approach considers all utterances to have interrelated meanings that may be lost if quotes are decontextualised, whereas the pool of meaning approach avoids the risk of focusing on the individual as opposed to the meanings as a collective (Åkerlind, 2005c). I have chosen to follow the approach advocated by Bowden (2005) as I think context has significant relevance in the research question I am investigating and that by considering utterances in greater context I will be able to discern intended meanings more reliably.

There is variation in practice in phenomenographic analysis as to what extent the creation of the categories of description and the outcome space occurs simultaneously or sequentially. Creating the outcome space requires a consideration of the relationships between the categories of description and therefore involves the researcher's own judgement. Bowden (2005) argues for determining the categories of description fully before considering the structural relationships, which are determined solely on empirical evidence. This to reduce the risk of the researcher's own perspectives influencing the categories, or as Walsh (2000) suggests ignoring inconvenient data. However, this could result in outcome spaces that show no clear logical relationships. I align with Åkerlind, (2005a) in preferencing co-constituting both meaning and structure. She argues that as the underpinning epistemological assumptions of phenomenography see meaning and structure as dialectically intertwined, categories of description are consequently logically related. Therefore, the structure can be determined using a mix of logical and empirical evidence, enabling the co-constitution of categories and structure. She also points out that research findings with logically related structures have greater potential for practical applications by distinguishing critical variation. This provides 'insight into what would be required for individuals to move from less powerful to more powerful ways of understanding a phenomenon' (p.72). Accordingly, I chose to co-constitute both meaning and structure during my analysis by considering structural relationships once initial drafts of categories of description were complete.

Though Åkerlind and a few others have sought to address the lack of published material discussing the detail of phenomenographic analysis techniques (e.g., Harris, 2011; Bowden and Green, 2005; Åkerlind, 2005c), it is still an area that would benefit from more guidance for novice phenomenographers, and this thesis contributes to that guidance. As Åkerlind (2017) notes much of the discussion on phenomenographic methodology occurs in doctoral theses which are less accessible than mainstream literature. As a consequence, I used a variety of sources to guide my approach, including established phenomenographic methodology literature (e.g., Harris, 2011; Sin, 2010; Bowden and Green, 2005; Marton and Pong, 2005; Åkerlind, 2005c; Ashworth and Lucas, 2000; Richardson,

1999; Marton and Booth, 1997) doctoral theses (e.g., Baughan, 2019; McGuigan, 2017) and personal communications with experienced phenomenographers. I returned to these sources and others throughout the analysis process to ensure I was making informed and appropriate decisions that would produce robust, quality outcomes.

In his reflection on leading a research team where the others were all new to phenomenography Bowden (2005, p.20) comments on how his initial preference to avoid telling colleagues how to do phenomenography but let them 'move creatively towards a way of seeing this research method that reflected their own experiences' was difficult to enact in reality. There was a desire from the others for guidance and direction in the early stages. He raises the tension between the underpinning philosophy of phenomenography valuing variation, yet our tendencies towards a natural attitude want to know the 'right' way of doing something. I find this resonates with my own experience as this was another aspect of this research process in which my paradigm transition became evident. My searching for a clear 'how to do it' guide was to some extent based in a subconscious naturalist/positivist expectation of a 'right' way of doing things. Even if I was able to accept different schools of 'right' ways (such as the variations discussed above) I was not yet considering that my own approach could be valid. This struggle ebbed and flowed throughout the analysis process as I slipped into well-worn thinking channels and climbed out again.

To confirm my interpretation of the literature and intended plan for the analytical process I arranged a conversation with an experienced phenomenographer, which could be framed as an example of peer debriefing (Given, 2008). I was able to verify that the details of phenomenographic analysis follow common techniques of qualitative analysis (i.e., there was not something unusual I needed to grasp). It involves looking for meaning through an iterative process of reading the data; splitting the data into meaning units; making notes on each participant; coding; and categorising. It is the focus on variation that sets the approach apart rather than the techniques themselves. It could be argued that the lack of specification of analysis approaches allows room for an individual researcher to take the steps that best fit their data and purposes. I further approached another practiced

phenomenographer to act as a critical friend (Costa and Kallick, 1993) in discussion of my emerging findings. The rest of this chapter details the steps I took in analysing my data set.

4.4 Finding meaning

Most discussions of phenomenographic analysis present the process as neat phases with a comment on the detailed, iterative nature without elaborating further. However, in reality the analysis process is not linear, there can be multiple steps happening concurrently with overlaps and pauses in activities, it is iterative and complex. A simplified process is easier and clearer to communicate, but I feel this to some extent does a disservice to both clearly expressing the process and guiding novice phenomenographers.

In response to this I present below two representations of my analytical process. Firstly, my analysis phases can be summarised in a similar way to other studies as the apparently linear steps shown in table 4-1 below. These analytical steps will be discussed in more detail later in this chapter. Secondly, I present the chart shown in figure 4-1 as a graphical representation to express the complexity of the overlap and iteration of the steps listed in table 4-1. The coloured blocks do not indicate the time taken for each step but are arbitrary units to represent which steps were occurring simultaneously in an iterative process. I undertook iteration cycles in each block to improve the quality of the outcomes. The colours are a tool to aid the clarity of following the horizontal line for a particular step.

Step	Activities
1. Transcription	Manual transcription of interviews, familiarisation with data and participant expression.
2. Familiarisation	Reading transcripts, noting points of interest, key words/phrases and variation.
3. Transcript summaries	Each transcript summarised as key ideas expressed.
4. Comparisons	Comparisons, similarities and differences between emergent perspectives, looking for critical variation.
5. Key meanings	Noting and refining potential meanings of, or ways of experiencing innovative teaching.
6. Coding	Detailed coding of transcripts to explore and compare potential meanings.
7. Formation of categories	Drafting categories of description from critical variation in meanings.
8. Formation of outcome space	Structural arrangement of the relationships between the categories.
9. Refinement of categories and outcome space	Further iterations of previous steps to edit, reorganise and refine categories and outcome space to produce the reported findings.

Table 4-1: Linear representation of analysis steps

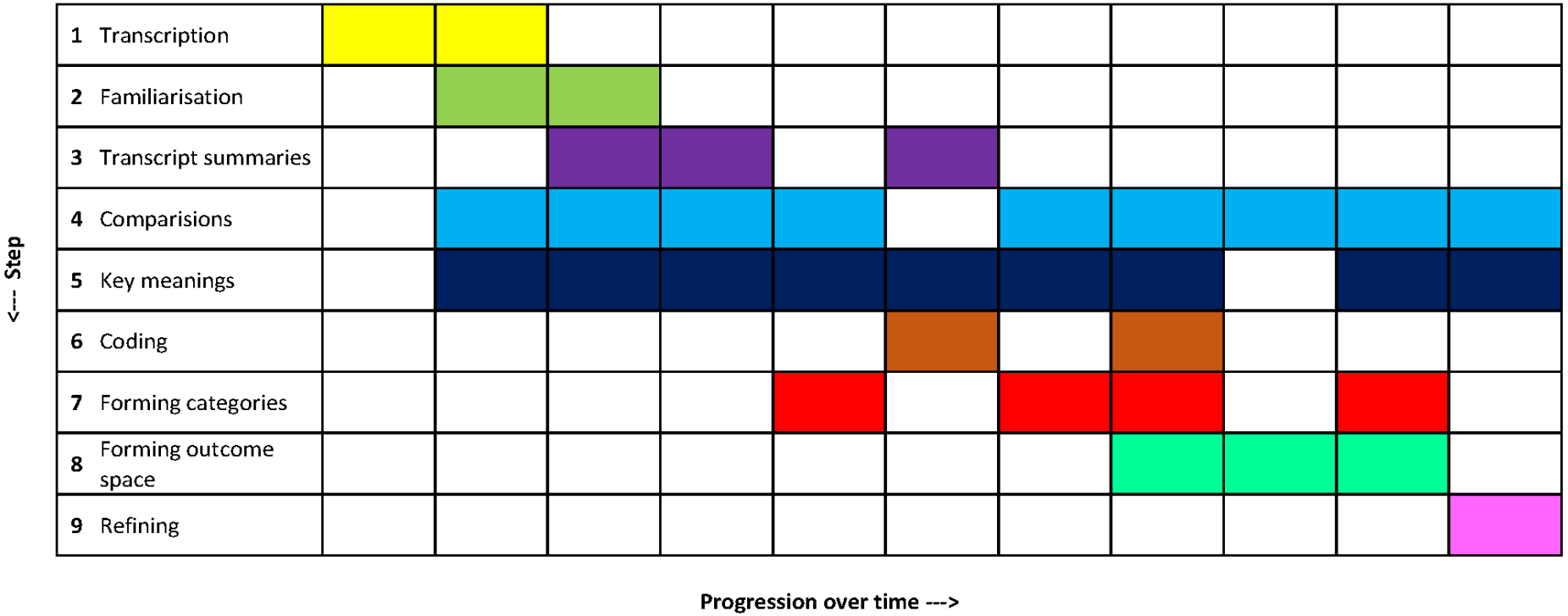


Figure 4-1: Chart representing overlap and iteration of analysis steps

I found the process of moving from a set of transcripts to a draft set of categories of description opaque in the phenomenographic literature. It was implied that this just happened, and I felt I was faced with somehow finding the workings of a magic box to be able to progress from one to the other. Kinnunen and Simon (2012) note how phenomenography does not have structured guidelines as some other approaches do and that there is no right way of doing analysis can be a challenge. To overcome this, I went back the literature, not just phenomenographic literature but to thematic analysis (Braun and Clarke, 2006) which shares similarities with phenomenographic analysis and offers more detail of the initial stages of analysis. Clarke and Braun (2017, p.297) explain that thematic analysis is a flexible tool 'unbound by theoretical commitments' and 'can be used to identify patterns within and across data in relation to participants' lived experience, views and perspectives…'. This shares clear synergy with the aims of phenomenographic analysis to identify patterns of variation in participants' conceptions (lived experience of) a phenomenon within and across data. Having carefully considered the philosophical similarities and differences of the two approaches, I felt the first two steps of Braun & Clarke's (2006, p.87) detailed guide, 'Familiarizing yourself with your data' and 'Generating initial codes' were appropriate for my approach and that the two analytical methods began to diverge at phase 3 'Searching for themes'. The divergence is one of focus in that phenomenography is looking for critical variation in ways of experiencing the phenomenon rather than themes about the phenomenon. There are similarities between the remaining phases of thematic analysis and phenomenographic analysis, however these later stages are more clearly discussed in phenomenographic literature and so I returned to these sources as my primary guide to ensure my research remained aligned.

I initially used 5 of the transcripts for a cycle of each iterative process before bringing in the rest. Phenomenographic analysis requires considering the data as a whole, but to practically hold all the data in mind at one time is unrealistic. Therefore, to manage this process considering a selection of transcripts at a time and taking an iterative approach considering the data from different perspectives at different times is the most common resolution (Åkerlind, 2005c, 2005a).

A constant challenge in the analysis was to focus in on the appropriate, phenomenographic aspects of the data. As Svensson (2016, p.169) notes, 'not everything said in an interview or part of an interview is relevant or equally relevant in describing a conception.' I saw and was distracted by things that were interesting but were not strictly phenomenographic concerns, for example comments on motivations, enablers/barriers, culture and personal history. Bowden (2005, p.28) comments that it requires 'constant vigilance' not to lose focus or become distracted by other meanings in the data. I had collected rich data, so the conversations covered aspects that were interesting and relevant to a wider consideration of innovative teaching, but not directly related to the focus of variation on ways of experiencing innovative teaching meaning they were a distraction from the phenomenographic focus of my research question. However, I would argue it is better to have collected too much around my central question than to realise I had gaps in the data because I had closed participants down too soon.

Step 1: Transcription

My data analysis began during transcription as Bowden (2005) argues it is important not to start analysis whilst collecting data so as not to subconsciously influence later interviews but to wait until after all the interviews are completed. In transcribing the data, I was familiarising myself with it and beginning to get a sense of participants ideas and meanings. How I chose to represent the conversation in the transcript was an analytical choice, as discussed in the methodology chapter, section 3.4.3. Listening to the interviews was helpful in finding meaning in how something is said, not just what is said, and I could carry this into my analysis of the written transcripts.

Step 2: Familiarisation

The next stage was to immerse myself in the data, a process central to most qualitative analysis. Though I had gained some familiarity with the data during the transcription process, this had taken place slowly over several months. I read all the transcripts more than once to gain a sense of the data as a whole as well as individual transcripts. It is necessary to understand and have a sense of the whole before breaking it apart during analysis (Savin-Baden and Major, 2013). As

discussed previously (section 4.3) I chose to consider transcripts as a whole as opposed to breaking them down by question or placing parts into a collective pool of meaning.

To progress the immersion stage, I went through each transcript making notes in the margin on what struck me; what was interesting or different; and emphasised or repeated ideas expressed by the participants. I did not place value on what may or may not be important or discard any sections. I began to have a sense of some of the key words and aspects though these were at a high level and unrefined at this point. The amount of data I had felt somewhat overwhelming. I was aware at this early stage that there was far more of interest in the data than I was likely to use as part of my phenomenographic focus. This was an odd situation of feeling daunted, excited and frustrated.

Step 3: Transcript summaries

I created a summary of the transcript as Åkerlind (2005b) did. I used the term transcript summary as opposed to participant profile to reduce the risk of thinking of a concept as equating to a participant (as discussed above in section 4.3). Initially this was a detailed document including a context summary, the examples they used, key phrases with quotations and explanation and additional info that did not seem immediately relevant, but I could not ignore yet. After doing this for a few transcripts I realised I was creating summaries that were too long and detailed to be useful. The process had however been helpful in aiding me to focus in on the relevant aspects of the data. I revised these as shorter summaries detailing the key words, areas of meaning and themes expressed by that participant. As I went through iterative cycles of this process coupled with reading the transcripts the summaries became more focused as I gained greater insight into the relevant parts of the data. See appendix F for extracts from two versions of the shorter summary approach.

Step 4: Comparisons

As I read and made notes on the transcripts and wrote the transcript summaries I was focused on similarities and differences between transcripts in relation to the research question. Though, as stated previously, a way of experiencing is not

equated with an individual participant, I decided comparing transcripts was a useful level at which to look initially for the critical variation that underpins the formation of categories. Once I had gained a sense of the critical variation from this approach, I could move to a more nuanced consideration including variation within transcripts and considering the data set as a whole. As I went through iterations of the steps, I alternated between considering the transcripts with mark up on them; considering the transcript summaries; considering transcripts with similar themes together; and comparing transcripts with apparently different themes. In later iterations these comparisons included the coding on the transcripts, the developing categories and outcome space.

Step 5: Key meanings

Through the above steps (and later also the following steps) I was looking for meanings expressed in the data that could indicate ways participants understand innovative teaching. Initially this is looking for aspects of the phenomenon that are mentioned in some transcripts but not others. In early iterations I referred to my key words and meanings as characteristics. I felt each of the aspects I was noting in the data was a characteristic of innovative teaching in the view of the participant, however, to differentiate what was a category of description and what was not required further steps and iterations.

I repeated steps 2-5 several times (see table 4-1 for step overview) producing versions of both the annotated transcripts (step 2) and transcript summaries (step 3). Each pass helped me see both commonalities and differences in the meanings expressed by participants (step 4), which are the core of the phenomenographic approach. This enabled me to construct mind maps of key phrases and key variations (step 5) to tentatively indicate what the critical perspectives in the data may be. These key aspects then formed the basis for my first draft of categories (see step 7). See appendix G for examples of step 5.

Step 6: Coding

On completing the process above I felt I had a good grasp of the relevant parts of my data. However, I also had a sense of not yet being thorough enough and a concern of inadvertently missing something important or being led too much by

my own perceptions of the data. I therefore chose to continue by following Braun and Clarke's (2006) phase 2 and code my data (as discussed earlier in this section) as coding 'makes it easier to search data, make comparisons and identify patterns worthy of further investigation.' (Savin-Baden and Major, 2013, p.422). I used Nvivo software for coding as I like working digitally and it was convenient to be able to access the project in different locations.

Assigning codes is a complex analytical process, it is the researcher's decision how to code data and to what level of granularity. For phenomenography data are coded at the 'semantic and conceptual levels' (Cossham, 2017, p.19) as the intention is to describe ways of experiencing the phenomenon as expressed by participants. Phenomenography is particularly concerned about the context of any meaning unit so sections are coded at a level of multiple sentences, including those before and after the focus, whereas other approaches may code at the sentence or word level.

As it is unclear at the beginning of analysis what will ultimately be meaningful (Merriam and Tisdell, 2016) and I spent time considering questions such as: 'What is a concept?' and 'What are properties of a concept?' I chose to code at a granular level. This would enable me to later merge codes into conceptual level codes and potential categories. As a result, I generated a long list of codes, some were characteristics/properties of concepts; some were closely aligned to potential categories; and some were interesting but ultimately not relevant to this analysis (see appendix H for an example of my coding in Nvivo). I spent considerable time sorting and merging these to come to a set of potential categories of description. As Svensson (2016, p.170) notes 'what counts as the "same" conception may be expressed in many linguistically different ways and what counts as different conceptions may be expressed in a very similar language.' As I coded each transcript, I also updated the transcript summaries where I noted the characteristics mentioned by the participant and summarised the core aspects of their way(s) of experiencing innovative teaching.

The draft of potential categories created from the coding were similar to the first draft I created before coding, which prompted me to reflect on and question the

value of the very time-consuming granular level of coding I had undertaken. In hindsight I feel the decision to code the transcripts in such detail was partially driven from my inexperience, I was not yet confident enough in phenomenographic analysis to make assured decisions on what was or was not relevant or view data at a slightly higher conceptual level. I think it led me slightly away from the holistic view that suits phenomenographic analysis and I got unnecessarily lost in the detail of the transcripts, as Bowden (2005, p.26) warns:

> *'Some researchers can be led astray by focusing on the multitude of details to the exclusion of establishing a smaller number of more holistic meanings.'*

However, I do feel there was some value in having undertaken this process as it enabled me to become very familiar with the data and feel confident I was being rigorous in my approach.

Step 7: Formation of categories

Categories of description are the primary outcome of phenomenographic analysis. They are the distinct, qualitatively different ways of experiencing the phenomenon that are constituted by the researcher in relationship with data. They should represent the full range of ways innovative teaching is experienced by this sample population at the time the interviews were conducted (Åkerlind, 2005c) and need to be 'as faithful as possible to the participants' conceptions of reality' (Sandbergh, 1997). The constitution of categories is 'highly inductive' (Merriam and Tisdell, 2016, p.210) however it is an iterative process and moves towards a deductive approach in the later stages as the categories are tested against the data.

Marton & Booth (1997) give their criteria for judging the quality of a set of categories of description as:

- Each category conveys something distinct about the way of perceiving the phenomenon
- The categories are logically related to one another, often hierarchical with more complex categories inclusive of less complex ones.
- That the set is parsimonious i.e., that there are as few categories as possible to represent the critical variation in the data.

It is also important to note that as the focus in on variation, categories usually describe only those aspects that seem 'critical in distinguishing qualitatively different ways of experiencing' (Åkerlind, 2005a, p.72) rather than describing the full detail of a conception.

Though this stage is where my approach began to diverge from the guidance of Braun & Clarke (2006) as the focus of phenomenographic analysis is different to that of thematic analysis, the principles they outline of re-focusing the analysis at a broader level; analysing the long list of codes and combining them into groups; and collating data in these groups; were still applicable.

I formed my first draft of categories of description after step 5 (see appendix I for a sample of the category development). I composed these categories from the key variations in meaning that were apparent from reading and summarising the transcripts. I then set aside this draft and undertook the detailed coding, my intention being to compare the sets of categories of description produced from the familiarisation and coding phases. As explained above the detailed coding felt more rigorous to me and so I felt more comfortable producing and comparing the two sets of categories as a sense check. These draft categories were then checked against the data – a cycle of changing focus whilst reading the transcripts: looking for critical aspects in the transcripts and ensuring they were represented in categories and looking for the categories in the transcripts to refine how they captured the data.

The formation of categories of description took a lot of thought and reflexivity. I was looking for the meaning in the comments made by participants, aware that I could easily imprint my own thoughts on what I was analysing. It also took care to avoid a binary approach – just because a person said it was *not* something, that did not necessarily mean they thought it *was* the opposite. Further into the analysis it was also challenging ensuring I was not trying to fit a meaning into existing categories when a new one would be more appropriate.

One aspect I found particularly challenging was the issue of non-variance. A central tenet of Phenomenography is that the focus is on variation in the data. When analysing the coding I had undertaken I discovered that some of the key

aspects I was considering for categories appeared in all the transcripts. Initially thinking that non-variance meant something that was present in all transcripts I became concerned I would have to drop some of my categories of description and have an outcome space with just those that were clearly not present in all transcripts. However, this did not feel right as it didn't feel like it was being fully faithful to the participants' conceptions. Also, it did not fit well with the outcome space illustrating a hierarchy of complexity as the simpler/foundational categories were those that would be discarded. I went back to the literature to clarify my thinking.

I was struck by how those studies that described their approach in Bowden and Green (2005) spoke of putting transcripts in piles relating to the category, despite noting more than one category present in some transcripts. It seemed the focus was on a particular expression of the concept in that transcript (category). On reflection I realised this related to the phenomenographic principle that:

> *"If a clear, logically inclusive hierarchy emerges whereby lower-order categories are subsumed into higher-order categories, then responses are classified according to the most "sophisticated" conception expressed. That is, it is assumed that lower-order conceptions form part of the more complex higher-order conception." (Stokes, 2011, p.29).*

So, it should not be surprising that a single transcript expresses more than one conception or that a less complex expression of the concept is evident across many of the transcripts. What constitutes variation is these different concepts, some of which are inclusive of others. I had inadvertently strayed into equating conceptions with participants, a risk associated with considering transcripts as a whole, as opposed to a pool of meaning, as discussed in section 4.3.

The creation and revision of categories of description was a slow, iterative process of combinations of steps that took place over a period of many months. Part of this was taking intentional breaks so I was able to view the drafts afresh. I was constantly going between categories and data (and later the outcome space drafts as well). There were 6 versions of draft categories of description before arriving at the final version presented in the Findings chapter.

Step 8: Formation of outcome space

The outcome space is the term for the way phenomenographic research findings are portrayed. The purpose is to represent the qualitatively distinct categories of description and their relationships to each other. As discussed in the methodology chapter, phenomenography considers a way of experiencing as representing a relationship between the person experiencing and the phenomenon being experienced. Therefore, the categories of description are logically related through the common phenomenon being experienced in a hierarchy of inclusiveness. The hierarchy does not indicate that one conception is better than another, but that some conceptions are more powerful than others in that they are more complex and inclusive of others. This research outcome of a set of structurally related categories of description is called the outcome space (Åkerlind, 2005c; Marton and Booth, 1997).

As discussed in section 4.3 there is variation in practice in phenomenographic analysis as to what extent the creation of categories and outcome space occur simultaneously or sequentially. My initial focus was on creating categories but considering relationships was always in the back of my mind. I think the categories need to be drafted first to keep the focus on the data, but I don't think they can be approached sequentially, i.e., the categories being complete before the outcome space is then considered. I found that the refining of the categories and the relationships between them represented by the outcome space are intrinsically linked and gain clarity together, as development of one informs the other. The iterative process of moving between the two sharpens each of them in turn. However, I did not focus on drafting an outcome space until version 4 of my categories, as at this stage I felt that though the categories may change in iterative refinements, the main features were all in play.

The process involves examining each category in detail, looking for what they have in common and how they differ, looking at the dominant aspects of each category and how they relate (Kinnunen and Simon, 2012). I found putting sticky notes of potential categories on the wall was the best way to explore different structures and relationships as I could easily move them around and add, combine, or remove potential categories. As Åkerlind (2005b) explains, which categories are

inclusive of others is not clear initially but is gradually developed through the analytical iterations. The ordering is based on both logical argument for which categories 'seemed to involve greater breadth of awareness than others; and on empirical evidence from the transcripts that some levels included awareness of earlier levels, but not vice versa.' (p123). The sticky note arrangements went through many iterations over time both as different aspects were foregrounded in the work on the categories themselves and as I tried out different relational arrangements and tested them against the data.

In arranging the outcome space, I faced a difficulty in having an unusually high number of categories and some that seemed to be a group of pre-requisites for all the other categories. I could not arrange these in a way that was representative of the data and fitted with a usual phenomenographic outcome space. This led to my developing a compound outcome space, which I explain further in my findings chapter. This arrangement of an outcome space is to my knowledge unique and therefore part of the original contribution of this thesis.

Step 9: Refinement of categories and outcome space

This step has largely been discussed above as further iterations of previous steps to edit, reorganise and refine the categories and the outcome space to produce the reported findings. As the analysis progressed the search for meaning and relationships moved from an alternating activity to an integrated one.

As a refinement of the outcome space, I explored using the structural and referential aspects of the categories of description developed by Marton and Booth (1997). They describe the referential aspect of a conception or way of experiencing as the part where we give meaning to the concept, it has a meaning that is different from another concept. The structural aspect refers to identifying the conception as distinct from the context in which it occurs, a discernment of where it starts and where it ends and what is or is not part of it. They also state that the two aspects are 'dialectically intertwined and occur simultaneously when we experience something.' (p.87).

How these are interpreted and applied in phenomenographic studies varies and can be confusing, possibly partially as the theoretical underpinnings are weak and

clear examples of the analytical use of the framework are few (Harris, 2011). This initially influenced me to decide against including this component in my study as it was not clear if it added any value to the findings. However, after further consideration I came to agree with Harris' observation that the referential and structural aspects can be a useful tool in helping researchers to frame their thinking or "to 'think apart' important distinctions within conceptions" (Harris, 2011, p.109).

In my analysis I have applied the structural and referential framework to the data as a way of further exploring the conceptions and their relationships to each other. The referential aspect as the meaning of the experience I have linked to the category of description, the explanation of the way of experiencing. The structural aspect is linked to what is focused on in each category of description and the relationships between the categories, i.e., the structure of the outcome space. The outcomes of this approach are shown in the findings chapter.

A challenge of any qualitative analysis is knowing when to stop, when enough iterations have been completed. Åkerlind, Bowden and Green (2005) discuss this point in relation to phenomenography without really resolving an answer. However, they pointed to researcher confidence in the outcomes, through a combination of iterative redundancy (further iterations not providing any meaningful new insights); a sense of clarity; a clear difference in categories and a need to complete. Åkerlind, (2005c, p.328) points out that 'any outcome space is inevitably partial, with respect to the hypothetically complete range of ways of experiencing a phenomenon'. Therefore, I made a judgment on when I felt the outcomes I had arrived at faithfully represented the data and no further iterations would be worthwhile.

4.5 Summary

This chapter has told the story of my journey through the analytical process. I situated the analysis in an interpretivist paradigm and considered some of the challenges that arose for me coming from a background in a different paradigm. I explored some of the variation in phenomenographic analysis practice and explained the choices I made between these alternatives for my data analysis. I

then presented a detailed account of the highly iterative process of phenomenographic analysis I undertook to extract meaning from the data I had gathered. I discussed the steps in the process, iterations and overlap and presented these in different forms (text, table and diagram) to elucidate my practice. I discussed some of the limitations in guidance available in published phenomenographic literature and how I supplemented this with guidance from thematic analysis literature. I then focused on how I formed the final outcomes of the analysis process, the categories of description and the outcome space. The journey was difficult, at times convoluted with the path ahead unclear. One of mixed emotions that required perseverance. It was a deep learning experience. The outcomes of this endeavour were a set of categories of description and an original representation of a compound outcome space which are presented in the next chapter.

Chapter 5: RESEARCH Findings

5.1 Introduction

Having given a detailed account of my data analysis process in the previous chapter, in this chapter I present the outcomes of my data analysis in keeping with the lens of the phenomenographic approach. The first finding is that variation in the ways practitioners experience innovative teaching was present in the data and led to the development of phenomenographic outcomes as follows. First, I present the outcome space as a representation of the qualitatively distinct categories of description of ways practitioners experience innovative teaching, and the categories' relationships to each other. I explain the visual representation and hierarchical nature of the categories. I then describe the salient features of each of the categories themselves in turn, using selected quotations from the interviews to illustrate the category. Finally, I explore the relationships between the categories of description and how these illustrate shifts in ways of experiencing innovative teaching.

5.2 The outcome space

As previously discussed in chapters 3 and 4 the outcome space is the term for the way phenomenographic research findings are portrayed. Its purpose is to represent the qualitatively distinct categories of description and their relationships to each other. The outcome space is a central aspect of the phenomenographic approach, but how this is presented varies in the research I have reviewed. Tables are the most common representation in journal articles (Mimirinis, 2019; e.g., Bell, 2016; Koenen, Dochy and Berghmans, 2015). However, some researchers use purely text to describe their outcomes (e.g., Rayner, Smyth and Fotheringham, 2020) and others produce graphical representations of the outcome space such as tree diagrams (Tsai, Tsai and Hwang, 2011; Larsson and Holmström, 2007; e.g., Bowden *et al.*, 2005). I think this variation adds to the richness of the research outputs and relates both to the variety of concepts explored and the differences between researchers who present them.

I explored a number of ways of presenting the outcome space for this study as the analysis process took place and the outcomes evolved. My aim being to present the outcome space in a way I feel best represents the data and is coherent to the reader, see previous chapter for more detail on this development. As Marton and Booth (1997, p.136) note this outcome space represents 'the researcher's way of experiencing how other people's ways of experiencing something vary.' Thus, this particular outcome space is a representation of my relationship with the data.

I consider the following visual representation in figure 5-1 to be the most effective summary of the categories of description and their relationships to each other for this study. I personally find graphical representations clearer than tables and feel they best represent this data in a way which make the relationships clear to the reader. I have also included tables of the structural and referential aspects in the relationships sections to ensure the data is represented fully in the best ways possible.

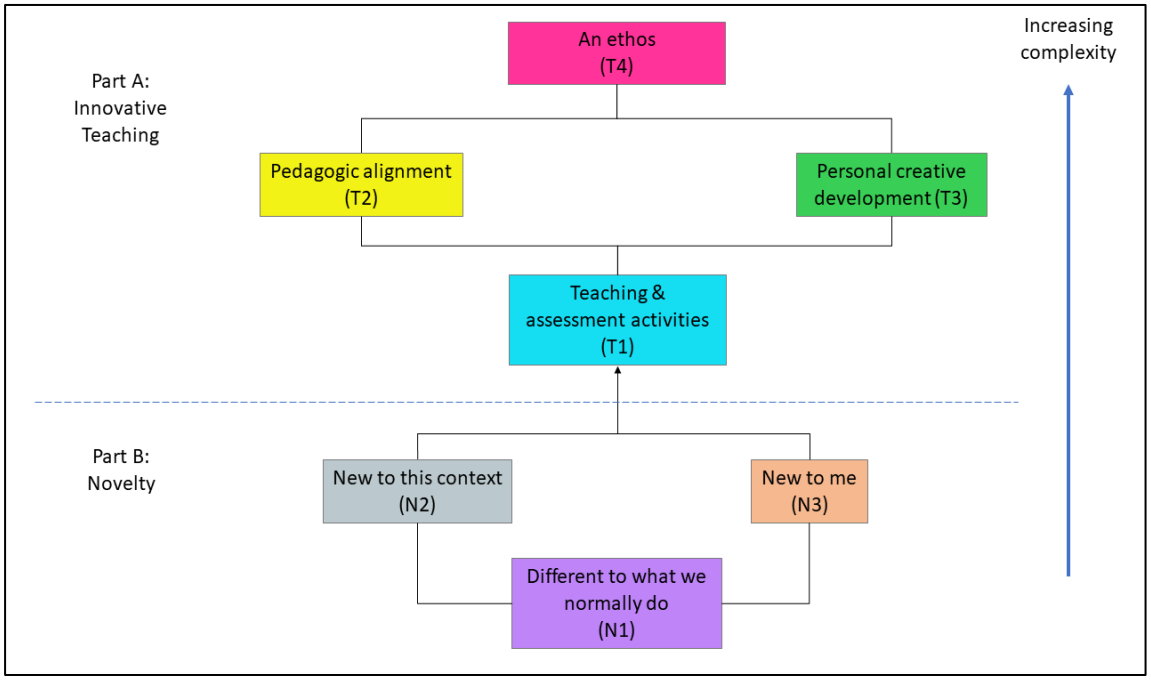


Figure 5-1: Outcome Space visual representation

In figure 5-1 the boxes represent the different categories of description with increasing awareness or complexity in the way of experiencing innovative teaching shown travelling from the bottom to the top of the diagram. Categories above others on the diagram incorporate an awareness of the categories that have gone

before, so for example the category 'Personal creative development' includes the aspects of 'Novelty' and of 'Teaching & assessment activities'. Where the tree diagram branches into two different categories this represents that these categories are on a similar level of complexity yet distinct. Both incorporate the preceding category(ies) but neither incorporates the other. For example, the category 'new to me' incorporates the perspective of 'different to what we normally do' but does not incorporate 'new to the context', the two 'new to' categories sit alongside each other as two different but similarly complex perspectives. The tree has been arranged such that the branching broadly represents two themes in the categories, the left branch a theme of practice orientation and the right branch a theme of personal orientation. I shall discuss this branching further in the inter-category relationships sections and the discussion chapter (chapter 6).

As discussed previously the outcomes are based on the variation across the participants as a group and not individuals. As such the experiences of some individuals are represented in more than one category because the awareness is hierarchical and inclusive. An individual with a complex awareness could therefore express ways of experiencing from any or all of the included categories.

5.2.1 A compound outcome space

A distinctive characteristic of this outcome space resulting from my data analysis and research findings is what I have termed a 'compound outcome space'. I developed the concept of a compound outcome space in response to challenges during the analytical process relating to the structure of the outcome space and identifying the relationships between categories. I identified in the data two integrated yet distinct sets of categories of critical variation in the participant's experience of innovative teaching. One set concerned the central phenomena of innovative teaching, the other set concerned the fundamental aspect of innovation, novelty. These sets of categories of description were too distinct to be represented in a single outcome space yet too integrated to be presented as two separate outcome spaces. I spent a significant amount of time and effort exploring the relationships between the categories and attempting to create a typical outcome space. However, this was not possible in a way that truly represented the data and I felt I would be compromising the findings. Instead, I decided to explore

what the outcome space would look like if I represented the relationships between the categories in an authentic way. Hence, I have created a compound outcome space to clearly illustrate the close relationship between these two sets of critical variation in the ways of experiencing the complex phenomenon of innovative teaching. This arrangement of an outcome space is to my knowledge unique and therefore part of the original contribution of this thesis.

Part A presents the qualitatively distinct ways of experiencing innovative teaching present in the data. These four categories are Teaching and assessment activities (T1); Pedagogic alignment (T2); Personal creative development (T3); and An ethos (T4). The categories of description in part B are Different to what we normally do (N1); New to this context (N2) and New to me (N3) which describe the qualitatively different ways of experiencing novelty as a constituent part of innovative teaching. These categories and the relationships between them are discussed in more detail below.

The critical variation present in ways of experiencing novelty underpins the categories of description of innovative teaching presented in part A. The variations are critical as they are three discrete ways of experiencing novelty that vary independently to the innovative teaching categories of description – in that any category of description of novelty could underpin any category of description of innovative teaching, it is not the case that a particular way of experiencing novelty is linked to a particular way of experiencing innovative teaching. This is significant as it is different to other aspects of innovative teaching expressed in the data which either do not vary critically in meaning or may vary between categories but are consistent within a category. Consequently, novelty is an aspect of critical variation intrinsically related to the categories of description of innovative teaching that needs to be included as part of the outcome space as without it the outcome space would not faithfully represent the complexity of the ways of experiencing innovative teaching. Whereas other aspects do not vary critically (such as change, risk, application), meaning that understanding of that aspect is consistent within the category.

The novelty categories are notably different to the other categories (part A) which are focused on what this novelty looks like in a teaching context. Yet these two characteristics are not distinct from each other but are intrinsically related. The categories describing the 'novelty' characteristic of 'innovative teaching' underpin and are a prerequisite for the 'teaching' focused categories so it would not be appropriate to separate them and consider them as two different and distinct outcome spaces. 'Innovative teaching' as a concept under investigation for this study is a single phenomenon comprising of both these characteristics. For example, innovative teaching as a 'teaching & assessment activity', required the activity described to also be novel in some way. A teaching & assessment activity without being different to normal practice or new to the individual or new to the context was not considered innovative teaching.

If novelty is a critical aspect of innovation, then it could perhaps be argued that any teaching which fits one of these categories of novelty could be considered innovative teaching (i.e., categories T1-T4 are unnecessary). However, this does not adequately represent the complexity of the data or help us understand in what ways innovative teaching is experienced by practitioners. No participant expressed their experience of innovative teaching to this simplistic level. The novelty aspect of innovative teaching was present as an underlying condition of the experience of innovative teaching expressed by the participant. It is precisely how we understand in more detail what this novel teaching is as experienced by practitioners that is the focus of this study. Consequently, I felt the best way to faithfully represent the variation in the way participants experience innovative teaching was to present the categories of description as a compound outcome space. This represents the relationships between the two sets of varying categories as integral to the full understanding of what innovative teaching means to practitioners. It shows they are distinct, yet one cannot be understood in isolation from the other. I propose this is a result of the nature of looking at a compound concept in 'innovative teaching', as both innovation and teaching are themselves multifaceted concepts. The focus is joined between the 'novelty' inherent in innovation and the teaching which gives the context and specifics of the

perceptions. This can be demonstrated where participants realise they have taken the 'novelty' aspect for granted.

> *R - And what do you feel makes that innovative? P - I suppose it depends how you define, I mean innovative... does that not just mean new? [R- does it?] Well that's a [laughs] I've been talking about it without defining it. So, you could just say a novel approach is an innovative approach. [Participant 04]*

5.3 The categories

Below I shall describe each of the categories of description presented in the outcome space. As explained in chapters 3 and 4, qualitatively distinct categories of description are the phenomenographic way of representing the critical variation in ways of experiencing the phenomena under study, in this case innovative teaching. I will explain the key characteristics of each category, often using the terms foreground and background to explain where the focus of that particular way of experiencing innovative teaching lies. An aspect that is focused upon in the participant's discussion is foreground to the awareness in that way of experiencing innovative teaching and forms a critical part of that category of description. Conversely an aspect that is background in the awareness is not critically relevant to that particular way of experiencing innovative teaching. This also explains how some aspects which are common to all categories (and therefore not critical variation) are yet more pertinent in some categories than others. I will provide quotations from participants which illustrate the category of description. Ashwin (2005) notes that

> *'...as the conceptions that are constituted by phenomenographic analysis are based upon an analysis of all of the interview transcripts within a study, it is unusual to find single quotations that perfectly illustrate each conception.' (p635)*

Therefore, the quotes below give a sense of the category but do not necessarily illustrate it completely. Quotations have been tidied for presentation in that repeated words, discourse markers, filled pauses and corrected words have been deleted. However, I have ensured no meaning is lost or changed by this concern for readability. To pseudonymise quotations contextual details have been removed, e.g., module and programme names, and replaced by the generic term in

square brackets. The context of the quotations are responses to questions about describing innovative teaching, some quotations are regarding specific examples, and some are more general.

The categories are given names that convey in a concise way the critical aspect of uniqueness of that category. For clarity of expression, I have given the categories in part A (Innovative teaching) of the outcome space the shorthand nomenclature T1-T4 and the categories in part B (Novelty) of the outcome space N1-N3. Again, I emphasise this is not intended to imply they are two separate outcome spaces; it is merely to make the presentation of findings and particularly the relationships between the categories clearer.

After describing the categories and providing example quotations, I will describe the inter-category relationships in terms of the structural and referential framework. As discussed in the analysis chapter, in phenomenography a concept or way of experiencing can be further described in terms of a structural aspect and a referential aspect. The referential aspect of a conception or way of experiencing is the part where we give meaning to the concept. The structural aspect refers to identifying the conception as distinct from the context in which it occurs, a discernment of where it starts and where it ends and what is part of it or not. These two aspects are 'dialectically intertwined and occur simultaneously when we experience something.' (Marton and Booth, 1997, p.87).

5.3.1 Part A: Innovative teaching

Part A of the outcome space focuses on the phenomena under study, the concept of innovative teaching. It describes the qualitatively different ways participants understand 'innovative teaching' as a concept and enact it in their professional practice. My analysis identified four qualitatively distinct and logically related categories of description in the interview data. I have named these categories: Teaching & assessment activities (T1); Pedagogic alignment(T2); Personal creative development (T3) and An ethos (T4). The relationships between the categories are illustrated in the outcome space above (figure 5-1), T2 and T3 are inclusive of T1 but not inclusive of each other, T4 is inclusive of T1, T2 and T3 and therefore the most complex way of experiencing innovative teaching. These relationships are

discussed in detail in the inter-category relationships section below, following the descriptions of the categories.

Category T1: Teaching & assessment activities

This category of description describes participants experiencing innovative teaching as novel teaching and assessment activity where the focus is on practice. Though participants were asked to consider the whole of their teaching related activities as the context for the interview, in this category the focus was on specific classroom (or equivalent space) activity itself in its immediate context, how it is occurring and what is happening. It places teaching as what is happening in the room and does not explicitly consider theory informing the practice, learning design or other aspects one could include in a concept of teaching. The role of students and other participants is also in the background and not explicitly considered. This is expressed in phenomenographic terms as what is in focus of the awareness. It does not mean an individual participant has not considered these wider things at other times, but in this particular expression of experiencing innovative teaching these other aspects are not in focus. This is part of the decoupling of phenomenographic categories of description from individuals.

Participants expressing this conception refer to delivery techniques, tools, technologies and equipment used in teaching as well as the use of the classroom itself. Though the practice in the classroom was the dominant expression of this category, assessment activities were also mentioned. The focus on the space in which teaching is occurring includes physical classrooms, labs, specialist spaces or online spaces. Using digital methods was a strong feature of this category, for example online materials (e.g., video), polling in lectures and online multiple-choice tests.

This category also includes foregrounding a consideration of experimentation and risk. Though these aspects are present in all categories, and therefore not a critically variant aspect, they are foregrounded particularly strongly in this category. It is about trying something out to see if it solves a problem or makes an improvement. The main risk discussed was whether students would like or engage with the activity and the concern of fallout on student opinion and course metrics

if things were not well received or did not go to plan. Technology failing was another notable concern, linked to the foregrounding of experimenting with digital tools as an expression of this category. It was important that the activity was successful to be considered innovative teaching.

Participant quotations that illustrate this category:

> *So as a definition of innovation … I would probably, focus on the delivery methods like, again using technology … and then try to see if even the space has to do with the learning of the students, or if you even need to change the space and go outside and do the learning under different circumstances completely. [Participant 08]*

> *We try to … experiment with the delivery method. And then taking the time outside of the classroom or to change 'the classroom'. To break out of it. [Participant 05]*

> *It might be using interactive whiteboards, you know it doesn't have to be world beatingly stunning. [Participant 11]*

> *From my point of view innovation is progressing, being up to date with the contemporary teaching methods. [Participant 08]*

> *I think, well trying something that's untested. And being prepared to try something untested, that holds an element of risk. I think preparation is key. But also, being of a frame of mind in the situation where you are prepared for unexpected things to happen and you respond sort of reflexively to them you know. [Participant 06]*

Category T2: Pedagogic alignment

In this category innovative teaching is experienced as making novel changes to the module/course/other episode of learning to better fit personal values of good pedagogy. The focus is on the episode of learning and the approach to teaching that this embodies. What the specific activity may be is background to the focus and therefore not discussed (as opposed to T1 where it is foreground to the way of experiencing). It is focused on the pedagogical approach, the theory and purpose behind an activity not the activity itself. It is strongly value based as the type of pedagogy is seen as the best way of teaching.

Often it was expressed in the example of inheriting an episode of learning and being dissatisfied with the current form. Innovating in the teaching to bring the

episode into line with their pedagogic values brought a sense of personal satisfaction. Constraints and limitations of institutional processes were a strong feature of this category. When considering the teaching of others, the episode of learning had to be novel and fit with their values of good pedagogy to be considered innovative teaching. The notion of good pedagogy was often contrasted with traditional didactic approaches. This demonstrates there is a pervading sense among academics that traditional and didactic teaching approaches are the norm in higher education (also discussed in the novelty section below). This is despite less didactive pedagogies and associated literature having entered into higher education practice many years ago.

This category of description is different to, and inclusive of, category T1 as it moves beyond the teaching activity itself to consider the theory and intentions behind the action. The following quote is of particular interest because as well as illustrating the digital methods aspect of category T1, it demonstrates the inclusive relationship of T1 and T2. The participant talks of digital methods as innovative teaching activity but highlights this is distinct to innovative pedagogy. Therefore, showing that a perception of innovative teaching as focused on pedagogy includes an awareness of innovative teaching as teaching and assessment activities.

> *'We've got to teach them about [topic] so instead of talking about it we'll show them a video that they can click on in Blackboard. ...it's not innovative in any way in terms of the approach to learning, it's just innovative in the approach to delivery of learning materials.'*
> *[Participant 04]*

Whilst in this category of description innovative teaching was seen as aligning course design to good pedagogy, there was variation in how this 'good pedagogy' was expressed by participants. This is important as it relates to literature discussing academics awareness and understanding of different pedagogies. These differing views in what constituted good pedagogy can be described as two sub-categories of this pedagogical alignment category of description. The first sub-category is student-centred, active learning and the second is authentic professional activities. These sub-categories share the notion of innovative teaching being about pedagogical alignment so maintain the main category's

qualitative distinction and are not categories in their own right. However, they are significant in their distinction from each other and therefore warrant further consideration as sub-categories.

Category T2a: Student-centred active learning

This sub-category describes innovative teaching as episodes of learning that are designed from a student-centred and active learning pedagogy as opposed to traditional and didactic approaches. It is focused on the pedagogical approach, the theory and purpose behind an activity not the activity itself. There are a variety of different named pedagogical approaches that embody the values of student centred and active learning which are included together in this sub-category, even though they may have a different focus, e.g., student centred learning (SCL), active, problem based, project based and co-creative. Examples included aspects of student-centred learning such as facilitation of learning; student agency; peer learning; discussion and collaborative learning. Student engagement and personalisation of learning are strong features in this category, as is student-teacher interaction and relationship.

In some cases, innovative teaching is seen almost synonymously as SCL. This was expressed as anything with a student-centred pedagogy being considered innovative teaching. There was a strong focus on the student experience in this category and a sense of it being successful if it was what the students liked/wanted/needed.

Participant quotations that illustrate this category:

> *I think innovation in many instances is about the level of student focusedness of an intervention, so contrasting that traditional didactic, higher education thing which I think still happens quite a lot, with methods that are more co-creative and collaborative. And I think that's where the innovation lies. [Participant 04]*

> *Active, making students active, however that happens. So giving them a bit more of an ownership of what happens. Making them have to actually do some stuff. … and there being some kind of feedback, between the students, between the learning and the teaching. [Participant 10]*

The innovation in the interesting session was that it was not teacher centric. The focus was on students. … I think innovation is anything that includes student engagement. [Participant 08]

We do quite well-established innovative teaching methods like hackathons. … The idea being that it's problem-based learning or, I don't want to say active learning, but it is active you know. That's what it is, they're learning through doing, in a in a highly compressed manner. [Participant 05]

Category T2b: Professionally authentic learning

This sub-category experiences innovative teaching as providing learning experiences for the students that are authentic, real-world and professionally relevant. This sub-category is qualitatively different from T2a above as the values are different, instead of valuing primarily the student being at the centre of the learning episode (although this may incidentally be the case) the focus is on the professional relevance of the learning episode. These are learning episodes that are clearly related to a student's future career or professional activity. These activities may simulate professional working or enable students to develop and practice professionally relevant skills, ideally giving them real-world work opportunities. Examples took a variety of forms including simulations and actual industry projects. Aspects such as working environment, expectations of students and a different relationship between staff and students were all highlighted. It is about the learning episode being as real as possible to the discipline professional role. Another aspect of the category is about the learning experience being informed by industry links/partnership or the academic's current professional involvement. There is a sense that the teaching is innovative if it brings developments in the professional context into the teaching experience.

Participant quotations that illustrate this category:

My aims were to again get the students to interact with an activity that is professionally part of their future roles. When you're in a classroom that's not real life, it's a simulated kind of activity. [Participant 09]

The idea being that the students get real world portfolio credit that isn't like your traditional live project. So, it's non-credit bearing, it's paid, and it's treated like employment. The idea is that it's an

authentic employment situation scaffolded by the university. Which is different from normal live projects or industry simulation work. … if it's authentic, that's what makes it innovative. [Participant 05].

So I already had all those links [with professionals] so when I was designing the course I went to all these people and talked to them about the idea, given that you're starting with a blank sheet of paper 'What would you like?' 'What do you think a [discipline professional] should be like?' [Participant 02]

So yes, the idea of innovation linking to the larger profession. And new issues, new ways of working, new processes might be brought into the profession and then that can feed into the teaching. … And again, it's that kind of newness. [Participant 09]

Category T3: Personal creative development

This category experiences innovative teaching as personal creative development. It is focused on the creative act of the practitioner themselves expressed as *I created something*, or *I came up with something*. This is focused on the agency of the individual rather than the teaching activity (as in T1) or pedagogy (as inT2) of the learning episode. The category is inclusive of T1 as it includes an awareness of teaching and assessment activities, but not T2 as pedagogic alignment is not in foregrounded. So, this category is hierarchically on the same level as T2 as they both include T1 but do not include each other. In the foreground of the awareness in this category is the creative process of designing novel learning experiences with a strong sense of ownership. It describes an internal focus on personal agency, creativity and opportunism.

Often there was strong association with emotions of enjoyment, challenge and self-learning. There was a sense of a love of learning, of exploring and finding out about new things, a willingness to, or even enjoying the adrenaline buzz of taking risk. There is a sense of *I* have made change, *I* have come up with something, it was my idea and I have ownership. It is very individualistic and does not include collaborative innovation.

This category includes a focus on self-development as a teacher and adding novel practices to one's repertoire. It is being creative, coming up with novel things or trying novel things for personal challenge and interest. This can include adapting

things seen elsewhere to one's own teaching practice, but it needs to involve significant adaptation to generate enough of a sense of ownership and personal creation. Again, the focus is on the practitioner themselves, the activities themselves, though part of the context, are in the background. When it goes well it builds confidence and makes the role more interesting. There is also an attitude of it being the responsibility of a good teacher to engage in reflective practice, which should lead to questioning one's own practice and trying to improve by doing something novel.

Participant quotations that illustrate this category:

> *I was trying to come up with an idea of what is it that I can offer to students to help them. I piloted originally with small workshops... And then I reflected on that and said okay, what is it that I can change in order to attract more and more students? So, this is how I came up with the idea of... [Participant 08]*

> *I designed those courses and then of course we got equipment. So, I had to design from scratch really, all the training of a [discipline professional]. Which was good fun. [Participant 02]*

> *I think for me it's down to whether it was my idea in the first place. So, if I've designed something, I will have thought it through. I mean with the things that I've designed, where I have innovated. [Participant 13]*

> *It is looking ... at your performance constantly just like any teacher training will tell you to. The action research, you're evaluating your, you're looking for new ways of improving or having an impact in terms of the teaching. [Participant 06]*

> *Well I enjoy it and it's more fulfilling I think if you tried something. Whether or not it's worked I've learnt. I will learn in all of those situations and that's good. [Participant 02]*

> *You can be creative earlier on when your repertoire's limited, but it's a different creative than when you've been teaching hopefully for a length of time. And of course that's what freshens you up and keeps you going as an educator, that you're constantly learning, how to do things in a different way more broadly, looking for the opportunities to use the toys, gadgets, bits and pieces. [Participant 11]*

Category T4: An ethos

This category describes innovative teaching as a teaching ethos, or way of being. This category is the most complex perception of innovative teaching shown in the data and incorporates an awareness of the other categories. It shows experiencing innovative teaching as an underlying value to the participant's approach to the profession and practice of teaching. Innovative teaching is seen as a fundamental part of what we should do as educators, a continual process of reflection and enhancement through novel practices. It incorporates both a sense of self-development (T3) and enhancing the learning episodes (T2) and therefore transcends both as a more complex way of experiencing innovative teaching. It may be an opportunist approach – seeking out novel practices to incorporate into one's own practice/ context, or it may be solution driven looking for areas that need improvement. It is an approach to the context of the teaching environment as a whole with an attitude of looking to enact novel change where possible. There is a sense of it being about how we think about what we do as professionals. There is a personal and professional identity aspect to this category, I am an innovator, I like experimenting and trying new stuff. It is something I believe in and am willing to put the effort into, there is less of a sense of negativity around risk and incompatible structures than in other categories.

Participant quotations that illustrate this category:

> *Any good committed teacher should always be questioning their practice and how successful it is. And they shouldn't be going 'oh well I've done it like this for 20 years and so I know it works.' Because students change, contexts change, classrooms change. It's all constantly evolving so if you believe that what you did 20 years ago is still the best way to do something, you're wrong, I think. You can't force people to engage with it, but I would argue that good teachers would engage with innovation automatically, at whatever level they feel confident at. [Participant 04]*

> *The want and need to kind of be like 'okay what's new, what can we do?' Maintaining your own interest. And just experimenting, that willingness to experiment to be innovative. And that involves risk taking. … having that resilience to want to change. To want to experiment, to evaluate to reflect on what you did. And then try and make it better the next time. I guess for me that's what innovative teaching is. [Participant 05]*

I think it's exciting. It's exciting to try new things to see whether you can enhance the student's learning and also your own learning. You don't know whether things can be better until you try a different approach. [Participant 06]

I think when you're talking about innovation and all the rest of it, I've always been somebody who's wanted to do something differently. So just picking up something and run with it the way it's always been run, just hasn't been, isn't me. [Participant 01]

Inter-category relationships

This section describes the relationships between the categories in more detail. In my analysis I have applied the structural and referential framework to the data as a way of further exploring the conceptions and their relationships to each other. The referential aspect as the meaning of the experience, I have linked to the category of description, the explanation of the way of experiencing. The structural aspect is linked to what is focused on in each category of description and the relationships between the categories, i.e., the structure of the outcome space.

The table below illustrates the referential and structural aspects of the ways of experiencing innovative teaching as expressed in the data.

Category	**Referential aspect**	**Structural aspect**
T1	Teaching & assessment activities	Practice (external)
T2	Pedagogical alignment	Approach (related)
T3	Personal creative development	Me (internal)
T4	An ethos	Integrated

Table 5-1: Referential and Structural aspects of outcome space part A: Innovative Teaching.

This table shows how both the referential and structural aspects change in each category of description. The change in the structural aspect explains the relationships between the categories and is the basis of the diagrammatic presentation (fig 5-1) of the outcome space.

In category T1 the structural aspect, or focus, of the concept of innovative teaching is on practice, the teaching activity itself in its immediate context, so is external to the person. In category T2 the structural aspect is relational as the focus of innovative teaching as pedagogical alignment, is a relationship between the person

and their teaching. The shift from T1 to T2 is therefore both referential and structural. In category T3 the structural aspect of the concept of innovative teaching as personal creative development is internal as the focus is on the person themselves, their creativity and development. The shift between T1 and T3 and T2 and T3 is therefore also both referential and structural. Categories T2 and T3 are related by both incorporating category T1 and therefore being a more complex way of experiencing innovative teaching than T1. They are of a similar level of complexity as they both incorporate T1, but neither incorporates the other and they differ from each other in both structural and referential aspects. Category T4 is the most complex way of experiencing innovative teaching as it incorporates all the other categories of description. The structural aspect of category T4 is integrated as innovative teaching as an ethos incorporates both internal person focused and external practice focused aspects. Therefore, the shift in the conception of innovative teaching from preceding categories to category T4 are all both structural and referential. The outcome space (fig 5-1) diagrammatically represents the shifts in structural and referential aspects of the data by the positioning of the categories. For part A of the outcome space the shift in meaning is represented by the more complex meaning being higher in the diagram and those at a similar level of inclusivity being side by side. The implications of the structure of the outcome space, particularly with regards developing understanding and discussion of innovative teaching in a university context, will be discussed further in the following chapter.

5.3.2 Part B: Novelty

Part B of the outcome space describes the qualitatively different ways participants experience the novelty characteristic of innovative teaching. For this aspect 'what' is novel, or how it is enacted, is not in focus. My analysis identified three qualitatively distinct and logically related categories of description regarding the novelty aspect of innovative teaching in the interview data. I have named these categories: Different to what we normally do (N1); New to the context (N2) and New to me (N3). The relationships between the categories are illustrated in the outcome space figure 5-1 in section 5.2 above. N2 and N3 are inclusive of N1 but not inclusive of each other. These relationships are discussed in detail in the inter-

category relationships section below, following the descriptions of the categories. I have used the term 'novel' to encapsulate the three different positions as this is a broad term that captures that they are about difference/originality and newness.

The novelty aspect of innovative teaching is fundamental in differentiating between development, or good reflective practice, and innovation. Boden (2019, p.858) does not make clear this distinction and their comment that innovative teaching 'can be promoted and motivated by accurately assessing what students currently know and understand, discovering the discrepancy between what the faculty member intended to convey, and determining a course of action to bridge the conceptual gap.' could equally apply to developing practice not specifically innovating.

Category N1: Different to what we normally do

This category describes innovative teaching as practice that is different to what we normally do. It is practice focused and contains any example of teaching that is different to what the participant considers normal or traditional higher education teaching practice. The idea of normal varies between participants depending on their discipline, but generally includes traditional didactic lectures or seminars and established lab or practical sessions. The critical aspect of this category is that the focus is on difference and not newness. It is important to note that this is not a quantitative difference to the other two categories in being less new – but that newness is not a consideration at all. It includes practices that may be established in the context but are still different to what is seen by the participant as the traditional normal. Teaching was considered innovative for being different to normal practice in the context, but it was not new to them or new to the context.

The normal to which innovative teaching is seen as different is expressed in three ways. First in the immediate experience of the participant as to what is normal practice in their department. This is comparing what they conceive as innovative teaching to established practice in their department and courses. Secondly normal teaching is expressed in the more generic sense of traditional didactic lecturing. Thirdly as in how they were taught when students themselves or what one experienced in their own university education.

A key expression of this category was the notion of established innovative methods, things that were known and not considered new but were still unusual practice or different to traditional approaches. Practice that had been taking place in that course/setting and with those practitioners for a number of years. It may also arise from an individual comparing their own practice to that of colleagues in their immediate locale. Examples included using polling software in lectures, problem-based learning and hackathons. This category also included examples of old practices reinvented, such as 1-1 tutorials in a setting where this was not considered normal practice. This temporal aspect is also present in the sense that innovative teaching in this category is contrasted with falling into habitual patterns of repeating the same practice year after year. There is a sense of innovative teaching involving change over time, or personally not doing the same thing repeatedly.

Participant quotations that illustrate this category:

> *I suppose [it is innovative] because it's just challenging the normal way that things are done. [Participant 09]*

> *Maybe what I think they've got in common [in being innovative] is that they are all different from the traditional norm of just giving a lecture. [Participant 10]*

> *Well innovation I guess is, it's not when you are delivering like you were last year. And that you are not delivering like it has always been delivered. [Participant 06]*

> *I think there are always elements of what we do, what I do which is innovative in the sense that it's not how I was taught. [Participant 05]*

> *I think it's perhaps doing something just differently from either what's been done before or is done by your colleagues or is normally done. It would be nice to think that innovation was a brand-new invention and off you went. But that's not how I interpret it, I interpret it as doing that thing differently. [Participant 02]*

> *We do quite well-established innovative teaching methods like hackathons. [Participant 05]*

It's new in the sense that it's different. It's a different way, of doing probably the same things. [Participant 08]

It's innovative because it's not just doing the standard teaching process. ... It's not regurgitating stuff the way it's always been... It's not doing the same thing over and over. It's not coming back from your long holiday in August and setting up your Blackboard site to look exactly the same as it was last year, although I wish it was. ... So, it's not just standing up there saying, okay I did this Monday morning 10 o'clock lecture this time last year and it's going to be word for word what it was then. Simple as that. [Participant 07]

Category N2: New to this context

This category experiences innovative teaching as something that is new to the context. This category moves beyond 'difference' to specify 'new'. In moving beyond difference to specify new this category of description demonstrates an expanding of awareness, or more complex understanding of the concept. It is a hierarchically more complex category as it incorporates the perspective of 'different to what we normally do'. In this category the reference point is the context in which the newness is placed. There is a recognition that something may not be new in itself, or is not new to the participant, but being new to the context qualifies it as innovative teaching.

The context considered varies and includes a specific learning episode (such as a workshop), a module or programme, an institution or higher education nationally or generally. This is related to how the practitioner views their sphere of influence and what level of context they feel they can enact innovative teaching in. It can include the intention to bring something known to the individual into their context where it is not yet present.

Participant quotations that illustrate this category:

Seemed radical at the time. It's not very innovative in terms of what we're doing here, but it was innovative in terms of introducing a new style in that context... [Participant 01]

Well I think there's a brand new, well I was going to say brand new idea, that's not quite true because it was influenced by something that had been done at [a different university]. But for [this university] at least it's a completely a different way to do things. [Participant 12]

Now all of those things are innovative in the context of [university], none of those things are innovative in the context of [programme]. Because we've been doing it for 4 years. [Participant 01]

New to the context in which we're operating. … certainly that is being innovative within [university]. You know it wasn't really being done here, wasn't being done in our, subject area. And this is where we have impact right. This is where I'm situated so, I'm not going to have significant impact on, your subject area or [another faculty] immediately, maybe further down the line after sharing practice and stuff, potentially but. The point at which the innovation happens, has to be local doesn't it and so the context is always local so that's where the newness is. [Participant 05]

I think my innovation has been more applying it and thinking how it can be applied to a different setting than having a new idea that was completely out of the blue. [Participant 02]

Category N3: New to me

This category describes innovative teaching as something that is new to me. Like N2 this category of description is moving beyond difference to specify new, so demonstrates an expanding of awareness, or more complex understanding of the concept. It is a hierarchically more complex category than N1 as it incorporates the perspective of 'different to what we normally do'. However, this time the reference point is personal in that 'new to me' is focused on the participant's own experience and exposure, anything that is new to them is included. It is therefore on a parallel complexity with N2 (see inter-category relationships section below for further explanation). It is practice that is new to *me*, *I* haven't come across it before. It may be expressed as practice I see (e.g., colleagues; at conferences) or ideas I have. It could include examples that are considered well-established by others or could be 'reinventing the wheel' where someone comes up with what they consider a new approach, to later find it is not new to others.

Conversely if it is not new to them it is not considered innovative, even though it may be portrayed as such by others. This personal reference point creates dissonance when sharing practice – what is new to one may not be to another. Another facet of this personal reference point for novelty is that it indicates what is perceived as innovative teaching may be related to how much variation in practice an individual has been exposed to in their career.

Participant quotations that illustrate this category:

> *Well I suppose if I've not seen something before is probably the short answer. I mean obviously what's innovative to me might be run of the mill for somebody else. [Participant 12]*

> *...just seeing something and going 'Oh wow I never would've thought of teaching X that way'. Or 'Oh okay they're doing this thing. I've never seen it before'. [Participant 10]*

> *New to me. So as a teacher it would be a new activity to me. ... I've not done it before. And it is possible that other people have and so as it stands in education isn't, but for me, it is. [Participant 09]*

> *So when you go to a teaching and learning conference you know people talk about what they've done and sometimes you think 'well that's not very different from what a lot of people do' and sometimes you think 'ah that's a really good approach I haven't ever come across that before'. [Participant 02]*

> *It's really what an individual teacher feels is new to them. And so there perhaps isn't, there's not a standard for innovation because as I said it's all from a different point of departure. [Participant 04]*

> *I never experienced it and I had never really heard of it before coming here. Since then I have found out that others have been doing it for some time. [Participant 05]*

> *I think to me innovation is where I can see people coming up with their own ideas. They may already exist, but people have got to learn, they're ideas that are new to them. And how they can take that forward. [Participant 07]*

Inter-category relationships

This section describes the relationships between the categories of description of novelty in more detail. As explained previously but repeated here for clarity, in my analysis I have applied the structural and referential framework to the data as a way of further exploring the conceptions and their relationships to each other. The referential aspect as the meaning of the experience I have linked to the category of description, the explanation of the way of experiencing. The structural aspect is linked to what is focused on in each category of description and the relationships between the categories, i.e., the structure of the outcome space. The table below

illustrates the referential and structural aspects of the ways of experiencing the novelty part of innovative teaching as expressed in the data.

Category	Referential aspect	Structural aspect
N1	difference	context (external)
N2	newness	context (external)
N3	newness	Me (internal)

Table 5-2: Referential and Structural aspects of outcome space part B: Novelty.

This table illustrates the shifts in the conceptual understanding between the categories. From N1 to N2 the shift is in meaning, the meaning changes from being about difference to being about newness. The structural aspect does not change between these two categories as both are focused externally on the context. The shift between N2 and N3 is structural as the focus changes from external context to the person themselves as the point of reference. The meaning of newness is the same in both categories. The shift between N1 and N3 is both referential and structural as the meaning and focus of the description of novelty changes. The outcome space represents the shifts in structural and referential aspects of the data by the positioning of the categories. For part B of the outcome space the shift in meaning is represented by the more complex meaning (newness) being higher in the diagram. The structural shift is shown by the two categories with the same referential aspect being side by side as the complexity of the meaning is the same. The implications of the structure of the outcome space, particularly with regards developing understanding and discussion of innovative teaching in a university context, will be discussed further in the following chapter.

5.4 Dimensions of variation

Phenomenographic findings can also be discussed in terms of the dimensions of variation, a later development of theory and practice from the original presentations (see Marton, 2015). This representation explores how the categories of description of innovative teaching vary across common themes in the data, which helps to highlight the critical differences between the categories. Some favour the term *themes of expanding awareness*, developed by Åkerlind (2005b) as the term dimensions of variation can be used in different ways in

phenomenography and has perhaps become ambiguous (Bowden *et al.*, 2005). However, I prefer the term *dimensions of variation* as the focus is variation across the categories, and inclusive expansion of awareness across all categories is not necessarily the case. The following table illustrates the dimensions of variation present in my data which were identified during the data analysis. They are themes that I noted to be present across all the categories of description yet were expressed differently in different categories. This is as opposed to themes which were expressed similarly in different categories and were therefore non-variant. These themes are discussed further in the next chapter, section 6.4.

	T1	T2	T3	T4
Motivation:	Something is not working well, I need to change this.	This current learning experience design does not fit my teaching values	I want to develop my practice /I need a new challenge	How can I make positive change here with something novel?
Orientation:	Teaching practice	Teaching approach	Personal practice	Interaction between person and teaching environment
Action:	Try a novel method to see if it improves things	Change the practice to fit my teaching values	Create /try something novel.	Explore novel approaches relevant to the situation
Success is:	The problem is solved/ improved and students like it	I am satisfied the learning experience is more appropriate	I enjoyed the process and/ or feel I have developed my practice	Personal fulfilment at having made change. Positive response from students /colleagues and intervention is showcased

Table 5-3: Dimensions of variation across the categories of description.

5.5 Summary

This chapter has presented the findings of this study as a compound outcome space comprising of seven qualitatively distinct yet logically related categories of description. These categories of description represent the qualitatively different

ways of experiencing innovative teaching in the data and are based on the collective experience expressed in 13 interviews conducted with academics. The compound outcome space expressed the hierarchical relationships between these ways of experiencing innovative teaching and illustrated critical variation both with regards the aspect of novelty and the actualisation of experiencing innovative teaching. The key characteristics of each of the categories of description have been explained and illustrated with participant quotes. The relationships between the categories have been discussed in terms of the varying structural and relational aspects which demonstrate the critical variation and the increasing complexity of the categories of description. Finally, the dimensions of variation across the categories of description of innovative teaching were presented to highlight the key themes that varied across the categories. The next chapter discusses these findings in detail and explores implications of these outcomes for practice.

CHAPTER 6: DISCUSSION

6.1 Introduction

In the previous chapter I presented the findings of this research study as a compound outcome space of seven qualitatively distinct yet logically related categories of description. The outcome space consisted of two intrinsically related parts, the variation in ways of experiencing innovative teaching and the variation in ways of experiencing novelty. These findings were established through phenomenographic analysis and address the aim of this study to investigate the qualitatively different ways academics perceive innovative teaching.

This chapter discusses these findings in detail, exploring what was found and offering comments in relation to previous research that was discussed in chapter 2. The first two sections revisit the categories of description that were established as the findings of this research and discusses them in further detail. I then consider the findings holistically by highlighting key themes in section 6.4. The professional practice nature of this doctorate becomes the focus for sections 6.5 and 6.6. First a framework I created informed by the findings with the intention of aiding discussion of innovative teaching among practitioners and inform staff development is presented in section 6.5. Finally, implications of the findings for practice are discussed in section 6.6.

6.2 Innovative teaching experienced as…

This section discusses the qualitatively different categories of description of the phenomena of innovative teaching. Each of the categories is discussed in the order presented in the findings chapter and begins with a summary of the category.

6.2.1 Novel teaching and assessment activities (T1)

This category describes participants experiencing innovative teaching as novel teaching methods and assessment activities. The focus is on the teaching activity itself in its immediate context, how it is occurring and what is happening. It is about actions in the classroom or equivalent space and any pedagogical background to these actions is not explicit. Participants expressing this conception refer to delivery techniques, tools, technologies and equipment used in teaching as

well as the use of the classroom itself. It foregrounds problem solving, experimentation, risk and a requirement for success.

A common term in this category was 'delivery' which could be considered to carry connotations of teaching as transmission and a teacher-centred approach. This study did not collect data to explore such a possible link, but the choice of word is interesting. It could just be a function of historical norms in saying we 'delivered' a session. Though these historical norms likely come out of the historical knowledge transmission model of teaching, it also illustrates the focus on what the teacher is doing in the classroom in this category. This aligns to Jaskyte, Taylor and Smariga's (2009) theme of innovative teaching as teaching methods/style which includes characteristics relating to how the teacher teaches their sessions, and Fraser's (2019) innovative deliverer, which focuses on innovative teaching as the way teaching is delivered in the practitioners' immediate context.

Problem solving and risk were present in all categories so do not feature as aspects of critical variation, however they were particularly strong concerns in this category. It is also interesting that success was important in this category when innovations often fail. This is likely because the focus is on the action in the classroom where the success and failure may feel more immediate. See key themes for further discussion.

This category relates strongly to the studies discussed in the literature chapter that use innovative teaching as a label. This way of experiencing innovative teaching is about trying novel methods and then sharing them as innovative practice, which is the setting of many of the studies in this literature category. Consequently, this category is probably what we are most used to interacting with as innovative teaching, especially at conferences. It is perhaps the easiest of the categories to explain and identify with, but this could limit people's perceptions of what innovative teaching is.

Using technology in the classroom was a feature of this category which connects to using innovative teaching as a label for technological interventions. As discussed in section 2.4.4 the rise of digital tools has prompted many of these studies, however the link between tools and pedagogy is not simple. This category

does not foreground consideration of pedagogy and so includes innovative teaching as interventions that introduce a novel tool but may not include any change to the pedagogical thinking underpinning the interaction. This contrasts with the more pedagogically aware categories where the difference was highlighted:

> *I think technology can be used in an innovative way, it can also be used in a dressing up way which actually doesn't really change the heart of what we do at all. It just makes it look a bit more 21st century. [Participant 13]*

This supports Ross, Morrison and Lowther's (2010, p.19) comment that 'educational technology is not a homogeneous "intervention" but a broad variety of modalities, tools, and strategies for learning. Its effectiveness, therefore, depends on how well it helps teachers and students achieve the desired instructional goals.'.

This category aligns to Schumpeter's first type of innovation as a new good (product) (Schumpeter, 1934) and consequently Tidd and Bessant's (2013) dimension of product innovation. The goods or product in this context are novel classroom activities.

6.2.2 Pedagogical alignment (T2)

This category describes innovative teaching as making novel changes to the episode of learning to better fit personal values of good pedagogy. The focus is on the approach to teaching embodied in the episode of learning, what the specific activity may be is not in focus. Often it was expressed in the example of inheriting an episode of learning from someone else and being dissatisfied with the current form. Constraints and limitations on innovation of institutional processes were a strong feature of this category. When considering the teaching of others, the episode of learning had to be novel and fit with their values of good pedagogy to be considered innovative teaching. This category consisted of two sub-categories of types of pedagogy that participants used in expressing pedagogical alignment. These were student-centred, active learning and authentic professional activities.

This category demonstrates a good awareness of pedagogy which was not evident in the previous category and relates strongly to the discussion in the literature chapter on the professionalisation of HE. The growth of training for new lecturers, qualifications and accreditations has increased awareness of pedagogy among teachers across the sector and perhaps contributed to the existence of this category. To see innovative teaching as an alignment of pedagogy, one must first have an awareness of pedagogy and subscribe to certain pedagogical beliefs. The occurrence of the two sub-categories of this category aligned to student centred learning and professionally authentic learning pedagogies supports Long, Cummins and Waugh (2017, p.180) comment 'there is a strong relationship between instructors' pedagogical beliefs and their use of pedagogical innovations'. This awareness of pedagogy and alignment with different preferences could cause frustrations when people are working in teams or under leadership with different views/priorities on pedagogical beliefs.

Though present across all conceptions (and therefore not a critically variant aspect) this category demonstrates particularly strongly that there is a pervading sense among academics that traditional and didactic teaching approaches are the norm in higher education. This is despite less didactive pedagogies and associated literature having entered into higher education practice many years ago. This is discussed below in the themes.

Constraints and limitations on innovation of institutional processes were a strong feature of this category. This relates to the literature on enablers and barriers to cultivating a culture of innovative teaching (e.g., Gregory *et al.*, 2015; Singh and Hardaker, 2014; Martinez-Garcia *et al.*, 2012; Smith, 2011). The finding of this category aligns with Singh and Hardaker (2014), who in their detailed consideration of the influence of institutional structure on innovative teaching highlighted significant tension between institutional structures and processes and the success of innovative teaching and its adoption.

Considering pedagogy as underpinning the *process of creating and enacting* a teaching episode (as opposed to category T1 where the emphasis is on the character of the activity itself) places this way of experiencing innovative teaching

in alignment with innovation theory considering innovation in processes. This category therefore aligns to Schumpeter's (1934) second type of innovation, the introduction of a new method of production, where pedagogy is our production method (if teaching activities are seen as the product). Similarly, it aligns to Tidd and Bessant's (2013, p.24) dimension of process innovation, as changing pedagogy is reconsidering the way in which learning experiences are 'created and delivered'. It also supports Walder's (2014, p.200) observation that innovative teachers' actions 'seek to move towards their pedagogical ideal'.

Student-centred active learning

This is probably the category I find most interesting as innovative teaching is perceived almost synonymously to enacting student-centred learning pedagogies. This was expressed as anything with a student-centred pedagogy being considered innovative teaching, even if it is not new. SCL has been around a long time, rooted in the growth of constructivist theories, and advocated in higher education (Kain, 2003). SCL is an umbrella term including a variety of approaches focused on students being actively engaged participants in their learning, often through collaborative, self-directed and creating processes (Trinidad, 2020). Because innovative teaching was perceived as anything that was SCL, not necessarily new, this category linked strongly to the perception of novelty as different to what we normally do. In this study SCL was consistently contrasted with teacher centred approaches, as Trinidad (2020) commented is often the case. This begs the question as to why perceptions of teacher centred approaches and particularly the didactic lecture as the norm in HE persist.

There was a strong focus on the student experience in this sub-category and a sense that the innovative teaching was successful if it was what the students liked/wanted/needed. The emphasis on needing to do what students liked may reflect pressures of metrics such as the NSS which has shifted emphasis to student satisfaction as an important goal. However, there was some acceptance that students may need coaching through the change and take time to see how the intervention was of benefit to their learning.

Professionally authentic learning

This sub-category surprised me as it is not something I had seen indicators of before commencing the research. The examples in this category were given by participants who taught in particularly applied subjects on programmes that are closely linked with a particular career. It could be that this specific context influenced their perspective, though not all participants with such a background expressed this view. The sub-category brings in undertones of apprenticing, which has been a way of learning since time immemorial. However, an apprenticing approach is challenging in the structures and numbers of HE (notwithstanding the recent introduction of higher apprenticeships). Participants spoke of the graduate paradox – where graduates do not have the work experience to get a job so can't get the work experience they need to get a job. They saw their innovative teaching as addressing this issue, providing legitimate portfolio work and live projects or 'real world' style employment. This aligns with the second of Fraser's (2019) case study participants whose innovative teaching was driven by desire to create authentic and real profession experiences. The university experience was seen as scaffolding the progression to becoming a practitioner in the discipline/career area. There was a discussion of creating a different relationship with students as co-professionals or manager-employee and giving the students real challenge and responsibility. This challenges the student as consumer rhetoric discussed in section 2.4.3.

Due to the constraints of institutional systems and processes these innovative teaching interventions are often offered outside of the standard curriculum as options and not available to all students. This raises questions for institutions of equality of opportunity and the resource challenges of scaling such innovative teaching initiatives. Another question this perception of innovative teaching raises for the sector, is considering why current university teaching and learning experience is not seen as real world.

This category also strongly links to novelty seen as new to the context. Examples participants gave of innovative teaching included bringing developments in the industry into the programme/ learning experience of the students.

6.2.3 Creative personal development (T3)

This category describes innovative teaching as personal creative development. It is focused on the creative act of the practitioner themselves expressed as *I created something*, or *I came up with something*. This is focused on the agency of the individual rather than the teaching activity or pedagogy of the learning episode. In the foreground of the awareness is the creative process of designing novel learning experiences with a strong sense of ownership. This category includes a focus on self-development as a teacher and adding novel practices to one's repertoire. It describes an internal focus on personal agency, creativity and opportunity.

This category brings together concepts of teaching, innovation and creativity. Creativity is another complex concept with varying definitions that has led to confusion in literature, particularly regarding its relationship to innovation where the terms are often used synonymously (Kirton, 2003). However, creativity is usually related to the generation of ideas or novelty whereas innovation has an application/implementation dimension (Von Stamm, 2008). I chose to use *creative* personal development to label this category as this was the term used in the data for this category.

> *'to me innovation is about creativity … personal informed creativity.' [participant 13]*

The participant is emphasising the aspect that is most foreground in this way of experiencing innovative teaching. In this instance it is the creative generation of novelty in their personal teaching practice. This is slightly different from teaching as a creative act or teaching with creativity discussed in educational literature where the focus is on a blending of domain knowledge and creative pedagogical knowledge (Beghetto, 2017) though the two could easily overlap.

There is a strong personal focus in this category. The reference point is the self, and it is about what *I* have ownership over, where *I* have innovated. This way of experiencing innovative teaching is very individualistic and does not include collaborative innovation and co-creation. This is surprising as collaborative working is generally seen as enhancing innovation (See section 6.4.2). This could be because academia attracts those with an independent nature, or perhaps it

could be due to experiencing the challenges of working in teams actually reducing their innovative capacity, as Kirton (2003) noted can happen when diverse teams are not managed well.

This category includes a focus on personal development as a teacher and adding novel practices to one's repertoire. There is an attitude of it being the responsibility of a good teacher to engage in reflective practice which should lead to question own practice and try to improve by doing something novel. This relates to literature on the professionalisation of HE and the development of reflective practice and conscious development of teaching practice. Consequently, this category has the potential to widen people's perceptions of identifying with being an innovative teacher, as many more would currently identify with being reflective practitioners who use novel approaches to improve practice/learning episodes than would necessarily identify as innovative teachers. There was however a sense that this way of experiencing innovative teaching is easier earlier in one's career when one has had less exposure to different approaches.

There is more emphasis on an emotional dimension in this category of description than the others, possibly due to the personal focus. There was a strong association with positive emotions of enjoyment, challenge, the adrenaline buzz of taking risk. There was a clear sense of the love of learning and developing, creating, exploring and finding out new things for personal challenge and interest. This could suggest that people with these characteristics are more likely to be innovative teachers, but this study did not explore a possible link. There was however also awareness of the negative side of frustration in dealing with barriers/enablers, needing the energy and perseverance to fight barriers and the headspace to think creatively alongside other commitments. This illustrates the importance of an institutional culture that supports and resources innovative teaching.

This category focuses on the process innovative teaching and not innovative teaching as a product so does not clearly align to either Schumpeter's (1934) types of innovation or Tidd and Bessant's (2013) dimensions of innovation space. As the foreground of this category is the individual's personal experience it is outside classic considerations of what innovation is. Instead, it corresponds to

Schumpeter's (1934, p.93) third category of motivations – 'the joy of creating' which includes a sense of enjoying 'exercising one's energy and ingenuity' and seeking out opportunity to make change or develop. Motivations for innovative teaching are discussed further below in section 6.4.1.

6.2.4 An ethos (T4)

This category describes innovative teaching as a teaching ethos, or way of being. This category is the most complex perception of innovative teaching shown in the data and incorporates an awareness of the other categories. Therefore, someone expressing this perception has the ability to choose to enact innovative teaching in any of the ways discussed above as they feel best suits the situation. This has advantages for practice and for empowering individuals to be powerful agents in a range of teaching scenarios. It shows experiencing innovative teaching as an underlying value to the participant's approach to the profession and practice of teaching. It is an approach to the context of the teaching environment as a whole with an attitude of looking to enact novel change where possible. There is a personal and professional identity aspect to this category. Innovative teaching is seen as a fundamental part of what we should do as educators, a continual process of reflection and enhancement through novel practices.

An ethos refers to a set of ideas and attitudes, in this case the ideas and attitudes towards innovative teaching. I chose this over labelling the category *innovative teaching as a value,* because it is more complex than seeing the worth or importance of innovative teaching - all the categories show worth. This category expresses a further level of belief in innovative teaching as a fundamental part of teaching practice and a personal or professional identity aspect in being innovative.

In addition to incorporating the previous categories of description, this category also has unique characteristics. This category includes an awareness of innovative teaching at a higher level of influence than the other categories, which generally focused on the immediate teaching context of the individual. There is mention of innovative ways of working, a wider view of the role and what innovative teaching could include, plus a consideration of intentional influence of an innovative

teacher in the framework of the institution. This perhaps sits somewhere between Fraser's (2019, p.1382) category of 'implementer of innovations' and 'innovative policy maker'. Fraser's implementer category includes influencing and persuading others but in the context of getting them on board with that implementation whereas this category of innovating teaching as an ethos shows as aptitude for influencing and persuading others to engage in adopting their innovations and to engage in innovative teaching as an ethos, which is broader than Fraser's category. However, Fraser's higher category is the innovative policy maker which is focused on those in positions of influence and policy making which is not the situation of the participants in this study and therefore not the explanation for the broader view of T4 that sits between Fraser's categories. So innovative teaching as an ethos sits outside of Fraser's categories which seem to frame range of influence on role – either bringing others into one's own innovation or being in a formal position to implement initiatives. Whereas T4 is more of a personal disposition towards innovative teaching, including personal values and a desire to influence others for good, than related to role. This category of innovative teaching as an ethos links more closely to the literature on creating a culture of innovative teaching than the T1-T3 as there is a holistic view of how innovative teaching sits in a wider context than the actions of the individual in their immediate situation and role, which dominates the other categories.

How can I make change here? Is a characteristic starting, or motivation question for this category. This category aligns with the more innovator end of Kirton's Adaption-innovation continuum as this category seeks out opportunity to 'do things differently' (Kirton, 1976, p.622). This could also be aligned to two of Schumpeter's (1934, p.93) person types of innovator/ entrepreneur. His first type exhibits a 'will to found a private kingdom' which could be reframed in this context as the desire to make a mark or build a reputation as an innovative teacher. His third type is one who innovates for the joy of innovating, who seeks out challenges and opportunities in order to enact change. This clearly resonates with the aspects of this category as an identity and seeking out to be innovative in a context. Is supports Von Stamm's (2008, pp. xi–xii) assertion that 'innovation,

design and creativity have to do with curiosity, a taste for experimentation, a dissatisfaction with the status quo and the desire to continuously improve things'.

This category challenges Schumpeter's (1934, p.78) assertion that one is only an innovator (or entrepreneur in his business context) in that moment of innovating. He explicitly states that this is not a person type and one 'loses that character as soon as he has built up his business, when he settles down to running it as other people run their businesses.', so it is rare for anyone to remain an innovator. Or in this case when one settles down to teaching in whatever was originally considered innovative teaching. However, I disagree with Schumpeter as this stance does not account for serial entrepreneurs, those who don't settle down but leave the business (or established innovative teaching) for someone else and move on to innovate again. Instead, this category indicates that even if not a person type, there is certainly room for personal characteristics that lean towards innovative practice as a way of being, that the challenge and rewards of being innovative encourage them to continually seek out new opportunities and not settle into a modus operandi.

Being a more complex and inclusive category than the others, this category does not clearly link to any one of Schumpeter's (1934) or Tidd and Bessant's (2013) types of innovation. However, it could pertain to any of them depending on the context of the application of this category of innovative teaching. The complexity does however support Walder's (2014, p.200) detailed definition (see section 2.5.2) of innovative teaching as a multi-faceted concept. Particularly the point that 'It stems from a reflection that is pedagogical, intellectual, creative, psychological and sustained … that aims to improve quality … at the will of the personality of the devoted professor'. All these aspects can be seen in the conception of innovative teaching as an ethos. How much this is a personality type as suggested by Walder (2014) above or can be learned would be an interesting area for further research.

6.3 Novelty experienced as…

This section discusses the qualitatively different categories of description of the novelty aspect of innovative teaching. Each of the categories is discussed in the

order presented in the findings chapter and begins with a summary of the category.

Newness is a core characteristic of innovation (OECD/Eurostat, 2018; Tidd and Bessant, 2013). That novelty it would be present in the data as an aspect of innovative teaching is to be expected, that there is critical variation in how it is perceived is not so expected. Because of this critical variation in ways of experiencing the novelty aspect of innovative teaching, the findings became more complex than expected and led to the development of the compound outcome space as discussed in chapter 5.2.1.

This section explores the 'new to whom' aspect of Johannessen, Olsen and Lumpkin's (2001) question regarding innovative teaching. New to students did not arise as a category as it was deemed that to some extent, all teaching experiences were new to students in that they had not experienced that particular episode of learning before. It was therefore not considered a characteristic of innovative teaching that it was new to students. This contrasts with Walder (2014, p.200) who includes 'surprises students' as part of their definition of innovative pedagogy. However, in this study it was found to be critical that the innovative teaching was new to practitioner, new to the context or different from normal practice.

Novelty had a dimension of degree in all categories – from a slight adaptation of an existing practice to the extreme of completely new in that no-one has ever done something like this, which was considered very rare if not impossible. This was seen as a scale or continuum of novelty, any point on the scale was considered valid though there was a value judgement that more significant novelty was more impressive. This related to what people felt was achievable – small adaptations were considered easier and often could be done within existing frameworks and resources. More significant novelty becomes increasingly difficult as it is seen to challenge established systems and take more effort on the part of the practitioner. This preference among participants for innovative teaching as moderate novelty, small to medium adaptations and incremental change relates to the more adaptor end of Kirton's A-T theory scale as the preference to stay within the system or established rules is evident, as opposed to the innovator end of the scale where

one seeks to make change outside of/ despite the systems and structures. This could be because education is a structured environment that is more likely to attract those with more of an adaptive preference (Kirton, Bailey and Glendinning, 1991). To come up with something entirely new was considered unusual as most ideas take their inspiration from somewhere. Schumpeter (1934, p.65) distinguished between a new combination arising from 'continuous adjustment in small steps' which is not an innovation by his reckoning and by something which appears discontinuously, which does characterise innovation. The question here is what does discontinuous mean in an innovative teaching context. Practitioners felt that small changes could be considered innovative – so is discontinuous any change to what was previously present in the curriculum/ delivery as opposed to improving a technique one has already implemented? This would be consistent with the data. Participants talked of refining innovations through iterative improvements but did not call each of these iterations an innovation, that term was used for the first implementation, or used collectively to refer to all iterations together.

6.3.1 Different to what we normally do (N1)

This category describes novelty as anything which is different to what is considered normal practice or traditional higher education teaching practice. What constitutes normal practice varies depending on the discipline but includes didactic lectures and rote laboratory sessions. The critical aspect of this category is that the focus is on difference and not newness, so examples were of established practice that is not new to the individual or to the context but is still considered innovative teaching.

This category is an unexpected finding of this research study as 'new' is a core characteristic of innovation, usually part of the definition in any context, yet in this way of experiencing the novelty of innovative teaching, newness is not required. Instead, the frame of reference is whatever is considered normal to the participant and/or in the context, and innovative teaching is seen in making a comparison of different to this normal. Dodgson and Gann's (2010, p.13) broad definition of innovation as 'ideas successfully applied' is one of the few definitions not to explicitly mention newness, though this is implied in ideas. This broad

concept of innovation allows room for these participants' expression of innovative teaching without an explicit newness aspect. In his book 'On Becoming an Innovative University Teacher' Cowan (2006, p.2) describes innovative teaching as 'making changes to your practice which will respond effectively – in *your* judgement – to needs that you may have identified, and which will bring about developments that will be valued by you and by your students.' This definition does not mention newness or novelty, so supports this category of conceiving educational innovation as not requiring novelty, though whether novelty is assumed, implied in 'developments', or omitted is unclear.

The normal to which innovative teaching is seen as different is expressed in three ways. First in the immediate experience of the participant as to what is normal practice in their department or locale. This gives an individual point of reference for considering what is novel as normal practice could be quite different from one department to another, both within an institution and in the same subject area between institutions. A point of reference which is individual in this way creates challenges for shared understanding of a concept such as innovative teaching as individuals may be starting from very different places. Secondly normal teaching is expressed in the more generic sense of traditional didactic lecturing. It is surprising that this notion of normal university teaching being a didactic lecture persists given the advance of student-centred learning pedagogies over what is now a significant timeframe and the increase in teaching courses for lecturers. This is discussed further in section 6.4.5. Thirdly it is expressed as how they were taught when students themselves. This is again a personal reference point of experience where one individual's own student experience of higher education could be very different to another person.

One of the most interesting findings to me was the notion of 'established innovations' as it appears such a contradiction in terms. These practices are not new to the person or new to the context yet still considered innovative teaching.

> *We do quite well-established innovative teaching methods like hackathons. … The idea being that it's problem-based learning or, I don't want to say active learning, but it is active you know. That's*

what it is, they're learning through doing, in a highly compressed manner. [Participant 05]

Taking out the new aspect of innovation presents interesting problems both for defining innovative teaching and establishing meaningful conversation on the topic. It also raises the question of time frame and when is an innovation no longer an innovation. Dodgson and Gann (2010) note that time is an important dimension of innovation, and that this consideration varies between sectors. However, this is not easily defined and with no clear delineation on when innovative teaching is no longer innovative, confusion and differences of opinion are only likely to grow. This is linked to another aspect of this category which is an acceptance that things considered innovative teaching could actually be old practices 'reinvented'. One such example given by a participant was of doing one-to-one sessions with students as an innovative practice when one-to-one (or very few) tutorials could be considered one of the original teaching approaches of higher education (see Ashwin, 2005).

6.3.2 New to the teaching context (N2)

This category describes novelty as something that is new to the teaching context, moving beyond 'difference' to specify 'new'. The reference point is the context of the teaching in which the newness is placed. This teaching context includes a specific learning episode (such as a workshop), a module or programme, an institution or higher education nationally or generally. There is a recognition that something may not be new in itself, or is not new to the participant, but being new to the context qualifies it as innovative teaching. It includes intentionally bringing something known to the individual into a new teaching context.

New to the application context is the primary expression of novelty in business innovation literature. For example, in the Oslo Manual innovation novelty is considered in three contexts: as new to the firm, new to the market or new to the world (OECD/Eurostat, 2018) and Casanovas' (2010, p.73) definition of innovation as 'the adoption of an idea or behaviour that is new to an organization'. As discussed in the literature chapter this body of literature usually considers innovation at an organisational level rather than an individual level which may explain the absence of a new to me aspect.

This category raises the question of what practitioners' sphere of influence is and what they consider their teaching context. For many participants it was the session or module for which they were responsible in which the innovative teaching example we were discussing occurred. However, others did consider their teaching context or sphere of influence to be wider, perhaps their department or the university as a whole. The quote below illustrates the focus of a local context for the majority of innovative teaching:

> *New to the context in which we're operating. … But certainly that is being innovative within [university]. You know it wasn't really being done here, wasn't being done in our, subject area. And this is where we have impact right. This is where I'm situated so, I'm not going to have significant impact on your subject area or [another faculty] immediately, maybe further down the line after sharing practice and stuff, potentially but. The point at which the innovation happens has to be local doesn't it and so the context is always local so that's where the newness is. [Participant 05]*

This will vary between individuals, and a differentiation of category T4 is a wider view of this aspect of innovative teaching.

6.3.3 New to me (N3)

This category describes novelty as something that is new to me. This category again moves beyond 'difference' to specify 'new'. The reference point is personal in that 'new to me' is focused on the participants' own experience and exposure, anything that is new to them is included. It is practice that is new to me, I came up with it/ I haven't come across it before.

The personal reference point of newness being contingent on an individual's' experience and exposure again illustrates the challenge in developing a common understanding of the concept of innovative teaching. For example, this personal reference point creates dissonance when sharing practice – what is new to one may not be to another, this can be an issue when attending conferences or reading articles that use innovation as a label without explaining their use of the term as the participant may not have the same view of innovative teaching as the presenter. One person's innovative teaching could include examples that are considered well-established by others.

Another facet of this personal reference point for novelty is that it indicates what is perceived as innovative teaching may have a relationship to exposure as a practitioner. This increased exposure could occur intentionally from many areas of professional development such as conferences, literature, sharing of practice. I use the term exposure rather than experience as it could be possible for someone to be a very experienced teacher who has not been exposed to a variety of teaching approaches. This can also lead to 'reinventing the wheel' where someone comes up with what they consider a new approach, to later find it is not new to others.

It involves people coming up with their own ideas, which links closely to the personal creative development category, T3. However, as discussed in category N1 this has a temporal dimension which can get quite complex. As the quote below illustrates, when is something that was innovative to me no longer innovative? This particularly has implication for sharing of practice as would someone offer up their practice as an example of innovative teaching if for them it has become routine? Even though for others it may be something they have not been exposed to before. This relates to the challenge of the personal reference point for innovative teaching discussed further in the key themes below.

> *So, the creative things, if you mainstream them, do they stop being creative? If you're doing them all the time, are they therefore routine, in your own mind at least, rather than innovative? Where does the line draw? Does the line move if you are a reflective learner throughout your career as an educator, is that business of what counts as innovation not constantly moving, because your repertoire has expanded? ... You know it can be innovative but if it becomes part of the normal repertoire doesn't that then defy the definition, it's no longer innovative because it's normal repertoire. ... So that's that movement I'm talking about in your career that if you're using something, several times it's no longer an innovation is it? ... It's that loop around so where does innovation stop? Because it's routine. It was innovative, it's become mainstream. It's innovative perhaps compared to other practitioners. But it's not innovation per se of itself. Tricky. [Participant 11]*

6.4 Key Themes

Having discussed in detail the categories of description as the key findings of this research study, this section now takes a step back to consider the outcomes more holistically and present key themes present across the categories. First, I discuss

themes of critical variation across the categories which I have previously expressed in phenomenographic terms as dimensions of variation (see section 5.4). Then in a departure from classic phenomenographic practice, I discuss some non-critically variant themes. As emphasised throughout this thesis, phenomenography is focused on the critical variation in the way people experience a phenomenon (innovative teaching). Therefore, this study focuses on aspects of innovative teaching that are unique, or strongly foregrounded in a particular description of the concept, and that are not present (or in focus) in other descriptions of the concept. Aspects that are present in all the ways of experiencing the phenomenon are non-variant and therefore not directly relevant to the phenomenographic discussion. That means the research did not set out to explore the definition or intricacies of innovation per se or explicitly consider aspects that were non-variant (To explore the intricacies of a phenomenon would be phenomenology). However, some of these non-variant aspects are of interest to professional practice so, I shall temporarily deviate from conventional phenomenographic practice and briefly discuss these below.

The critically variant themes discussed are: motivations for innovating (V_1); the orientation of the innovative teaching (V_2); and how success is defined (V_3). The non-critically variant themes discussed are: technology in innovative teaching (NV_1); traditional pedagogy (NV_2); experimentation and risk (NV_3); and a personal reference point (NV_4).

6.4.1 Motivation (V1)

One of the dimensions of variation that showed critical qualitative difference across the four ways of experiencing innovative teaching was motivation. In T_1, teaching and assessment activities, problem-solving was presented as being the key driver and motivator. The innovative activity was triggered by the recognition that something in the learning experience was not working well and needed to be improved, this triggered exploration of alternative, and ultimately innovative activities to try and improve the learning experience. Less common but also present was the reverse scenario where an innovative activity was encountered in an alternative context which triggered an opportunistic process of considering how this innovative activity could improve a learning experience the practitioner

had influence over. In category T2, pedagogic alignment, there is also a problem-solving motivator, but in this case the problem is dissonance between the practitioners' pedagogic values and the existing design of the learning experience. A different motivator is demonstrated in category T3, personal creative development, where the focus is on opportunity to be creative and develop one's professional practice. This category demonstrated a strong awareness of continual professional development and a sense of being constantly on the lookout for novel approaches to teaching. In some cases, this motivator was further expressed as needing personal challenge in the role, a sense of things becoming boring if they were too routine and that engaging in innovative teaching added excitement and interest to their work. A shift to a wider perspective for category T4, an ethos, is demonstrated by the motivation of 'How can I make a positive change here?'. The focus is beyond a specific immediate problem or personal goals and is an attitude in approaching their teaching environment. It is about evaluating the current situation and looking to improve things in some way through innovative action. This category also had the widest inclusion of teaching environment as grounds for innovative teaching, including assessment, pedagogy, environment and processes.

Motivation for innovative activity has been discussed in detail by Cohen and Sauermann (2007), largely in the context of scientists and technologists in research and design departments. They consider motivation in the form of individual-level incentives which they define as 'desired benefits that motivate individual behavior' (p.75). Three types of motivations or incentives are discussed: extrinsic, intrinsic and social. Extrinsic relates to environmental conditions or another party evaluating the outcome and is not directly related to the task or the outcome itself. For example, rewards such as pay or promotion. Intrinsic relates directly to the task itself and includes finding the task interesting, involving, satisfying or personally challenging. Social relates to social aspects such as gaining social approval or reciprocation. Despite their significant, qualitative variation, all the motivators in my findings can be classed as intrinsic motivators. This has an impact on policy and management as intrinsic motivators are harder for organisations to facilitate than external incentives. Though Cohen and Sauermann

(2007) do state that individuals are generally motivated by a combination of all three types of incentives in differing combinations. As this research was not exploring motivators specifically it could be that it is just the foremost motivator that was expressed by participants in these interviews, further research would be needed to explore if innovative teaching is indeed facilitated by a mix of incentives. However, these outcomes do support the findings of previous research suggesting it would be beneficial to management in organisations wishing to encourage innovative teaching to consider how they create conditions for incentivising innovative behaviour. This would both encourage current practitioners to innovate and be more attractive to potential employees with innovative behaviour preferences.

Schumpeter describes three motivations for innovation: (1) 'the dream and will to found a private kingdom'; (2) 'the will to conquer' or a desire for success and (3) 'the joy of creating, of getting things done' (Schumpeter, 1934, p.93). Swedberg modernises the first one to 'the desire for power' (Swedberg, 2000, p.16) which in the context of education could perhaps be the desire for a reputation or making a mark. The will to conquer, in which Schumpeter also included the impulse to fight or rise to a challenge, could perhaps be reframed and mapped to the desire to conquer a problem, or a situation where things are not working in a teaching context regarding the outcomes of this study, category T1. The joy of creating fits well into an education context and particularly resonates with category T3, creative personal development. Schumpeter expands this to 'seeks out difficulties, changes in order to change' (p93/94) which maps well to category T4, innovative teaching as an ethos. He is particularly concerned to point out that pecuniary gain is not a significant motivator for these individuals which again has implications for creating a culture for innovative teaching.

6.4.2 Orientation (V2)

The dimensions of variation considering the orientation of the descriptions shows two broad themes – that of a practice orientation and that of a personal orientation. These can be viewed to some extent on the outcome space diagram as a practice orientation on the left and a personal orientation on the right, though N1 and T1 are practice orientated but placed in the middle for hierarchical reasons.

T4 shows an integration of both so is appropriately placed in the middle both for hierarchical reasons and in the context of the orientation. This illustrates how when describing a complex concept different aspects are in focus in different descriptions. The focus shifts from being orientated on the immediate teaching space, the classroom or equivalent in T1 to an orientation considering the teaching approach or pedagogy in T2 to an orientation towards personal practice in T3 to an integrated orientation in T4 on the interaction between the individual's ethos and their environment.

These shifts in orientation can be loosely aligned with consideration of innovative teaching as a product or output and the process of creating innovative teaching. In categories T1 and T2 the orientation is towards the output, the new combination itself – the innovative teaching activity or pedagogy. Whereas T3 is orientated towards the innovation process one engages in to create an innovative teaching output, the output itself is backgrounded. T4 integrates these two orientations with a more holistic orientation towards innovative teaching involving both a creative process and resulting in an innovative teaching output. Each of these orientations are related to different bodies of literature. The orientation towards the output (T1 & T2) relates to the types of innovation previously discussed, for example Schumpeter's (1934) five types of innovation and Tidd and Bessant's (2013) four dimensions of innovation space. An orientation towards the process of creating innovative teaching (T3) is aligned to literature on describing the process of innovation and effective management of this, for example product development processes and creating innovative organisations (Von Stamm, 2008).

Whichever orientation the category demonstrated, there was an individual focus to the descriptions and a surprising absence of considering collaboration in innovative teaching. It is well established in modern organisational innovation literature that the problem-solving ability of an individual is inherently limited and that more can be achieved in collaboration (Kirton, 2003). So 'teams have more to offer than individuals in terms of both fluency of idea generation and in flexibility of solutions developed', which has led to an increase in cross-functional team working in organisations (Tidd and Bessant, 2013, p.132). This stance of advocating diverse teams for achieving successful innovation is questioned by the

absence of collaboration for innovative teaching in the participant's accounts. This absence implies that collaboration is not important for successful innovative teaching. There was some indication of collaborative ways of working as innovative, which implies a move towards diverse teams is considered innovative practice itself by participants. This indicates a very localised focus of personal practice as the norm. The reasons for this are unclear as they were not a target of the research but could be related to habitual independent working in HE, practice silos, or a concern over the challenges of successfully managing diverse teams (Kirton, 2003). Alternatively, perhaps innovative teaching would be more successful if intentional cross-functional teams were created to develop innovative teaching. Further research to explore this would help inform strategies for culture change to encourage collaborative working for innovative teaching.

6.4.3 Success (V3)

A consistent theme across the categories was the importance of success. This attitude is particularly interesting as innovations often fail (Dodgson and Gann, 2010). Though how success is defined varied between the categories, the fact that it was important did not. There was an underlying sense of success meaning the students liking/ appreciating the point of the innovative teaching present in all categories. This is closely linked to the underlying intent/purpose to improve student engagement and outcomes present in all the expressions of innovative teaching. This reflects core concerns in the sector and likely has two key aspects, one being the teacher's desire to provide an effective learning experience for their students and the other linking to literature on metrification and student expectations with the resultant often risk averse culture.

> *There just seems to be … so much awareness of NSS, you know not upsetting the students. [Participant 13]*

However, how important this concern was, varied between categories. it was foreground in T1 and a significant consideration and is probably linked to the greater concern of risk foregrounded in this category. In other categories there was more of a sense of it was better when this happened, but students didn't always know what was good for them, or they may not see the point until much later in their course/ career. It could be that those participants who expressed more

complex concepts of innovative teaching were more able to see failure as learning and/ or had better personal strategies for dealing with failure in this context and were less concerned. To explore this possibility would be an interesting point for future research.

> *And we'll get things wrong. If it's kind of anyone who gets a low NSS score's gonna get hammered, well if we got a low NSS score because we tried something it didn't work and we learnt from that and have moved on. That should be encouraged. [Participant 01]*

6.4.4 Technology (NV1)

An interesting feature of the data was that there was not a strong indication of innovative teaching equals technological implementations. It was present to a limited extent in T1 (Innovative teaching as novel teaching and assessment activities) with examples of using digital tools in the learning approach, e.g., students putting questions into a response app instead of raising hands in a lecture. As commented in the discussion of category T1 I suggest this is the perception of innovative teaching that leads to using the term as a label in studies evaluating and sharing digital tools. This tendency prompted a strong drive in the TEL community to push the message that good learning experiences required (re)consideration of the pedagogy behind the implementation of digital tools and that a tool in itself does not necessarily impact pedagogical teaching practice, encapsulated in the mantra don't let the technological tail wag the pedagogical dog (for example see Mertala, 2017). It seems this message has been embraced by the participants in this study as the majority of comments on technology highlighted the difference between using tools and innovating pedagogy. As shown in the following quote:

> *I think you could take a technological approach to a very traditional pedagogy. And I think sometimes some of the technology enhanced learning stuff is a bit like that. So, you know we've got to teach them about [topic] so instead of talking about it we'll show them a video that they can click on in Blackboard. ...it's not innovative, in in any way in terms of the approach to learning it's just innovative in the approach to delivery of learning materials. I think that that's an important distinction so you can have, an innovative technological approach without having an innovative pedagogy about what you're trying to achieve. [Participant 04]*

There was also limited evidence of the notion of digital natives (Prensky, 2001), again this only arose in T1 and was in the form of students want/ expect digital tools or social media. This supports the aspect of the rhetoric that expects students to want an integrated and digital experience but does not speak to any expectations or otherwise about their innate competence and confidence in using the tools.

This research did not explicitly set out to explore such relationships so it may just be that such assumptions were implicit and not explicitly discussed. However, given the probing nature of the interviews the fact that they were not mentioned is an interesting outcome in itself, suggesting more likely a clear conceptual differentiation between innovative teaching and the role of technology.

6.4.5 Traditional pedagogy (NV2)

A pervasive theme throughout the findings was that of innovative teaching being compared against a concept of normal HE teaching being traditional teacher-centred didactic lectures, or similar seminar/ rote lab teaching. This is coupled with the notion of student centred, or active learning approaches being considered new, even though they have been present and advocated in higher education for quite some time (e.g., Biggs, 1999; Barr and Tagg, 1995). The rise of constructivist theories and its emphasis on student activity in learning generated the shift from teacher-centred to student-centred teaching (or learning) paradigms (Biesta, 2015). The teacher-centred paradigm is also used to frame teachers as providers of content and students as consumers of this content (Sagy *et al.*, 2018), which links to the concept of students as consumers discussed in the literature chapter (2.4.3). In this study SCL was consistently contrasted with teacher centred approaches, as Trinidad (2020) commented is often the case.

It is interesting that this is such a dominant frame of reference given the rise of pedagogical awareness, partially as a consequence of the professionalisation of HE teaching as discussed in chapter 2. Though it could be argued that this rise in pedagogical awareness is exactly what has contributed to this notion. To make the comparison requires a perception of different pedagogical approaches. This study did not investigate academics' beliefs about teaching in a transmission/facilitation

continuum (Samuelowicz and Bain, 2001). However, the responses in the data would suggest these participants tend towards the facilitation end of the continuum. Categories T2-T4 require an awareness of pedagogy and theories of learning which would be unlikely for a person with an exclusively transmission centred view of teaching to demonstrate these categories.

A student-centred learning paradigm is not without its issues and critics, for example Biesta (2015) argues against the extreme end of this shift implying the teacher has little to offer in a constructivist learning environment, and that nothing can be learned in a transmission model of teaching, contrasting the experiences of learning from and being taught. Cousin (2012, p.20) suggests the binary opposition of these two positions (teacher-centred and student-centred) is unhelpful and the complexity of relations between students and teachers would benefit from 'a more sociological enquiry'. However, this debate is not what concerns us here, instead the relevant question is why perceptions of teacher centred approaches and particularly the didactic lecture as the norm in HE persist. Further research is needed into why this perception that teacher-centred didactic teaching is the current norm pervades and what this means for perceptions of teaching in HE.

6.4.6 Experimentation and risk (NV3)

A consistent theme was that innovative teaching involves experimentation and risk. This is unsurprising as these aspects are a strong feature of literature on innovation (see section 2.3.2). In a teaching context this included concerns of how students would respond to the innovation and if they would 'get' what the teacher was aiming to achieve through the intervention. Attitudes towards risk play a significant role in attitudes towards innovation, as Dodgson and Gann (2010) commented, innovators need to develop personal strategies to become resilient to failure. This has significant implications for practice and HE culture to enable an environment where experimentation and risk with permission to fail is supported by students, processes, quality assurance safeguards and senior management. Participants saw organisational moves towards standardisation as a considerable threat to an environment enabling innovation. Senior managers therefore need to

balance the organisational needs for consistency (not the same as standardisation) with support for innovative practices.

It is important to note that this does not imply teaching that is not innovative is without risk. As Biesta (2015, p.1) notes 'education always involves risk' as it is an interaction between free agents of 'action and responsibility'. However, the difference is that innovation involves unknown and unquantified risk which is much harder to predict and mitigate (Dodgson and Gann, 2010).

6.4.7 A personal reference point (NV4)

A final theme consistent throughout the data that is pertinent to highlight is how an individual's judgement on what is or is not innovative is based on a personal point of reference. This was displayed in a number of ways through the different categories, e.g.:

- What **I** consider a novel activity (T1)
- What **I** consider appropriate pedagogy (T2)
- Something **I** came up with (T3)
- It is different to what **I** consider normal practice (N1)
- Something **I** haven't seen before (N3)
- It is new to **me** (N3)

This was particularly apparent in considerations of novelty, though novelty was a critically variant aspect, that it was based in a reference point of an individuals' personal awareness was not. This is fundamental to the challenge in assuming a shared understanding of innovative teaching. If our reference point of what is novel, and therefore what is innovative, is taken from our personal experience and exposure, then any evaluation of whether teaching is innovative is going to vary significantly between individuals.

6.5 Creating a framework to aid discussion

As discussed in the introduction chapter, this research is situated in my professional background and my role in learning development. A key motivation for me has been to make use of my research findings in my practice to share knowledge and inform staff development. I wanted to create something that will

promote and aid discussions on innovative teaching, to make the implicit explicit and challenge assumptions, to expose colleagues to an appreciation of the variation of perspectives of innovative teaching and empower them to reconsider their own practice in light of these findings. To this end I sought opportunities to share my early findings with colleagues both to create opportunity for discussion and learning among colleagues and to gain feedback on my research outcomes. I designed a workshop titled 'What does innovation in teaching and learning look like to you?' which took place at the UWE Festival of Learning in June 2019 and at the Advance HE Teaching and Learning Conference in July 2019. In this workshop I designed activities based on the emergent findings from my research which facilitated participants' reflection on their own perceptions of innovative teaching and considering how these perceptions may differ between colleagues. This led into an ideas exchange on how discussing understandings of the term in local contexts could have a significant beneficial impact on effectively communicating and promoting engagement in 'excellent' practice and in effectively translating strategy into practice. Both sessions were well attended and unfortunately people had to be turned away from the Advance HE session as the room was full. The activities were well received and the discussions among participants were fruitful. After the sessions I received positive feedback, with participants telling me they had enjoyed the discussions and the session had enabled them to think differently about innovative teaching.

Following on from this in June 2021 I ran another workshop at the UWE Festival of Learning, this time using the fully formed findings as presented in chapter 5. For this workshop, titled 'Innovative teaching: What is it and how do I know if I'm doing it?'. I was exploring how to use the findings as a framework to facilitate discussion and sharing of practice among participants. The outcome space presented in this study provides a useful tool to explore ideas of innovative teaching with staff and prompt discussion. However, a phenomenographic outcome space is often misunderstood by those unfamiliar with the approach as indicating a hierarchy of 'better' understandings as opposed to more complex awareness. To avoid this confusion, I chose to explore how I could use the outcomes of this study to create a framework to aid discussion of innovative

teaching that did not require familiarity with phenomenographic principles. I took the critical aspects of variation from my findings and presented them in different graphical forms as a framework. These were then used by participants in discussion activities. As with the previous workshops, this generated constructive discussion and I received positive feedback from the session, below are some example quotes:

'It was a helpful starting point for the conversation and for reflecting on our own practice.'

'Good to have a vocabulary that has shared understanding so that ideas can be explored together.'

'Gets you thinking about being more creative.'

As mentioned above, core to the principles of a professional doctorate is the impact on practice of the research. Sharing my findings in these workshops has both influenced colleagues in their consideration of innovative teaching and helped me refine what a useful framework may look like. It has already impacted both my own practice and that of those who attended the workshops. Please see appendix J for a revised version of the framework.

6.6 Implications for practice

This section considers key implications of the findings discussed above for practice in HE. I have approached this in levels of expanding influence, starting with the personal practice of individuals, then considering professional development and finally strategy and policy. Though it is useful to consider implications from different perspectives to bring out the pertinent considerations, there are not clear boundaries between these areas of practice and there is overlap between the sections.

6.6.1 Variation matters

Phenomenography as a research approach highlights variation in ways of understanding a phenomenon and invites us to consider this complexity in a specific context. These findings have shown there is variation in the ways of experiencing innovative teaching as a concept among a sample of academics. This problematises the assumption there is a shared understanding of the term

innovative teaching as expressed in discourse and strategy. That academics presented a variety of ways of experiencing innovative teaching, with an associated range of ideas and priorities presents implications for practice from an individual to a strategic scale. It highlights the need for critical discussion and a shared language to enable conversation on the matter, to be able to validate different positions and encourage multiple perspectives. The outcomes of this research provide a framework to enable such discussions.

6.6.2 Personal practice

One of the original motivators of this study was wondering what individual practitioners think is being asked of them by strategy and policy that advocates innovative teaching. The outcomes of this study show that there are multiple different answers to this question. This not only poses a challenge to senior managers (see section 6.6.4) but also to individual practitioners as they try to make sense of the directive in their own context. If someone has a different perception of innovative teaching to others around them without an understanding of the variation established in this study, this could lead to miscommunication and confusion in understanding and implementing initiatives to address this kind of strategy. A shared language and understanding are needed to facilitate an appreciation of different views and how this contributes to a richer understanding of innovative teaching practice. These outcomes provide a framework to support this process.

On an individual level appreciating the variation in ways practitioners experience innovative teaching may impact individuals' professional identity and self-perception as innovators. When encouraging sharing of innovative practice, a common issue in my experience is that people do not often come forward as having practice to share. There are many possible reasons for this, but one is that they may not perceive their own practice as innovative from their personal conception and reference point, though others may perceive it as innovative and would benefit from such a share. By using the outcomes of this study to challenge assumptions and broadening people's individual definitions of innovative teaching, more practitioners may self-identify as innovative teachers or having examples of innovative practice to share. This could lead to greater personal

reward and better cultures of sharing practice. It could also lead to practitioners seeing innovative teaching as an opportunity for SoTL or educational research. A greater understanding of the variation in reference points for novelty may help people avoid labelling practice as innovative without qualifying what this means. This would address the issues with literature using innovative teaching as a label highlighted earlier in this study in section 2.5.1 (for example Colleran-Santos, 2014).

Creating a culture of innovative teaching is not just the responsibility of managers and organisational policies. The change of an institutional culture is dependent on individuals engaging with the values and mindset encouraged. As Von Stamm (2008, pp.xi–xii) asserts:

> *'It is of the utmost importance to be aware that creating a more innovative organisation is much more about changing one's frame of mind than it is about a changing the company's processes or vision statement. Innovation, design and creativity have to do with curiosity, a taste for experimentation, a dissatisfaction with the status quo and the desire to continuously improve things.'*

Fostering the desire to continuously improve things is an encouragement for all teaching individuals to engage in reflective practice and seek to continually enhance both their own practice and their curriculum offer. Though this need not always involve innovative teaching, embracing innovative teaching as an ethos would enhance the opportunities to do so.

People's engagement or otherwise in innovative teaching are significantly influenced by personal attitudes and behaviours towards it. The above quote highlights the importance of positive attitudes towards curiosity and experimentation and Dodgson & Gann's (2010) list includes digital literacy, ability to deal with change, communication across boundaries and tolerance, in the context of innovative organisations. In the context of innovative teaching specifically Jaskyte, Taylor and Smariga (2009) include open to new ideas, up to date on scholarship, connects ideas and problems, and Fernández-Cruz and Rodríguez-Legendre (2021) include a disposition towards improving practice, attitude towards change, analysis of environment to identify needs for

improvement and intentional use of digital. This study did not explicitly investigate such attitudes and behaviours but many of those listed above can be seen throughout the categories, with the fullest representation being in category T4, an ethos. Therefore, encouraging individuals to develop these attitudes and behaviours in the workplace would support a culture of innovative teaching.

6.6.3 Professional development

The findings of this research offer rich insight to inform professional development and support for those first engaging in higher education teaching, through the spectrum of experience, to reaching those well established. This is the area in which my professional practice is situated and so is one of particular personal interest. In response I took the outcomes of this study further to develop a framework as discussed in section 6.5 above. The outcomes of this study and the resultant framework offer a way to stimulate discussion among practitioners on innovative teaching, to explore what innovative teaching means to them, individually and as an institution, and to develop an appreciation of variation in perspectives. It contributes to ways of encouraging practitioners to reflect on practice and develop a continual development perspective to their teaching practice.

Staff development or training opportunities could be developed for both experienced and new practitioners to facilitate expanding practitioners' awareness of different conceptions of innovative teaching to help people consider their own conception, to appreciate that of others and to offer exposure to the variation established by this research. This could help practitioners value exposure to different approaches, to consider pedagogy alignment, personal development and the ethos of innovative teaching. Exploring the category of teaching and assessment activities (T1) could help practitioners value exposure to different methods in different contexts. Understanding innovation as 'a new combination' could help people value their own interventions as innovative where they may not have done so before. Considering the category of pedagogical alignment (T2) would facilitate conversations on pedagogical approaches and learning design. Alongside curriculum development processes raising awareness of this category would help practitioners consider the cohesive pedagogical approach of their

programme and how this relates to their personal pedagogical values. The category of personal creative development (T3) clearly has close links for professional development. Encouraging practitioners to explore this category creates links between intentional professional development and creative, innovative practice. It would help people to consider the process of creating innovative teaching in a move beyond a focus on the output. It is an opportunity to encourage creative, collaborative, cross-institution initiatives. Exploring the perspective of innovative teaching as an ethos (T4) would give practitioners the opportunity to take a broader, more holistic view of innovative teaching. This could emphasise the role of attitudes and behaviours towards innovative teaching and an individual's role in creating a culture of innovative teaching.

There are also useful learning possibilities in developing structured opportunities for practitioners to explore the critical variation in perceptions of novelty underpinning innovative teaching. Appreciating the personal viewpoint of 'new to me' (N3) and the challenges of a personal reference point for judging innovative teaching could help understanding in situations where there is discord between people in considering if something is innovative or not – for example when a session at a conference is labelled as innovative but the participant does not consider it innovative. Discussions of new to the teaching context (N2) could help people consider sphere of influence and whether they are focused on an individual session, influencing practice in their department, across the institution or beyond. Finally raising the category of different to what we normally do (N1) is an opportunity to explore perceptions of difference and newness, consider how this relates to perceptions of what is or is not innovative teaching, including the temporal dimension. It also offers a chance to unpack the pervasive view of traditional didactic as normal HE teaching found in this study.

The hierarchy of categories of description presented in the phenomenographic outcome space and the dimensions of variation across the categories offer insight that may be of particular interest to professional developers as it represents expanding awareness of the concept of innovative teaching. In developmental phenomenography the increasing complexity of the categories of description is seen as a potential path for developing people's conceptions of the phenomena

under study (Bowden and Green, 2005). The most complex concept of the phenomena, in this case innovative teaching as an ethos, is seen as the goal as it includes an understanding of all the other conceptions of innovative teaching. In this context it is not necessarily a 'better' conception – each of them can be useful in different applications – but as it is most complex and includes the others having this conception gives a practitioner the possibility of choosing between the conceptions to use in a given circumstance. If a practitioner has a less complex conception, they can only make use of the awareness they have, and this limits opportunity. Taking this developmental view of the phenomenographic categories of description presented in this study therefore offers potential to professional development interventions to facilitate practitioners developing the most complex conception, innovative teaching as an ethos. Developing practitioners to have an innovative teaching ethos would benefit the institution if strategy and policy view innovative teaching as an aim.

For institutions which promote a Boyer's (1990) four scholarships approach to research and scholarship, innovative teaching as articulated in the findings of this study can be linked to both the scholarship of integration and the scholarship of teaching. To truly fit with his principles of scholarship the innovation would need to be based on scholarly knowledge and the outcome of the innovative teaching intervention would need to be documented and disseminated with the wider community. This may help to improve perceptions of the scholarly value of innovative teaching, particularly in situations where there is a concern of discipline research being more highly valued than research into teaching practice.

6.6.4 Strategy and policy

One of the key motivators for undertaking this thesis was to question how the use of the term innovative teaching in marketing, strategy and policy is interpreted by practitioners and to challenge the assumption that there is a shared, homogenous understanding among stakeholders. This research has shown that there is qualitatively distinct variation in how innovative teaching is conceptualised by practitioners which means there are implications for strategy and policy makers at local, institutional and sector level, and those who translate these into action. It demonstrates that what is envisioned by these marketing/ strategy/ policy authors

may not be what is understood by academics enacting these policies. Therefore, it is vital for strategy and policy makers to consider what the term means to them in their context and to clearly communicate this with stakeholders. It is also an opportunity to initiate and engage in conversations with various stakeholders (including students, parents and employers) on the many aspects of innovative teaching and what the priorities are in each context. This has relevance to managing student expectations and satisfaction scores in key metrics as miscommunication and differing expectations are a significant cause of dissatisfaction. Actively considering variation in perspectives of innovative teaching, is an opportunity to open dialogue and improve interpretation and understanding between stakeholders.

This study has contributed to the established debate on creating a culture of innovation in an organisation, and specifically a culture of innovative teaching. It encourages senior leaders/ managers to consider how intentional they are being about building a culture of innovative teaching if innovative teaching is a desired strategic goal. Tidd and Bessant (2013, p.140) note that 'culture is a complex concept, but it basically equates to the pattern of shared values, beliefs and agreed norms which shape behaviour'. They further explain that organisations develop through repetition and reinforcement ways of behaving that become 'the way we do things around here' (p.79). In the context of this study, this culture or ways of behaving will ideally be thoughtfully considered to create conditions within the organisation under which innovative practice is more likely. Considering different perspective of innovative teaching and aligning these with institutional goals would help senior managers consider and address relevant barriers and enablers. Taking account of motivations for innovative teaching discussed above could help create a culture of innovation by enabling practitioners to pursue these desires, summarised by a reworking of Schumpeter's (1934) list as to build a reputation, to conquer a problem or have opportunity to be creative. Intentional consideration of all the key themes above would help senior managers explicitly consider how they are addressing these issues in their context.

Cultivating innovative teaching is not just about creating an environment where innovative teaching occurs, but these innovations need to become widely

embedded and transform practice to be effective and meet strategic aims (Smith, 2011). The findings of this study support previous studies (see section 2.5.4.) that have found that a vital aspect of cultivating innovative teaching is creating an environment in which new pedagogies and teaching activities can be tried and evaluated in a supportive way. The fundamental aspects of experimentation, risk and potential failure of innovative teaching need to be supported and not penalised.

6.7 Summary

This chapter has explored the findings of this study in detail, offering comments on them and relating them to previous research that was discussed in chapter 2. First, I discussed each of the categories of description in turn. Key features of each category were highlighted, commented upon and related to previous literature. I then considered the findings holistically, discussing key themes across the findings including dimensions of variation. The key themes highlighted were motivations for innovative teaching, a practice or personal orientation, considerations of success, the relationship of innovative teaching and technology, the pervasive notion of traditional pedagogy, experimentation and risk, and finally a personal reference point for conceptualising innovative teaching. Following this I commented on how I have used the findings to create a framework to aid discussion of innovative teaching among practitioners and inform staff development. Finally, I made suggestions of the implications of the findings of this research for practice to individual practitioners, professional development, and strategy and policy. The following chapter summarises this research study and brings a conclusion to the thesis.

CHAPTER 7: CONCLUSION

7.1 Introduction

The previous chapters of this thesis have guided the reader in detail through this research study exploring academics perspectives on innovative teaching. First the concept of the study was introduced, and the background, motivations and research questions presented. In chapter two the literature context was critically discussed and gaps in our current knowledge highlighted. Chapter 3 discussed phenomenography as a methodological approach and why this is a good fit for the proposed research question. Chapter 4 explained the analysis process and how the findings were established. The findings of the research study were presented in chapter 5 and discussed in relation to the literature and implications for practice in chapter 6.

In this chapter I provide a summary of the research study and conclusion to this thesis. First, I revisit the aims of the study and the research questions. Next, I summarise the main findings of this research study and their implications for teaching practice in HE. Following this I highlight the original contributions of this research to our current understanding of innovative teaching, and to phenomenography as a research approach. I then discuss limitations of the project and some related opportunities for future research. I close by providing a brief personal reflection on the experience of undertaking this doctoral research study. Based on the findings of this study the central argument of this thesis is that there is critical variation in academics' perspectives of innovative teaching, and these qualitatively different perceptions offer valuable original insights to enhance our understanding of innovative teaching in practice.

7.2 Revisiting the study aims and research question

This research study sought to investigate the potential variation in ways academics in UK higher education conceptualise innovative teaching.

The study had the following aims:

1. To problematise the assumption that there is a single unified concept of innovative teaching and that this is shared among academics.

This aim has been addressed through the findings of the study showing that there is not a unified conceptual understanding of innovative teaching among the participants in the study. The critical variation in perspectives illustrated through the four categories of description of innovative teaching challenges this assumption present in strategy, marketing, and research literature.

2. To critically explore literature around the concept of innovative teaching in HE and themes that emerge from the data.

This aim has been addressed through the critical discussion of contextual literature in chapter 2 and the discussion in chapter 6 of the outcomes of the research in relation to existing literature. This study found that there is a shortage of studies exploring concepts of innovative teaching in higher education and therefore this research adds a valuable contribution to our understanding of the area. Key themes explored in the literature included innovation as a concept and political ideology, key aspects of the current teaching landscape in higher education such as the professionalisation of HE teaching and cultivating innovative teaching.

3. To explore how innovative teaching is perceived by academics in UK HE and identify conceptual frameworks using a phenomenographic approach.

This aim was addressed through the empirical research study undertaken using a phenomenographic approach and interviewing 13 academics from a variety of disciplines and teaching experience. The conceptual framework is the outcomes of the study discussed in chapters 5 and 6. This consists of four categories of description of innovative teaching underpinned by three categories of description of novelty. These categories were arranged in a structure of hierarchical inclusiveness represented as a phenomenographic outcome space.

4. To contribute academic's views to the literature discussion, which are currently underrepresented.

Through interviewing academics as the participants in this study, the findings of this research contributes academic voice on the concept of innovative teaching.

This study proposed to address the following research question:

What are the qualitatively different ways academics perceive/ experience innovative teaching?

With the subsidiary questions:

- In what ways do academics describe innovative teaching and what it means to them?
- What are the critical ways these perceptions vary?
- How do these different perceptions relate to each other?
- How can this understanding be used to inform practice?

The key findings of this study that answer the research questions above are summarised in the sections below and were discussed in depth in chapter 5: Findings and chapter 6: Discussion.

7.3 Key findings

This study established that there is variation in the way academics perceive innovative teaching and that the term does not have a single, unified meaning among practitioners. The key findings of this research study were the development of a compound outcome space consisting of four categories of description expressing qualitatively different ways practitioners experience innovative teaching underpinned by three categories of description of qualitatively different ways of experiencing novelty in innovative teaching.

7.3.1 Categories of description

The categories of description of innovative teaching are:

- **Teaching and assessment activities (T1)** - this category describes innovative teaching as novel teaching methods and assessment activities. The focus is on the teaching activity itself in its immediate context, how it is occurring and what is happening. It is about actions in the classroom or equivalent space and any pedagogical background to these actions is not explicit. Participants expressing this conception refer to delivery techniques, tools, technologies and equipment used in teaching as well as

the use of the classroom itself. It foregrounds problem solving, experimentation, risk and a requirement for success.

- **Pedagogic alignment (T2)** - this category describes innovative teaching as making novel changes to the module/ course/ other episode of learning to better fit personal values of good pedagogy. The focus is on the approach to teaching embodied in the episode of learning, what the specific activity may be is not in focus. Often it was expressed in the example of inheriting an episode of learning from someone else and being dissatisfied with the current form. Constraints and limitations of institutional processes were a strong feature of this category. When considering the teaching of others, the episode of learning had to be novel and fit with their values of good pedagogy to be considered innovative teaching. This category consisted of two sub-categories of particular types of pedagogy that participants used in expressing pedagogical alignment. These were student-centred, active learning and authentic professional activities.
- **Personal creative development (T3)** - this category describes innovative teaching as personal creative development. It is focused on the creative act of the practitioner themselves expressed as *I created something*, or *I came up with something*. This is focused on the agency of the individual rather than the teaching activity or pedagogy of the learning episode. In the foreground of the awareness is the creative process of designing novel learning experiences with a strong sense of ownership. This category includes a focus on self-development as a teacher and adding novel practices to one's repertoire. It describes an internal focus on personal agency, creativity and opportunity.
- **An ethos (T4)** – this category describes innovative teaching as a teaching ethos, or way of being. This category is the most complex perception of innovative teaching shown in the data and incorporates an awareness of the other categories. Therefore, someone expressing this perception has the ability to choose to enact innovative teaching in any of the ways discussed above as they feel best suits the situation. It shows experiencing innovative teaching as an underlying value to the participant's approach to the

profession and practice of teaching. It is an approach to the context of the teaching environment as a whole with an attitude of looking to enact novel change where possible. There is a personal and professional identity aspect to this category. Innovative teaching is seen as a fundamental part of what we should do as educators, a continual process of reflection and enhancement through novel practices.

The above categories of innovative teaching are underpinned by three categories of novelty:

- **Different to what we normally do (N1)** – this category describes novelty as anything which is different to what is considered normal practice or traditional higher education teaching practice. What constitutes normal practice varies depending on the discipline but includes didactic lectures and rote laboratory sessions. The critical aspect of this category is that the focus is on difference and not newness, so examples were of established practice that is not new to the individual or to the context but is still considered innovative teaching.
- **New to the teaching context (N2)** - this category describes novelty as something that is new to the teaching context, moving beyond 'difference' to specify 'new'. The reference point is the context of the teaching in which the newness is placed. This teaching context includes a specific learning episode (such as a workshop), a module or programme, an institution or higher education nationally or generally. There is a recognition that something may not be new in itself, or is not new to the participant, but being new to the context qualifies it as innovative teaching. It includes intentionally bringing something known to the individual into a new teaching context.
- **New to me (N3)** – this category describes novelty as something that is new to me. This category again moves beyond 'difference' to specify 'new'. The reference point is personal in that 'new to me' is focused on the participants' own experience and exposure, anything that is new to them is included. It is practice that is new to *me, I* haven't come across it before.

7.3.2 A compound outcome space

These relationships between these categories of description are illustrated by a phenomenographic outcome space (fig 7-1). This research provides an original representation in the development of a 'compound outcome space'. I identified in the data two integrated yet distinct sets of categories of critical variation in the participants' experience of innovative teaching. One set concerned the central phenomenon of innovative teaching, the other set concerned the fundamental aspect of innovation, novelty. These sets of categories of description were too distinct to be represented in a single outcome space yet too integrated to be presented as two separate outcome spaces. Hence, I have created a compound outcome space to clearly illustrate the intrinsic link between these two sets of critical variation in the ways of experiencing the complex phenomenon of innovative teaching.

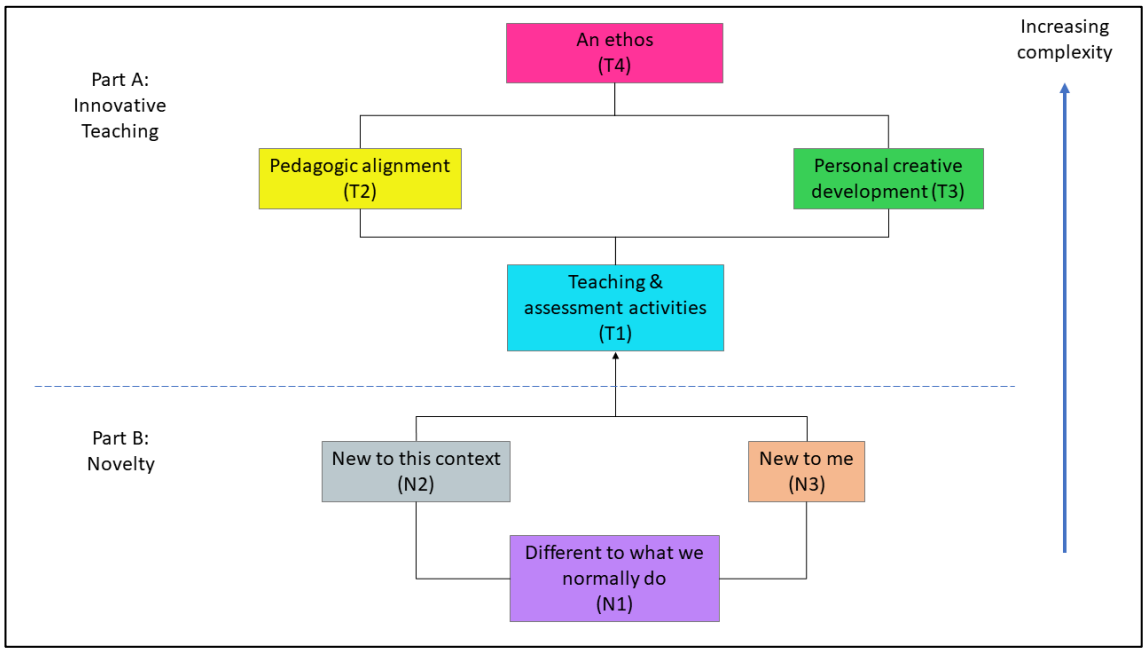


Figure 7-1 Graphical representation of the compound outcome space

Part A presents the qualitatively distinct ways of experiencing innovative teaching present in the data and part B the qualitatively different ways of experiencing novelty as a constituent part of innovative teaching. This arrangement of an outcome space is to my knowledge unique and therefore part of the original contribution of this thesis.

The boxes in the diagram (fig 7-1) represent the different categories of description with increasing awareness or complexity in the way of experiencing innovative teaching shown travelling from the bottom to the top of the diagram. Categories above others on the diagram incorporate an awareness of the categories that have gone before. Where the tree diagram branches into two different categories this represents that these categories are on a similar level of complexity yet distinct. Both incorporate the preceding category(ies) but neither incorporates the other.

7.3.3 Dimensions of variation

The findings also presented dimensions of variation across the categories of description. This representation explores how the categories of description of innovative teaching vary across common themes in the data, which helps to highlight the critical differences between the categories.

	T1	T2	T3	T4
Motivation:	Something is not working well, I need to change this.	This current learning experience design does not fit my teaching values	I want to develop my practice /I need a new challenge	How can I make positive change here with something novel?
Orientation:	Teaching practice	Teaching approach	Personal practice	Interaction between person and teaching environment
Action:	Try a novel method to see if it improves things	Change the practice to fit my teaching values	Create /try something novel.	Explore novel approaches relevant to the situation
Success is:	The problem is solved/ improved and students like it	I am satisfied the learning experience is more appropriate	I enjoyed the process and/ or feel I have developed my practice	Personal fulfilment at having made change. Positive response from students /colleagues and intervention is showcased

Table 7-1 Dimensions of variation across the categories of description

7.4 Key implications for practice

This study has established there is variation in how practitioners view innovative teaching, so this has implications for teaching practice and the wider higher educational environment. As this study has been undertaken as a professional doctorate, implications for practice are an important outcome of this research and were therefore discussed in detail in chapter 6. These key implications for practice are summarised below.

- **Practitioners** – these findings have implications for how individuals perceive their own practice and that of others. Having different conceptions of innovative teaching could lead to miscommunication and confusion in understanding and implementing strategy, in sharing practice and in describing their own practice. A shared language and understanding are needed to facilitate an appreciation of different views and how this contributes to a richer understanding of innovative teaching practice. A more complex understanding of innovative teaching could also lead to more practitioners identifying their own practice as innovative teaching which could lead to greater personal reward and better cultures of sharing practice.
- **Professional development** – a key aspect of this study is the relationship between innovative teaching and practitioners developing their practice. This has implications for professional development from those first engaging in higher education teaching to reaching those well established. The findings of this study and particularly the framework created offer an opportunity for professional developers to open up the conversation among practitioners in their institutions on what innovative teaching means to them, as an individual and as an institution.
- **Strategy and policy** – this study has problematised the assumption in strategy and policy that there is a shared understanding of what innovative teaching means to practitioners. Therefore, it is vital for strategy and policy makers to consider what the term means to them in their context and to clearly communicate this with stakeholders. It is an opportunity to initiate and engage in conversations on the many aspects of innovative teaching

and what the priorities are in each context. It is also a call for senior managers to consider how intentional they are being about building a culture of innovative teaching, if innovative teaching is a desired strategic goal. Considering different perspectives of innovative teaching and aligning these with institutional goals would help senior managers consider and address relevant barriers and enablers to better create a culture of innovative teaching.

7.5 Original contribution of the research

This piece of original research has contributed new knowledge to the field in the following ways:

1. This study established by empirical research that there is variation in the way academics perceive innovative teaching and that the term does not have a single, unified meaning among practitioners. This opens the debate for practitioners, managers and policy makers to consider how to discuss innovative teaching in a more meaningful way.
2. The key findings of this research study outlined above of a compound outcome space consisting of four categories of description expressing qualitatively different ways practitioners experience innovative teaching underpinned by three categories of description of qualitatively different ways of experiencing novelty in innovative teaching. This is an original finding regarding innovative teaching as to my knowledge there are no other studies exploring innovative teaching through the lens of phenomenography.
3. The development of a compound outcome space as a unique representation to best illustrate the relationships of these categories of description (see Fig 7-1).
4. The discussion of these categories of description, their relationships and themes, and the implications for practice adds to our understanding of innovative teaching as a concept and how it is enacted in practice. This contributes new knowledge to what is currently a limited body of literature on the area.

5. The development of an original framework to aid discussion on innovative teaching.
6. This study contributes a detailed account of the undertaking of the phenomenographic research approach. This account adds detail to the limited literature on the applied practice of phenomenography.

7.6 Limitations of the study

Every research study has limitations and this one is no exception. Firstly, the research questions were asked in a particular place and time giving this research situated meaning. The interviews took place as a snapshot in time of participant views and did not explore how these may change over time or situation, though participants were encouraged to draw on their personal professional history for the discussion. This study interviewed participants from a single UK HE institution. Participants drew on experience of other institutions and cultures, but the study could have been strengthened by including participants from other institutions. Another limitation is the number of participants included as a greater number of participants may have revealed greater variation in the ways of experiencing innovative teaching. Unfortunately, extending the sample either in size or across institutions was not possible in the scope of this professional doctorate.

This study is also subject to the general limitations of phenomenography as a research approach discussed previously in this thesis. These include that the sampling may not include all possible variations of the ways of experiencing innovative teaching. Sampling is to some extent influenced by access and there may be bias in the sample, for example by nature of being willing to participate. Åkerlind, (2005c, p.328) points out that 'any outcome space is inevitably partial, with respect to the hypothetically complete range of ways of experiencing a phenomenon'. Additionally, Marton and Booth (1997) make the point that an outcome space represents the relationship between the researcher and the data. Therefore, the study is not intended to be replicable, and a different researcher may have developed a different set of categories of description or outcome space.

7.7 Recommendations for further research

Following both the (de)limitations of the study and the avenues explored in the discussion offers opportunities for further research to contribute greater understanding to the discussion of innovative teaching.

The research would be complemented by studies, especially phenomenographic in approach, into other stakeholder perceptions of innovative teaching. For example, exploring student views, especially as Jaskyte *et al*. (2009) found staff and students had different priorities on characteristics for innovative teaching. Also, other stakeholders in the support and strategic development of innovative teaching cultures such as managers, staff developers, senior leaders and policy makers. A greater understanding of the perception, particularly variation in perspective of these stakeholders would offer greater insight into the narrative, communication and enacting of innovative teaching strategy translation from policy to classroom. It would also be helpful to conduct further research in other contexts as the outcomes of this research are situational. For example, stakeholders in innovative teaching in other institutions in the UK and internationally. It would then be possible to compare these findings and explore local and international factors.

This study alluded to the expression or foregrounding of different motivations, emotions and values in different categories of description. A natural follow-on from this research would be to explore possible links between perceptions of innovative teaching and personal traits, values and behaviours. This could include researching links with motivations and incentives of innovative teachers, personality traits and professional identity.

It would also complement this study to explore perceptions (and possible variation therein) of other related concepts such as entrepreneurship, creativity in teaching and risk in teaching.

Given the potential link between category T2b, innovative teaching as professionally authentic learning, and practitioners with strong practical industry subjects it would be interesting to explore any influence of discipline ways of thinking, knowing and doing on perceptions of innovative teaching. Bager-Elsborg (2018) found that practitioners' attitudes to changing teaching practices was

influenced by local discipline dispositions, so an extension would be to explore if perspectives on innovative teaching are similarly influenced. This could offer ways to support innovative teaching more meaningfully in local contexts and to generate discussion and translate practice across disciplines.

My study suggests many people view innovative teaching as a novel teaching activity given the prevalence of literature using the term as a label. We need to further develop understanding of how we can expand people's awareness of other aspects of innovative teaching.

7.8 Personal reflections

Undertaking this process of doctoral study and independent research has been a learning journey like no other. As someone who loves learning and embracing a challenge it has been a rewarding journey, if a long and at times emotional one. My view of the world has changed. Probably the most significant to me of all the learning and growing that has occurred during this process has been the paradigm shift I have experienced. My early research training was in a positivist paradigm, entrenched to the extent that paradigms were never considered as there was no recognition of alternative approaches. The transition to social science research and multiple perspectives has been fascinating but bumpy and I am still discovering ways in which my heritage directs my thought processes. Ontology, epistemology and interpretivism were all new concepts and deeply challenging. I experienced really clearly the cognitive dissonance of a threshold concept, which I found fascinating (if also distressing!) as someone who includes threshold concepts in teaching learning design. In creating this thesis I have been thinking, seeing and writing all in a new way. Coming through this experience of paradigm shift gave me a real passion to share my experience, particularly with others embarking on educational research from a similar background. I presented at two doctoral conferences in 2018: my faculty postgraduate research conference and the Southwest Doctoral Partnership conference. I have also taught a session on this in the 'Enquiry into academic practice' module on our Postgraduate Certificate in Academic Professional Practice since June 2019. I have had feedback from colleagues with similar backgrounds thanking me for how the session has really

helped them. This is an example of how this research has impacted my own practice and that of colleagues.

This has also been a journey of gaining identity as a researcher and growing in confidence to make an argument. Imposter syndrome was a phrase often bandied around in our study group and illustrated a shared challenge of taking on this new identity. I have found myself slowly developing my own voice, my confidence to give an opinion in an academic context and argue my own take on my research. I am particularly grateful to my supervisors for their encouragement and support in this. They recognised the need to build my confidence whilst also offering feedback and constructive criticism, not an easy balance to achieve. I have become a phenomenographer, the research approach still fascinates me as it did when I first read of it, as does the associated theory of learning through variation. This is something I would like to take forward in my practice and perhaps further research.

The additional challenges of undertaking doctoral study on top of a full-time job and the rest of life was something I underestimated. Six plus years is a long time to constantly feel you should be studying. I started this journey as both work and life were settled and a bit routine, so I was looking for a new challenge. Since then, I have met and married my husband and the Covid-19 pandemic had a significant impact on both my workload and mental capacity. My work commitments went into overdrive as a member of the digital learning team suddenly supporting a whole university transitioning to online teaching and there was no headspace for anything else. As with most people, the emotional impact of the pandemic also took a toll. The delay to completion caused by these circumstances has been frustrating but a growth opportunity in itself as dealing with unexpected circumstances is a part of any research endeavour. I am a believer that deep learning is often uncomfortable and challenging, so I treasure the struggles as some kind of badge of accomplishment and character building. Would I do things differently if I did this again? Yes and no. I don't believe in regrets and the journey we have taken is what makes us who we are. Hindsight is just that and knowing what I know now would put me in a very different starting place. However, from a research perspective there are things I would do differently in another project

having learned from this experience. For example, knowing the challenges of participant recruitment would mean I approach that aspect with a stronger strategy and more drive. I would have more confidence in analysing data and so would spend less time doubting my findings and trust more that I have undertaken a robust process so I can believe in my findings. I would also be more organised with my literature, I thought I was to start with, but the sheer volume meant it seemed to get a bit unwieldy.

Though I feel most of my personal gain in this research has been from the process of undertaking the study, the outcomes of the research also have personal and professional relevance to me. As discussed in the introduction chapter the motivation for this research is situated in my personal and professional experience, my interest in innovative teaching as a concept and my frustrations with rhetoric in the area. To be able to take the time to delve into the question has been a privilege. The interview conversations with colleagues were really interesting and many promises of discussing it further over a coffee once this was done were made. The outcomes themselves I have found interesting and in ways surprising. I have experienced the joy of creating new knowledge and the reward of the satisfaction of sharing this with others. Using knowledge I created in staff development workshops to generate discussion and make people think gave me a sense of success and pride. A challenging, emotional and tumultuous journey maybe, but one I am much richer for having undertaken.

REFERENCES

AdvanceHE (2011) *The UK Professional Standards Framework for teaching and supporting learning in higher education.* [online]. Available from: https://www.advance-he.ac.uk/knowledge-hub/uk-professional-standards-framework-ukpsf [Accessed 15 July 2022].

Åkerlind, G. (2005a) Learning about phenomenography: Interviewing, data analysis and the qualitative research paradigm. In: Bowden, J.A. and Green, P., eds. (2005) *Doing Developmental Phenomenography*. Melbourne: RMIT University Press, pp. 63–73.

Åkerlind, G. (2005b) Phenomenographic methods: A case illustration. In: Bowden, J.A. and Green, P., eds. (2005) *Doing Developmental Phenomenography*. Melbourne: RMIT University Press, pp. 103–127.

Åkerlind, G.S. (2005c) Variation and commonality in phenomenographic research methods. *Higher Education Research & Development*. 24 (4), pp. 321–334.

Åkerlind, G.S. (2017) What Future for Phenomenographic Research? On Continuity and Development in the Phenomenography and Variation Theory Research Tradition. *Scandinavian Journal of Educational Research*. 62 (6), pp. 949–958.

Åkerlind, G., Bowden, J.A. and Green, P. (2005) Learning to do phenomenography: A reflective discussion. In: Bowden, J.A. and Green, P., eds. (2005) *Doing Developmental Phenomenography*. Melbourne: RMIT University Press, pp. 74–100.

Alvesson, M. and Sandberg, J. (2011) Generating research questions through problematization. *The Academy of Management Review*. 36 (2), pp.247–271.

Ashwin, P. (2005) Variation in Students' Experiences of the 'Oxford Tutorial'. *Higher Education*. 50 (4), pp. 631–644.

Ashwin, P. (2017) What is the Teaching Excellence Framework in the United Kingdom, and Will it Work? *International Higher Education*. 88, pp .10–11.

Ashwin, P., Abbas, A. and McLean, M. (2016) Conceptualising transformative undergraduate experiences: A phenomenographic exploration of students' personal projects. *British Educational Research Journal*. 42 (6), pp. 962–977.

Ashworth, P. and Lucas, U. (2000) Achieving empathy and engagement: A practical approach to the design, conduct and reporting of

phenomenographic research. *Studies in Higher Education*. 25 (3), pp. 295–308.

Bager-Elsborg, A. (2018) How lecturers' understanding of change is embedded in disciplinary practices: a multiple case study. *Higher Education*. 76 (2), pp. 195–212.

Bailey, J. (2008) First steps in qualitative data analysis: transcribing. *Family practice*. 25 (2), pp. 127–131.

Bajada, C., Kandlbinder, P. and Trayler, R. (2019) A general framework for cultivating innovations in higher education curriculum. *Higher Education Research & Development*. 38 (3), pp. 465–478.

Barnett, R. and Hallam, S. (1999) Teaching for Supercomplexity: A Pedagogy for Higher Education. In: Mortimore, P., ed. (1999) *Understanding Pedagogy and its Impact on Learning*. London: SAGE Publications Ltd, pp. 137–154.

Barr, R. and Tagg, J. (1995) From teaching to learning-A new paradigm for undergraduate education. *Change*. 27 (6), pp.13-25.

Baughan, P. (2019) *"The Sociological Imagination": Researching Sustainability, Using Phenomenography.* PhD, Lancaster University.

Beetham, H. and Sharpe, R., eds. (2013) *Rethinking pedagogy for a digital age: designing for 21st century learning.* 2nd ed. Abingdon: Routledge.

Beghetto, R.A. (2017) Creativity in Teaching. In: Kaufman, J.C., Glăveanu, V.P. and Baer, J., eds. (2017) *The Cambridge Handbook of Creativity across Domains*. Cambridge: Cambridge University Press, pp. 549–564.

Bell, D. (2016) The reality of STEM education, design and technology teachers' perceptions: a phenomenographic study. *International Journal of Technology and Design Education*. 26 (1), pp. 61–79.

Ben-Ari, A. and Enosh, G. (2013) Power Relations and Reciprocity: Dialectics of Knowledge Construction. *Qualitative health research*. 23 (3), pp. 422–429.

Biesta, G. (2015) Freeing Teaching from Learning: Opening Up Existential Possibilities in Educational Relationships. *Studies in Philosophy and Education*. 34 (3), pp. 229–243.

Biggs, J. (1999) What the Student Does: teaching for enhanced learning. *Higher Education Research & Development*. 18 (1), pp. 57–75.

Boden, K.E. (2019) Pedagogical Innovation among University Faculty. *Creative Education*. 10 (5), pp. 848–861.

Bowden, J.A. (2005) Reflections on the phenomenographic team research process. In: Bowden, J.A. and Green, P., eds. (2005) *Doing Developmental Phenomenography*. Melbourne: RMIT University Press, pp. 11–31.

Bowden, J.A. and Green, P., eds. (2005) *Doing developmental phenomenography.* Melbourne: RMIT University Press.

Bowden, J.A., Green, P., Barnacle, R., Cherry, N. and Usher, R. (2005) Academics' ways of understanding success in research activities. In: Bowden, J.A. and Green, P., eds. (2005) *Doing Developmental Phenomenography*. Melbourne: RMIT University Press, pp. 128–144.

Boyer, E. (1990) *Scholarship Reconsidered: Priorities of the professoriate.* New York: The Carnegie Foundation for the Advancement of Teaching.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3 (2), pp. 77–101.

Breen, L.J. (2007) The researcher 'in the middle': Negotiating the insider/outsider dichotomy. *The Australian Community Psychologist*. 19 (1), pp.163–174.

British Educational Research Association [BERA] (2011) *Ethical Guidelines for Educational Research*. London: BERA.

British Educational Research Association [BERA] (2018) *Ethical Guidelines for Educational Research.* 4th ed. London: BERA.

Brooks, L., Baird, H. and Shenstone, A. (2014) *Independent Review of the Higher Education Academy: A report to HEFCE by Capita Consulting.* London: Capita Consulting.

Bryman, A. (2008) The End of the Paradigm Wars?. In: Alasuutari, P., Bickman, L. and Brannen, J. eds (2008) *The SAGE Handbook of Social Research Methods*. [online]. London: SAGE Publications Ltd, pp. 12–25. [Accessed 19 April 2021].

Budd, R. (2017) Undergraduate orientations towards higher education in Germany and England: problematizing the notion of 'student as customer'. *Higher Education*. 73 (1), pp. 23–37.

Bunce, L., Baird, A. and Jones, S.E. (2017) The student-as-consumer approach in higher education and its effects on academic performance. *Studies in Higher Education*. 42 (11), pp. 1958–1978.

Burke, J.E. (1989) Becoming an 'Inside-Outsider'. *Journal of the Anthropological Society of Oxford (JASO)*. 20 (3), pp. 219–227.

Callaghan, J. (2014) Professions and Professionalization. In: Teo, T. (ed.) *Encyclopedia of Critical Psychology*. [online]. New York: Springer New York [Accessed 18 August 2021].

Casanovas, I. (2010) Exploring the Current Theoretical Background About Adoption Until Institutionalization of Online Education in Universities: Needs for Further Research. *Electronic Journal of E-Learning*. 8 (2), pp. 73–84.

Chowning, K. and Campbell, N.J. (2009) Development and validation of a measure of academic entitlement: Individual differences in students' externalized responsibility and entitled expectations. *Journal of Educational Psychology*. 101 (4), pp. 982–997.

Cibangu, S.K. and Hepworth, M. (2016) The uses of phenomenology and phenomenography: A critical review. *Library & Information Science Research*. 38 (2), pp. 148–160.

Clarke, V. and Braun, V. (2017) Thematic analysis. *The Journal of Positive Psychology*. 12 (3), pp. 297–298.

Cohen, L., Manion, L. and Morrison, K. (2018) *Research Methods in Education*. 8th ed. New York: Routledge.

Cohen, W.M. and Sauermann, H. (2007) Schumpeter's prophecy and individual incentives as a driver of innovation. In: Malerba, F. and Brusoni, S., eds. *Perspectives on innovation*. Cambridge: Cambridge University Press, pp. 73–104.

Colleran-Santos, C.C. (2014) Innovative Teaching Method in Emergency Response Education of Undergraduate Nursing Students. *Journal of Nursing Education*. 53 (8), p. 483.

Collier-Reed, B.I., Ingerman, Å. and Berglund, A. (2009) Reflections on trustworthiness in phenomenographic research: Recognising purpose, context and change in the process of research. *Education as Change*. 13 (2), pp. 339–355.

Connolly, M., Jones, C. and Jones, N. (2007) New approaches, new vision: capturing teacher experiences in a brave new online world. *Open Learning: The Journal of Open, Distance and e-Learning*. 22 (1), pp. 43–56.

Cossham, A.F. (2017) An evaluation of phenomenography. *Library and Information Research*. 41 (125), pp. 17–31.

Costa, A.L. and Kallick, B. (1993) Through the lens of a critical friend. *Educational Leadership*. 51 (2), pp.49-51.

Costley, C. and Gibbs, P. (2006) Researching others: care as an ethic for practitioner researchers. *Studies in Higher Education*. 31 (1), pp. 89–98.

Costley, C., Elliott, G. and Gibbs, P. (2010) *Doing work based research: approaches to enquiry for insider-researchers*. London: SAGE.

Cotton, D.R.E., Miller, W. and Kneale, P. (2018) The Cinderella of academia: Is higher education pedagogic research undervalued in UK research assessment?. *Studies in Higher Education*. 43 (9), pp. 1625–1636.

Cousin, G. (2012) Getting our students to engage: a review of two key contributions 10 years on. *Higher Education Research & Development*. 31 (1), pp. 15–20.

Cowan, J. (2006) *On becoming an innovative university teacher: reflection in action.* 2nd edition. [online]. Maidenhead: Open University Press. [Accessed 8 May 2021].

Crotty, M. (1998) *The foundations of social research: meaning and perspective in the research process.* London: SAGE.

Data Protection Act 2018 [online]. *Chapter 12.* (2018) legislation.gov.uk. Available from: https://www.legislation.gov.uk/ukpga/2018/12 [Accessed 6 February 2019].

Department for Business, Energy & Industrial Strategy (2021) *UK Innovation Strategy: leading the future by creating it* [online]. London: Department for Business, Energy & Industrial Strategy. Available from: https://www.gov.uk/government/publications/uk-innovation-strategy-leading-the-future-by-creating-it [Accessed 24 August 2021].

Department for Business, Innovation and Skills (2015) *Fulfilling our potential: teaching excellence, social mobility and student choice* [online]. London: Department for Business, Innovation and Skills. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/474227/BIS-15-623-fulfilling-our-potential-teaching-excellence-social-mobility-and-student-choice.pdf [Accessed 14 August 2021].

Department for Business, Innovation and Skills (2016) *Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice* [online]. London: Department for Business, Innovation and Skills. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/523546/bis-16-265-success-as-a-knowledge-economy-web.pdf. [Accessed 14 August 2021].

Department for Education (2018) *Office for Students Framework Document* [online]. London: Department for Education. Available from: https://www.officeforstudents.org.uk/media/1441/ofs-framework-28-april-2018.pdf [Accessed 15 July 2022].

Department for Education and Skills (2003) *The future of higher education* [online]. London: Department for Education and Skills. Available from: http://www.educationengland.org.uk/documents/pdfs/2003-white-paper-higher-ed.pdf [Accessed 14 August 2021].

Dodgson, M. and Gann, D. (2010) *Innovation: a very short introduction* Oxford: Oxford University Press.

Esposito, E. and Stark, D. (2019) What's Observed in a Rating? Rankings as Orientation in the Face of Uncertainty. *Theory, Culture & Society*. 36 (4), pp. 3–26.

Fagerberg, J., Mowery, D.C. and Nelson, R.R. (2006) *The Oxford handbook of innovation.* Oxford: Oxford University Press.

Fanghanel, J., Pritchard, J., Potter, J. and Wisker, G. (2016) *Defining and supporting the Scholarship of Teaching and Learning (SoTL): A sector-wide study. Literature review* [online]. York: Higher Education Academy. Available from: https://www.advance-he.ac.uk/knowledge-hub/defining-and-supporting-scholarship-teaching-and-learning-sotl-sector-wide-study [Accessed 30 July 2021].

Fernández-Cruz, F.J. and Rodríguez-Legendre, F. (2021) The innovation competence profile of teachers in higher education institutions. *Innovations in Education and Teaching International* [online]. [Accessed 8 May 2021].

Fidalgo-Blanco, A., Martinez-Nuñez, M., Borrás-Gene, O. and Sanchez-Medina, J.J. (2017) Micro flip teaching – An innovative model to promote the active involvement of students. *Computers in Human Behavior*. 72, pp. 713–723.

Finance Act 2016 [online]. *Chapter 24.* (2016) legislation.gov.uk. Available from: https://www.legislation.gov.uk/ukpga/2016/24/part/6 [Accessed 15 July 2022].

Flanagan, N. and Wilson, E. (2018) What makes a good placement? Findings of a social work student-to-student research study. *Social Work Education*. 37 (5), pp. 565–580.

Floyd, A. and Arthur, L. (2012) Researching from within: external and internal ethical engagement. *International Journal of Research & Method in Education*. 35 (2), pp. 171–180.

Fraser, S. (2019) Understanding innovative teaching practice in higher education: a framework for reflection. *Higher Education Research & Development*. 38 (7), pp. 1371–1385.

Given, L.M. (2008) *The SAGE Encyclopedia of Qualitative Research Methods* [online]. Los Angeles: Sage Publications Inc.

Godin, B. (2014) Innovation after the French Revolution, or, Innovation Transformed: From Word to Concept. *Redescriptions: Political Thought, Conceptual History and Feminist Theory*. 17 (2), pp.201-231.

Godin, B. (2015) *Innovation contested: the idea of innovation over the centuries*. New York: Routledge.

Godin, B. (2016) Technological Innovation: On the Origins and Development of an Inclusive Concept. *Technology and Culture*. 57 (3) pp. 527-556.

Godin, B. (2020) *The Idea of Technological Innovation: A Brief Alternative History*. Cheltenham: Edward Elgar Publishing.

Gregory, S., Scutter, S., Jacka, L., McDonald, M., Farley, H. and Newman, C. (2015) Barriers and Enablers to the Use of Virtual Worlds in Higher Education: An Exploration of Educator Perceptions, Attitudes and Experiences. *Journal of Educational Technology & Society*. 18 (1), pp. 3–12.

Gunn, A. (2018) Metrics and methodologies for measuring teaching quality in higher education: developing the Teaching Excellence Framework (TEF). *Educational Review*. 70 (2), pp. 129–148.

Hall, R. and Smyth, K. (2016) Dismantling the Curriculum in Higher Education. *Open Library of Humanities* [online]. 2 (1). [Accessed 20 August 2021].

Hamill, C. and Sinclair, H. (2010) Bracketing - practical considerations in Husserlian phenomenological research. *Nurse Researcher*. 17 (2), pp .16–24.

Hammersley, M. (2003) Recent Radical Criticism of Interview Studies: Any implications for the sociology of education?. *British Journal of Sociology of Education*. 24 (1), pp .119–126.

Hammersley, M. and Traianou, A. (2016) *Ethics in qualitative research : controversies and contexts.* London: SAGE.

Hannan, A. (2005) Innovating in higher education: contexts for change in learning technology. *British Journal of Educational Technology*. 36 (6), pp. 975–985.

Harris, L.R. (2011) Phenomenographic perspectives on the structure of conceptions: The origins, purposes, strengths, and limitations of the what/how and referential/structural frameworks. *Educational Research Review*. 6 (2), pp. 109–124.

HEA, The Pedagogy for Employability Group (2014) *Pedagogy for employability* [online]. York: The Higher Education Academy. Available from: https://www.advance-he.ac.uk/knowledge-hub/pedagogy-employability [Accessed 6 September 2022].

Higher Education and Research Act 2017 [online]. Chapter 29. (2017) legislation.gov.uk. Available from: https://www.legislation.gov.uk/ukpga/2017/29/ [Accessed 29 July 2021].

Hubble, S. and Bolton, P. (2019) *Degree Apprenticeships Briefing Paper* [online]. London: House of Commons Library. (No.8741). Available from: https://researchbriefings.files.parliament.uk/documents/CBP-8741/CBP-8741.pdf [Accessed 15 July 2022].

Jabbar, A., Analoui, B., Kong, K. and Mirza, M. (2018) Consumerisation in UK higher education business schools: higher fees, greater stress and debatable outcomes. *Higher Education*. 76 (1), pp. 85–100.

Jaskyte, K., Taylor, H. and Smariga, R. (2009) Student and Faculty Perceptions of Innovative Teaching. *Creativity Research Journal*. 21 (1), pp. 111–116.

Jenkins, M., Browne, T., Walker, R. and Hewitt, R. (2011) The development of technology enhanced learning: findings from a 2008 survey of UK higher education institutions. *Interactive Learning Environments*. 19 (5), pp. 447–465.

Johannessen, J.-A., Olsen, B. and Lumpkin, G.T. (2001) Innovation as newness: what is new, how new, and new to whom? *European Journal of Innovation Management*. 4 (1), pp. 20–31.

Kain, D.J. (2003) Teacher-Centered versus Student-Centered: Balancing Constraint and Theory in the Composition Classroom. *Pedagogy*. 3 (1), pp. 104–108.

Katz, C.C., Elsaesser, C., Klodnik, V.V. and Khare, A. (2019) Mentoring Matters: An Innovative Approach to Infusing Mentorship in a Social Work Doctoral Program. *Journal of Social Work Education*. 55 (2), pp. 306–313.

Kember, D. and Gow, L. (1994) Orientations to Teaching and Their Effect on the Quality of Student Learning. *The Journal of Higher Education*. 65 (1), pp. 58–74.

King, H. (2019) Stepping back to move forward: The wider context of assessment. In: Bryan, C. and Clegg, K., eds. (2019) *Innovative Assessment in Higher Education: A Handbook for Academic Practitioners*. 2nd ed [online]. Abingdon: Routledge, pp. 9–21. [Accessed 15 June 2022]

King, H. (2022) Introduction: Developing expertise for teaching in higher education. In: King, H. ed. (2022) *Developing Expertise for Teaching in Higher Education* [online]. Abingdon: Routledge, pp. 1–12. [Accessed 6 July 2022].

Kinnunen, P. and Simon, B. (2012) Phenomenography and grounded theory as research methods in computing education research field. *Computer Science Education*. 22 (2), pp. 199–218.

Kirton, M. (1976) Adaptors and innovators: A description and measure. *Journal of Applied Psychology*. 61 (5), pp. 622–629.

Kirton, M.J. (2003) *Adaption-innovation: in the context of diversity and change.* Hove: Routledge.

Kirton, M., Bailey, A. and Glendinning, W. (1991) Adaptors and Innovators: Preference for Educational Procedures. *Journal of Psychology*. 125 (4), pp. 445–455.

Koenen, A.-K., Dochy, F. and Berghmans, I. (2015) A phenomenographic analysis of the implementation of competence-based education in higher education. *Teaching and teacher education*. 50, pp. 1–12.

Kopcha, T.J., Rieber, L.P. and Walker, B.B. (2016) Understanding university faculty perceptions about innovation in teaching and technology. *British Journal of Educational Technology*. 47 (5), pp. 945–957.

Larsson, J. and Holmström, I. (2007) Phenomenographic or phenomenological analysis: does it matter? Examples from a study on anaesthesiologists' work. *International Journal of Qualitative Studies on Health and Well-being*. 2 (1), pp. 55–64.

Larsson, M., Mårtensson, K., Price, L. and Roxå, T. (2020) Constructive friction? Charting the relation between educational research and the Scholarship of Teaching and Learning. *Teaching and Learning Inquiry*. 8 (1), pp. 61–75.

Le Gallais, T. (2008) Wherever I go there I am: reflections on reflexivity and the research stance. *Reflective Practice*. 9 (2), pp. 145–155.

Lengetti, E., Kronk, R., Ulmer, K.W., Wilf, K., Murphy, D., Rosanelli, M. and Taylor, A. (2018) An innovative approach to educating nurses to clinical

competence: A randomized controlled trial. *Nurse Education in Practice*. 33, pp. 159–163.

Locke, W. (2014) The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment. *European Journal of Education*. 49 (1), pp. 77–90.

Long, T., Cummins, J. and Waugh, M. (2017) Use of the flipped classroom instructional model in higher education: instructors' perspectives. *Journal of Computing in Higher Education*. 29 (2), pp .179–200.

Mackay, N. (1997) Constructivism and the logic of explanation. *Journal of Constructivist Psychology*. 10 (4), pp. 339–361.

Martinez-Garcia, A., Morris, S., Tscholl, M., Tracy, F. and Carmichael, P. (2012) Case-Based Learning, Pedagogical Innovation, and Semantic Web Technologies. *IEEE Transactions on Learning Technologies*. 5 (2), pp. 104–116.

Marton, F. (2015) *Necessary conditions of learning.* New York: Routledge.

Marton, F. and Booth, S.A. (1997) *Learning and awareness.* Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Marton, F. and Pang, M.F. (2013) Meanings Are Acquired from Experiencing Differences against a Background of Sameness, Rather than from Experiencing Sameness against a Background of Difference: Putting a Conjecture to the Test by Embedding It in a Pedagogical Tool. *Frontline Learning Research*. 1 (1), pp. 24–41.

Marton, F. and Pong, W.Y. (2005) On the unit of description in phenomenography. *Higher Education Research & Development*. 24 (4), pp. 335–348.

Maxwell, J.A. (2017) The Validity and Reliability of Research: A Realist Perspective. In: Wyse, D., Selwyn, N., Smith, E. and Suter, L., eds. (2017) *The BERA/SAGE handbook of educational research.* Los Angeles: SAGE, pp. 114–140.

McCaig, C., (2018) *The marketisation of English higher education: a policy analysis of a risk-based system.* Bingley: Emerald Publishing Limited.

McGuigan, N. (2017) *A phenomenographic study of students' perceptions of accounting*. PhD, University of the West of England.

Mercer, J. (2007) The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*. 33 (1), pp. 1–17.

Merriam, S.B. and Tisdell, E.J. (2016) *Qualitative research: a guide to design and implementation.* 4th ed [online]. San Francisco, CA: Jossey-Bass. [Accessed 3 December 2020].

Mertala, P. (2017) Wag the dog – The nature and foundations of preschool educators' positive ICT pedagogical beliefs. *Computers in Human Behavior*. [online]. 69, pp.197–206. [Accessed 25 July 2022].

Meyer, J.H.F. and Land, R. (2005) Threshold concepts and troublesome knowledge (2): epistemological considerations and a conceptual framework for teaching and learning. *Higher education*. 49 (3), pp. 373–388.

Miller, A. and Bull, R.M. (2013) Do you want to play? Factors influencing nurse academics' adoption of simulation in their teaching practices. *Nurse education today*. 33 (3), pp. 241–246.

Mimirinis, M. (2019) Qualitative differences in academics' conceptions of e-assessment. *Assessment and evaluation in higher education*. 44 (2), pp. 233–248.

Mishler, E.G. (1991) Representing Discourse: The Rhetoric of Transcription. *Journal of Narrative and Life History*. 1 (4), pp. 255–280.

Morse, J.M., Barrett, M., Mayan, M., Olson, K. and Spiers, J. (2002) Verification Strategies for Establishing Reliability and Validity in Qualitative Research. *International Journal of Qualitative Methods*. 1 (2), pp. 13–22.

Muller, J.Z. (2019) *The tyranny of metrics*. Princeton: Princeton University Press.

Naidoo, R. and Williams, J. (2015) The neoliberal regime in English higher education: charters, consumers and the erosion of the public good. *Critical Studies in Education*. 56 (2), pp. 208–223.

National Committee of Inquiry into Higher Education [NCIHE] (1997) *Higher Education in the learning society (Dearing report).* London: The Stationery Office.

Neary, M. (2014) From the International Desk. *Council on Undergraduate Research Quarterly*. 35 (2), pp. 28–34.

NOvation (no date) *NOvation – Critical Studies of Innovation/ About the Journal*. Available from:

http://www.novation.inrs.ca/index.php/novation/about [Accessed 23 August 2021].

O'Neill, O. (2017) Accountable Institutions, Trustworthy Cultures. *Hague Journal on the Rule of Law*. 9 (2), pp. 401–412.

OECD (2015a) *The Innovation Imperative: Contributing to Productivity, Growth and Well-Being* [online]. Paris: OECD Publishing. Available from: https://www.oecd-ilibrary.org/science-and-technology/the-innovation-imperative_9789264239814-en [Accessed 25 August 2021].

OECD (2015b) *The Innovation Imperative: Contributing to Productivity, Growth and Well-Being: STI Policy note* [online]. Paris: OECD Publishing. Available from: https://www.oecd.org/sti/Innovation-Imperative-Policy-Note.pdf [Accessed 24 August 2021].

OECD/Eurostat (2005) *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data.* 3rd edition. [online]. Paris: OECD Publishing. Available from: https://www.oecd-ilibrary.org/science-and-technology/oslo-manual_9789264013100-en [Accessed 24 August 2021].

OECD/Eurostat (2018) *Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation,* 4th Edition [online]. Paris: OECD Publishing. Available from: https://www.oecd-ilibrary.org/science-and-technology/oslo-manual-2018_9789264304604-en [Accessed 24 August 2021].

Ozolins, L.-L., Elmqvist, C. and Hörberg, U. (2014) A nursing student-run health clinic – an innovative project based on reflective lifeworld-led care and education. *Reflective Practice*. 15 (4), pp. 415–426.

Pillow, W. (2003) Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education*. 16 (2), pp. 175–196.

Prensky, M. (2001) Digital Natives, Digital Immigrants Part 1. *On the Horizon*. 9 (5), pp. 1–6.

QAA (2018) *The revised UK Quality Code for Higher Education* [online]. Available from: https://www.qaa.ac.uk/quality-code [Accessed 15 July 2021].

Rayner, M., Smyth, K. and Fotheringham, H. (2020) Academics' conceptions of and approaches to research-teaching linkages: Challenges for realising the curriculum as praxis. *Journal of Perspectives in Applied Academic Practice* [online]. 8 (2), pp. 25–38. [Accessed 1 September 2021]

Richardson, J.T.E. (1999) The concept and methods of phenomenographic research. *Review of Educational Research*. 69 (1), pp. 53–82.

Robertson, A., Cleaver, E. and Smart, F. (2019) *Beyond the metrics: Identifying, evidencing and enhancing the less tangible assets of higher education* [online]. Glasgow: QAA Scotland. Available from: https://www.enhancementthemes.ac.uk/completed-enhancement-themes/evidence-for-enhancement/defining-and-capturing-evidence/the-intangibles-beyond-the-metrics [Accessed 12 August 2022].

Robson, C. (2002) *Real world research: a resource for social scientists and practitioner-researchers.* 2nd ed. Oxford: Blackwell.

Ross, S.M., Morrison, G.R. and Lowther, D.L. (2010) Educational Technology Research Past and Present: Balancing: Rigor and Relevance to Impact School Learning. *Contemporary Educational Technology*. 1 (1), pp. 17–35.

Ryen, A. (2007) Ethical Issues. In: Seale, C., Gobo, G., Gubrium, J. and Silverman, D., eds. (2007) *Qualitative Research Practice*. London: Sage, pp. 218–235.

Sagy, O., Hod, Y. and Kali, Y. (2019) Teaching and learning cultures in higher education: a mismatch in conceptions. *Higher Education Research & Development*. 38 (4), pp. 849–863.

Sagy, O., Kali, Y., Tsaushu, M. and Tal, T. (2018) The Culture of Learning Continuum: promoting internal values in higher education. *Studies in Higher Education*. 43 (3), pp. 416–436.

Säljö, R. (1997) Talk as Data and Practice - a critical look at phenomenographic inquiry and the appeal to experience. *Higher education research and development*. 16 (2), pp. 173–190.

Samuelowicz, K. and Bain, J.D. (2001) Revisiting academics' beliefs about teaching and learning. *Higher Education*. 41 (3), pp. 299–325.

Sandbergh, J. (1997) Are Phenomenographic Results Reliable?. *Higher Education Research & Development*. 16 (2), pp. 203–212.

Savin-Baden, M. and Major, C.H. (2013) *Qualitative research: the essential guide to theory and practice.* London: Routledge.

Schumpeter, J.A. (1934) *The theory of economic development.* Reprint. New Jersey, Transaction Publishers, 1983.

Schweighofer, P. and Ebner, M. (2015) Aspects to Be Considered when Implementing Technology-Enhanced Learning Approaches: A Literature Review. *Future Internet*. 7 (1), pp. 26–49.

Scott, R. (2018) *It's Not Lack of Time, It's Lack of Priorities.* Available from: https://medium.com/swlh/its-not-lack-of-time-it-s-lack-of-priorities-d67d8c3051e8 [Accessed 11 August 2022].

Selwyn, N. (2009) The digital native – myth and reality. *Aslib Proceedings*. 61 (4), pp. 364–379.

Sikes, P. (2006) On dodgy ground? Problematics and ethics in educational research. *International Journal of Research & Method in Education*. 29 (1), pp. 105–117.

Silverman, D. (2013) *Doing qualitative research.* 4th ed. Los Angeles: SAGE.

Sin, S. (2010) Considerations of Quality in Phenomenographic Research. *International Journal of Qualitative Methods*. 9 (4), pp. 305–319.

Singh, G. and Hardaker, G. (2014) Barriers and enablers to adoption and diffusion of eLearning: A systematic review of the literature - a need for an integrative approach. *Education & Training*. 56 (2/3), pp. 105–121.

Skelton, A. (2004) Understanding 'teaching excellence' in higher education: a critical evaluation of the National Teaching Fellowships Scheme. *Studies in Higher Education*. 29 (4), pp. 451–468.

Smith, K. (2011) Cultivating innovative learning and teaching cultures: a question of garden design. *Teaching in Higher Education*. 16 (4), pp. 427–438.

Spencer, L., Ritchie, J., Lewis, J. and Dillon, L. (2003) *Quality in qualitative evaluation: A framework for assessing research evidence. A Quality Framework* [online]. London: Cabinet Office. Available from: https://www.gov.uk/government/publications/government-social-research-framework-for-assessing-research-evidence [Accessed 6 July 2021].

Staller, K.M. (2010) Qualitative research. In Salkind, N. ed. (2010) *Encyclopedia of Research Design* [online]. California: SAGE Publications Inc. pp. 1159-1163. [Accessed 19 April 2021].

Stanton, A.D. and Stanton, W.W. (2013) Digital Natives or Digital Neophytes: Business Student Perspectives on Course-Based Web 2.0 Applications. *Academy of Educational Leadership Journal*. 17 (1), pp. 119–137.

Starr-Glass, D. (2011) Reconsidering Boyer's Reconsideration: Paradigms, Sharing, and Engagement. *International Journal for the Scholarship of Teaching and Learning* [online]. 5 (2). [Accessed 13 June 2022].

Stokes, A. (2011) A phenomenographic approach to investigating students' conceptions of geoscience as an academic discipline. *Geological Society of America Special Papers*. 474, pp. 23–35.

Strathern, M. (1997) 'Improving ratings': audit in the British University system. *European Review*. 5 (3), pp. 305–321.

Stum, J. (2009) Kirton's Adaption-Innovation Theory: Managing Cognitive Styles in Times of Diversity and Change. *Emerging Leadership Journeys* [online]. 2 (1). [Accessed 9 May 2021].

Svensson, L. (1997) Theoretical Foundations of Phenomenography. *Higher Education Research & Development*. 16 (2), pp. 159–171.

Svensson, L. (2016) Towards an Integration of Research on Teaching and Learning. *Scandinavian Journal of Educational Research*. 60 (3), pp. 272–285.

Swann, G.M.P. (2014) *Common Innovation: How We Create the Wealth of Nations Common Innovation* [online]. Cheltenham: Edward Elgar Publishing. [Accessed 5 May 2021].

Swedberg, R. (2000) *Entrepreneurship: the social science view.* Oxford: Oxford University Press.

Thompson, D.W. (2019) Widening participation research and practice in the United Kingdom on the twentieth anniversary of the Dearing report, reflections on a changing landscape. *Educational Review*. 71 (2), pp .182–197.

Thurlings, M., Evers, A.T. and Vermeulen, M. (2015) Toward a Model of Explaining Teachers' Innovative Behavior. *Review of Educational Research*. 85 (3), pp. 430–471.

Tidd, J. and Bessant, J. (2013) *Managing Innovation: Integrating Technological, Market and Organizational Change.* 5th ed. Chichester: Wiley.

Tight, M. (2016) Phenomenography: the development and application of an innovative research design in higher education research. *International Journal of Social Research Methodology*. 19 (3), pp. 319–338.

Trigwell, K. (2000) A phenomenographic interview on phenomenography. In: Bowden, J.A. and Walsh, E., eds. (2000) *Phenomenography*. Melbourne: RMIT, pp. 62–82.

Trinidad, J.E. (2020) Understanding student-centred learning in higher education: students' and teachers' perceptions, challenges, and cognitive gaps. *Journal of Further and Higher Education*. 44 (8), pp. 1013–1023.

Tsai, P.-S., Tsai, C.-C. and Hwang, G.-H. (2011) College students' conceptions of context-aware ubiquitous learning: A phenomenographic analysis. *The Internet and Higher Education*. 14 (3), pp. 137–141.

Unluer, S. (2012) Being an Insider Researcher While Conducting Case Study Research. *The Qualitative Report*. 17 (29), pp.1-14.

Uzoka, F.-M., Fedoruk, A., Osakwe, C., Osuji, J. and Gibb, K. (2013) A multi-criteria framework for assessing scholarship based on Boyer's scholarship model. *Information Knowledge Systems Management*. 12 (1), pp. 25–51.

Von Stamm, B. (2008) *Managing innovation, design and creativity* 2nd ed. Chichester: John Wiley & Sons, Ltd.

Walder, A.M. (2014) The concept of pedagogical innovation in higher education. *Education Journal*. 3 (3), pp. 195–202.

Walsh, E. (2000) Phenomenographic analysis of interview transcripts. In: Bowden, J.A. and Walsh, E., eds. (2000) *Phenomenography*. Melbourne: RMIT University Press, pp. 19–33.

Watson, D. (2015) The coming of post-institutional higher education. *Oxford Review of Education*. 41 (5), pp. 549–562.

Watson, D. and Bowden, R. (2007) The fate of the Dearing recommendations: policy and performance in UK HE, 1997-2007. In: Watson, D. and Amoah, M., eds. (2007) *The Dearing Report: ten years on*. London: Institute of Education, pp. 6–50.

Webb, G. (1997) Deconstructing deep and surface: Towards a critique of phenomenography. *Higher Education*. 33 (2), pp. 195–212.

Williamson, B. (2019) Policy networks, performance metrics and platform markets: Charting the expanding data infrastructure of higher education. *British Journal of Educational Technology*. 50 (6), pp. 2794–2809.

Wisdom, J., Chor, K.H.B., Hoagwood, K. and Horwitz, S. (2014) Innovation Adoption: A Review of Theories and Constructs. *Administration and Policy in Mental Health and Mental Health Services Research*. 41 (4), pp. 480–502.

Wolff, W.I. (2008) "A chimera of sorts": Rethinking educational technology grant programs, courseware innovation, and the language of educational change. *Computers & Education*. 51 (3), pp. 1184–1197.

Zhu, C. (2015) Organisational culture and technology-enhanced innovation in higher education. *Technology, Pedagogy and Education*. 24 (1), pp. 65–79.

Zhu, C. and Engels, N. (2014) Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management Administration & Leadership*. 42 (1), pp. 136–158.

Zhu, C., Wang, D., Cai, Y. and Engels, N. (2013) What core competencies are related to teachers' innovative teaching?. *Asia-Pacific Journal of Teacher Education*. 41 (1), pp. 9–27.

APPENDICES

Appendix A - Ethical approval letter

Faculty of Arts, Creative Industries and Education
Frenchay Campus
Coldharbour Lane
Bristol BS16 2QY

Tel: 0117 328 1170

UWE REC REF No: ACE.18.04.059

30th April 2018

Clare Denholm
[redacted]
Frenchay Campus
UWE

Dear Clare

Application title: A phenomenographic study of academics' perspectives on adoption of pedagogic innovations in UK Higher Education

Your ethics application was considered by the Faculty Research Ethics Committee and, based on the information provided, has been given ethical approval to proceed.

You must notify the committee in advance if you wish to make any significant amendments to the original application using the amendment form at http://www1.uwe.ac.uk/research/researchethics/applyingforapproval.aspx

Please note that any information sheets and consent forms should have the UWE logo. Further guidance is available on the web: https://intranet.uwe.ac.uk/tasks-guides/Guide/writing-and-creating-documents-in-the-uwe-bristol-brand

The following standards conditions also apply to all research given ethical approval by a UWE Research Ethics Committee:

1. You must notify the relevant UWE Research Ethics Committee in advance if you wish to make significant amendments to the original application: these include any changes to the study protocol which have an ethical dimension. Please note that any changes approved by an external research ethics committee must also be communicated to the relevant UWE committee. Amendments should be requested using the form at http://www1.uwe.ac.uk/research/researchethics/applyingforapproval.aspx.

2. You must notify the University Research Ethics Committee if you terminate your research before completion;

3. You must notify the University Research Ethics Committee if there are any serious events or developments in the research that have an ethical dimension.

Please note: The UREC is required to monitor and audit the ethical conduct of research involving human participants, data and tissue conducted by academic staff, students and researchers. Your project may be selected for audit from the research projects submitted to and approved by the UREC and its committees.

We wish you well with your research.

Yours sincerely

[redacted]

Jane Andrews
Chair Faculty of Arts, Creative Industries & Education
Research Ethics Committee

c.c. Elizabeth Cleaver

Note: signature blanked for privacy purposes

Appendix B – Participant information sheet

Participant Information Sheet

Research Project: Academics' views on innovative teaching and learning.

Researcher name: Clare Denholm

You are invited to participate in a research study on innovation in teaching and learning. Before you decide whether to participate it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is this research about?

'Innovative teaching and learning' is a phrase used often both at UWE and in wider HE context. It appears in strategies, department and job titles and numerous articles on teaching and learning. Yet what 'innovation' means in this context is unclear, people have different ideas on what it is and think about innovation in different ways. With this confusion, what do academics think is being asked of them when guided by strategies that advocate 'innovative teaching and learning'? This study is interested in exploring different perspectives on innovation in teaching and learning among academics at UWE. I hope this will lead to a better understanding of the ways academics view innovation in teaching and learning to contribute to discussions in the area.

Why take part?

Participating in this study offers you the opportunity to contribute to our understanding of innovation in teaching and learning. In literature and discussions on this topic the views of academics are under-represented, I would really appreciate you sharing your views to give academic voice to a current issue. I hope participating in the study will also offer you an opportunity to reflect upon your practice in this context. I am seeking to involve 10-15 participants with a range of views on the topic, the focus of this project is to explore variation. I hope this can aid understanding of participation in innovative teaching practice and inform strategy and staff development initiatives.

What will be expected of me?

If you choose to participate you will be asked to take part in one interview of approximately an hour. This interview will be conducted during working hours on UWE campuses. You will be asked about your views and experience of innovation in teaching and learning. These interviews will be audio recorded and later transcribed.

What are the risks?

No risks or discomforts are expected and any personal information that could identify you will be removed or changed before data is shared with other researchers or outputs are published. You will be given a copy of this information sheet and asked to sign a consent form. You will be free to withdraw at any time without giving a reason and without consequence. If you have concerns during the study please contact me in the first instance, followed by my supervisory team (see below).

What will happen to my information?

Any information or personal details gathered in the course of the research will be confidential and data will be kept securely in accordance with UWE policies. Any personal information that could identify you will be removed or changed before data is shared with other researchers or outputs are published. Only Clare and the supervisory team will have access to identifiable data. If transcription is undertaken by a third-party this will be in line with UWE policies for confidentiality and data protection which, in turn, align to GDPR. The supervisory team will only have access to data containing pseudonyms. Any quotations used in final publications will be given pseudonyms and identifiable references removed or changed. You may request a copy of data collected about you and a summary of the results and any publications if you wish. Requests for data about you must be made within 4 weeks of the data being generated and consent to use data will be assumed after 4 weeks if no request is made. If a request for data is made, consent to use the data will be assumed if no response is received 4 weeks after the request is fulfilled. Pseudonymised data may be deposited in a data archive after the completion of the study where other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form. Local copies of the data will be securely disposed of once the outputs are complete.

What are the intended research outputs?

The primary research output for this study will be a thesis to meet the requirements for the degree of Doctor of Education. It is also intended that outcomes will be presented at relevant conference(s) and published in an appropriate peer reviewed journal. Outcomes may also be used to inform policy and staff development.

Who's involved?

The research is being conducted by Clare Denholm, Learning Developer in the Faculty of Business and Law and Doctor of Education student. This research is being undertaken to meet the requirements for the degree of Doctor of Education under the supervision of [redacted]. Please contact [redacted] for further information.

Thank you for considering participating.

Appendix C – Participant consent form

Consent Form

I _____ have read and understand the participant information sheet provided and any questions I have asked have been answered to my satisfaction.

I am aware of the procedures involved in this study. I agree to participate in this research, knowing I can withdraw from further participation at any time without consequence and I do not have to give any reasons for why I no longer want to take part. I am aware I may request a copy of data collected about me and a summary of the results and any publications. I realise requests for data about me must be made within 4 weeks of the data being generated and consent to use data will be assumed after 4 weeks if no request is made. I am aware that if I do request data about me, consent to use the data will be assumed if no response is received 4 weeks after the request is fulfilled.

I agree to personal information being collected and to interviews being audio recorded and transcribed. I understand that the information gathered for this study will be used only for research purposes and in ways that will not reveal who I am. I understand that only the researcher has access to any directly identifying personal data collected (e.g. email address) and that all personally identifying information collected about me will be destroyed once it is no longer needed for the study. Any personal information that could identify me will be removed or changed before data is shared with other researchers or results are made public. If the context revealed by the data could be identified, I understand that the researcher will contact me before any information is shared or results are made public.

I understand that pseudonymised data may be deposited in a data archive after the completion of the study where other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form. I also understand that my pseudonymised words may be quoted in publications, reports, web pages, and other research outputs. I agree to assign the copyright I hold in any materials related to this project to Clare Denholm unless I actively withdraw from participation.

I have been given a copy of this form to keep.

Participant's Name:

Participant's Signature: Date:

Researcher's Name:

Researcher's Signature: Date:

Project contact details for further information: [redacted]

(Researcher's / Participant's copy)

Appendix D – Table of participants showing variation sampling

Participant Number	Years of HE teaching experience	Years of discipline related professional experience	Gender	Age	Teaching qualifications and accreditations	Department
Participant_01	9.5	25+	m	56+	PGCE (HE), other	Business & Management
Participant_02	34	<1	f	56+	SFHEA	Applied Sciences
Participant_03	7	9	m	36-45	SFHEA	Applied Sciences
Participant_04	14	29	m	46-55	PGCE (HE), FHEA	Geography & Environmental Management
Participant_05	6	8	m	26-35	PG Cert LTHE, FHEA	Computer Science & Creative Technologies
Participant_06	12	30	m	46-55	PGCE (HE)	Art & Design
Participant_07	5	15	f	46-55	SFHEA	Engineering Design & Mathematics
Participant_08	2	N/A	f	26-35	QTS, PG Cert LTHE, FHEA	Business & Management
Participant_09	25	29	f	46-55	FHEA	Art & Design
Participant_10	8	N/A	f	26-35	PG Cert LTHE, FHEA	Health & Social Sciences
Participant_11	18	16	m	46-55	QTS, MA Education, other	Education & Childhood
Participant_12	10	14	m	36-45	PG Cert LTHE	Engineering Design & Mathematics
Participant_13	18	8	f	46-55	SFHEA	Law

N/A = not disclosed or a discipline without clear direct professional application
m = male
f = female
QTS = Qualified Teacher Status
PG Cert LTHE = Postgraduate Certificate in Learning and Teaching in Higher Education
PGCE (HE) = Postgraduate Certificate in Education (Higher Education)
FHEA = Fellowship of the Higher Education Academy (now Advance HE)
SFHEA = Senior Fellowship of the Higher Education Academy (now Advance HE)
other = other teaching related qualification

Appendix E – Interview schedule

Interview Protocol

- Date of interview
- Location of interview
- Time of start /end = duration

Introduction and background to study, reinforce consent and right to withdraw. Give assurance of confidentiality. Interviewee is free to interrupt or ask for clarification. State length of interview. Ask permission to turn on recording device.

Interview Questions:

1. First, by way of context, can you tell me about your current role and a little about your history as an academic? Including where you have worked and your own uni education.
2. Using the context of teaching and learning in its broadest sense, I would like you to tell me about some teaching & learning that you have been involved in that you consider was innovative in some way. Describe it to me in detail or from start to finish and tell me how you felt about it.
    a. Please could you to explain to me why you did it that way?
    b. What were the aims in doing this, or what did you hope to gain?
    c. Why do you view it as innovative?
3. I would now like you to tell me about some teaching & learning that you have been involved in that you consider was not innovative. Describe it to me in detail and tell me how you felt about it.
    a. Why do you view this as not innovative?
4. You have told me about an instance of teaching and learning that you view as being innovative in some way and an instance you view as not being innovative. Can you compare these instances and tell me why you selected them?
5. Now we have explored some examples I would like you to explain what innovative teaching and learning means to you.
    a. Check include description, feeling,

6. What is it not? /How would you describe teaching and learning that is not innovative? Are there any times you have experienced a difference in opinion, e.g. things at a conference?
7. What motivates you to be innovative?
    a. You have said 'more time', which I understand, but given there is never enough time and yet you have previously taken time to do something you consider innovative, what means it becomes a priority where you do find time?
8. Do you have an example of something you would like to do and why?
9. Before we finish is there anything else you would like to add?

Possible follow-up prompts:

- Tell me (more) about...
- Repeat significant words
- You mentioned... tell me about that....
- You mentioned... can you describe an example?
- Could you please explain what you mean by....?
- Could you explain... further?
- Could you clarify....?
- I am not sure what you mean...?
- Do you have further examples of...?
- What else did you notice/feel?
- Could you give a more detailed description?
- Just now you said... but earlier you said... how does this fit together?
- Silence – allow pauses for reflection and for participant to continue.
- I think you have mentioned but can you say more about....

Keeping on track:

- I don't mean to be pushy, but I would like to hear more about....
- I am interested in your views, not the management/norm/mine/...
- Thanks for sharing that, can we return to... remember I asked you to tell me about...
- What did that experience mean for you?
- Could you recap....
- Check for both feelings as well as descriptions

Appendix F – Examples of two iterations of transcript summaries of key aspects

P01

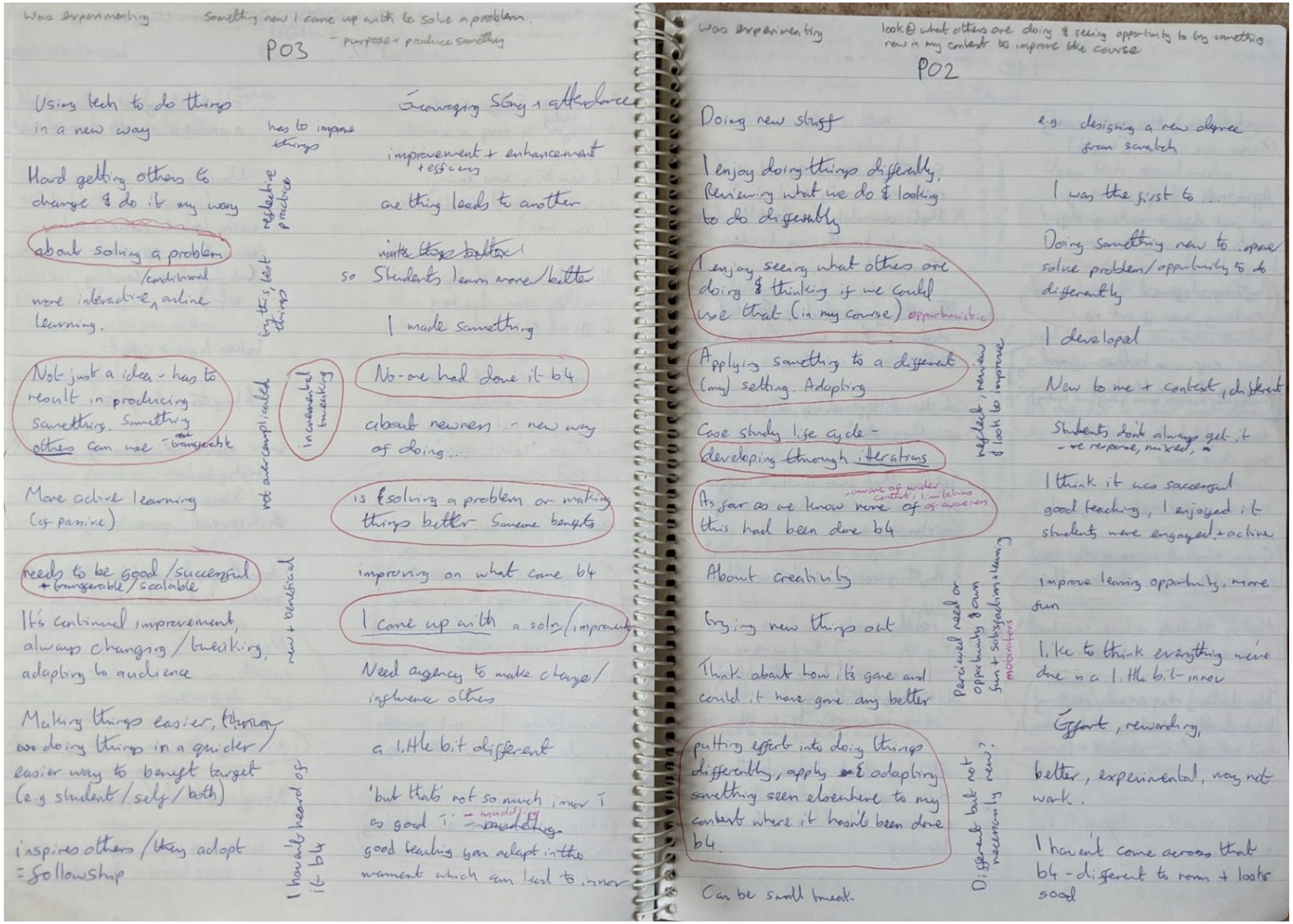
Innov is ME *doing* something *new/different*. Problem solving. Has purpose, directed by own philosophy on T&L, moving in that direction. Can be approach to T&L, delivery methods. Experimental/trying. Good innovation is congruent with direction/purpose (institutional perspective). Contexts – personal, programme, institution. Context dependant – it is and it isn't innov, uncertainty and complexity. A way of being – continual improvement, never satisfied, challenging self (individual or institution). Intrinsically motivated by a desire to improve, a love of doing things differently, to feel better about the situation. Is a process/cycle of iterative improvement. Has a scale of small to 'radical' depending on how different to normal. Is an attitude. Nothing is truly new, is always building on things from a different context.

P02

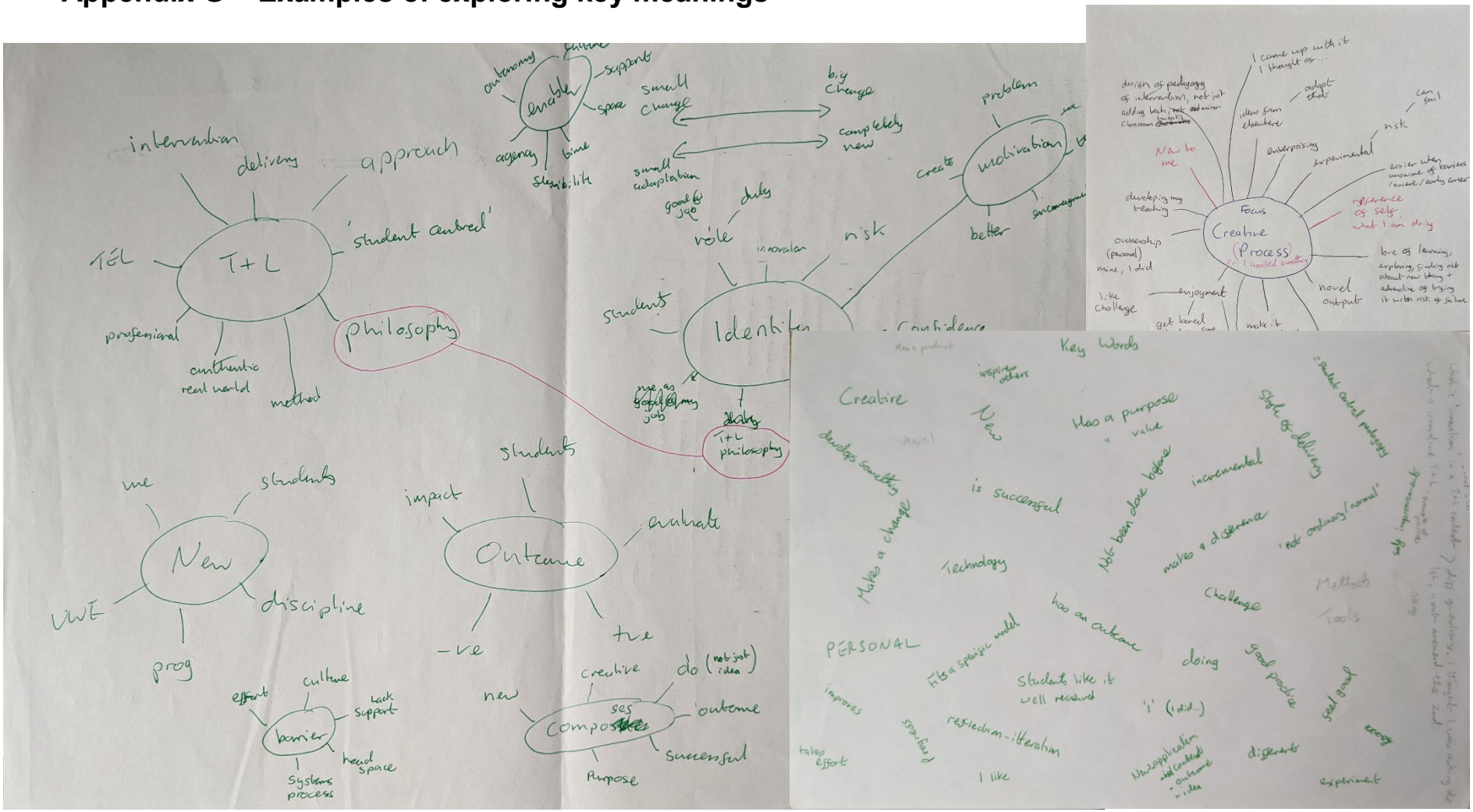
Me doing new stuff. Driven by opportunity and personal interest. Personal validation, believing it was good even if mixed student response and disappointing engagement. Very personal reference point so what is innov is different for person. Not done in that specific way in that programme context. Application of something seen elsewhere similar but not the same. Takes effort. Doing things differently. Being prepared to try even though don't know if it will work, uncertain of outcome. Doing that thing differently. Different to normal, to colleagues, to what has gone before. Some creativity and personal agency. Current. To make things better. To meet a perceived need, perceived opportunity, my own fun and satisfaction.

P03

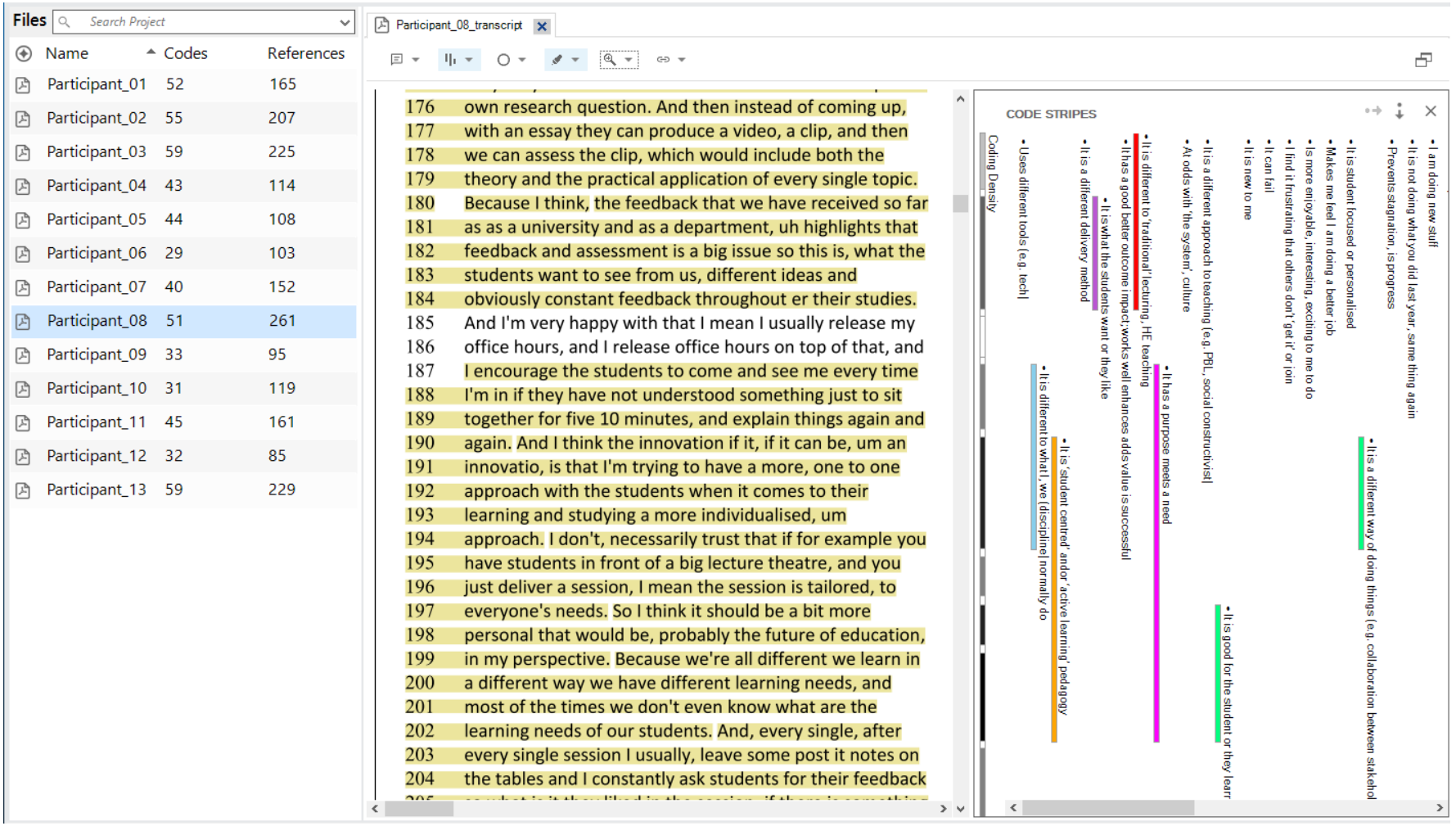
Me or us *producing* something new using technology to produce a better outcome for your target (staff or students). Needs to be useful. Solve a problem, find a better/more efficient way. Not just using the tech – needs good pedagogy too, e.g. be designed as active learning to enhance engagement. An iterative process with a long journey of improvements/enhancements, cascade effect. Well designed, encourages engagement, results in good learning and improves the learning experience and outcome. Strategic. I built – has to have a product, not just be an idea (not a way of thinking/approach). Making something others can use. New, improved, more efficient, better outcome for target. Useful. No-one has done it before. Has a timeframe of relevance [it was innov at the time]. Has a clear, aligned (to T&L philosophy etc) purpose. Not box ticking, not to fill a gap, not just because we can. You believe in it. Solves a problem (whether you knew it existed or not) - 'this isn't working what can we do?' or 'oh that's better' [opportunity?]. Involves evaluating the outcome. Have agency to make the change. Effort cost - may seem difficult, but the outcome is worth it. Has positive outcome. Is personally rewarding. Reflect and evaluate. Reflective continual problem solving and improvement. using new tech. Personal gain. +ve outcome not necessarily improvement in marks as that is down to the students [complexity]. Recognises mixing concepts between good teaching and innov teaching. I haven't heard of it before [personal reference point].


Was experimenting   Something new I come up with to solve a problem.
P03   - purpose + produce something
Using tech to do things in a new way
has to improve things
Encouraging SEng + attendance
improvement + enhancement + efficiency
Hard getting others to change & do it my way
reflective practice
one thing leads to another
about solving a problem
/ conditional
make things better!
so Students learn more/better
more interactive, online learning.
try this, test things
I made something
Not just a idea - has to result in producing something. Something others can use - not transferable
not overcomplicated
incremental tweaking
No-one had done it b4
about newness - new way of doing...
More active learning (cf passive)
is solving a problem or making things better. Someone benefits
needs to be good / successful + transferable / scalable
new + beneficial
improving on what came b4
It's continual improvement, always changing / tweaking, adapting to audience
I came up with a soln / improvement
Need agency to make change / influence others
Making things easier, through doing things in a quicker / easier way to benefit target (e.g. student / self / both)
I haven't heard of it b4
a little bit different
'but that's not so much innov I as good I' - muddling
inspires others / they adopt = followship
good teaching you adapt in the moment which can lead to innov
Was experimenting
look @ what others are doing & seeing opportunity to try something new in my context to improve the course
P02
Doing new stuff
e.g. designing a new degree from scratch
I enjoy doing things differently. Reviewing what we do & looking to do differently
I was the first to...
Doing something new to improve solve problem / opportunity to do differently
I enjoy seeing what others are doing & thinking if we could use that (in my course) opportunistic
I developed
Applying something to a different (my) setting. Adapting
reflect, review & look to improve
New to me + context, different
Case study lifecycle - developing through iterations
Students don't always get it - ve response, mixed
As far as we know none of this had been done b4 , aware of wider context, limited by awareness
I think it was successful good teaching, I enjoyed it students were engaged + active
About creativity
Perceived need or opportunity from fun + satisfaction + learning motivators
Improve learning opportunity, more fun
trying new things out
I like to think everything we've done is a little bit innov
Think about how it's gone and could it have gone any better
Effort, rewarding,
putting effort into doing things differently, apply & adapting something seen elsewhere to my context where it hasn't been done b4.
Different but not necessarily new?
better, experimental, may not work.
I haven't come across that b4 - different to norm + looks good
Can be small tweak.

Appendix G – Examples of exploring key meanings



Appendix H – Example of coding in NVivo



Appendix I – Sample of category development

First draft
different to what we normally do
I am doing new stuff
authentic real-world activities
student focused pedgagoy
solving a problem
making things better
me being creative

After coding
different to what we normally do
new to me
different delivery methods
authentic, professionally relevant activities
student centred, active learning pedagogies
solving a T&L problem
Me creating
Part of who I am / philosophy

Version 5
different to what we normally do
new to me
new to context
novel delivery methods
authentic, professionally relevant activities
student centred, active learning pedagogies
Me experimenting
Me creating
A teaching philosophy

Final version
teaching & assessment activities (T1)
student centred, active learning pedagogies (T2a)
professionally authentic learning (T2b)
personal creative development (T3)
an ethos (T4)
different to what we normally do (N1)
new to teaching context (N2)
new to me (N3)

Appendix J - Framework for discussion of innovative teaching

A framework for discussing innovative teaching

This conceptual framework is intended as a reflective tool to facilitate discussion on innovative teaching. Innovative teaching is an ambiguous and contested concept. By nature, judgements of innovative teaching are comparative and made from a personal reference point. Therefore, this framework will help make the implicit explicit, enable a shared language, enhance reflective practice and facilitate constructive debate.

The framework is presented as a set of sliders highlighting 5 key areas of variation in considerations of innovative teaching. The horizontal arrow displays a continuum between two orientations for each aspect and an example can be marked at any point along the slider. I.e., if the example of innovative teaching under discussion is equally 'new to me' and 'new to the teaching context' it would be marked in the middle of the slider, if it was more 'new to the teaching context' than 'new to me' it would be marked towards the right-hand side of the slider. This framework is not intended to indicate any value judgements of any points on a scale being better than any others. It is about highlighting and discussing variation and difference in perceptions.

Think of an example (or use the ones given) of innovative teaching, where would you mark it on each of these sliders? Discuss in your group if you have the same or differing views.