Transnational students' accounts of processes of networked learning: A phenomenographic study

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This thesis results entirely from my own work and has not been offered previously for any other degree or diploma. The word-length conforms to the permitted maximum.

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Abstract

Globalisation of higher education has led to an increase in the delivery of transnational programmes, those where students are located in a different country than the providing institution. These programmes are marketed as offering the same degree at the same quality standards as that delivered onshore and often the specific context or place of learning is not considered. Literature on the student experience of learning in this setting is sparse. This study addresses this gap by exploring accounts of students' processes of networked learning on two transnational Masters programmes delivered by an Irish college in the Gulf region of the Middle East. Processes of learning are theorised using two frameworks: the approaches to learning framework; and the model of networked learning. Data is generated through interviews with 18 students. Findings show two key qualitative differences in the phenomenographical outcome spaces. Firstly, between descriptions focused on academic skills (searching literature, reading, writing) and those focused on ideas (analysing, synthesising, critiquing). Secondly, between descriptions of engagement in the act of networked learning and descriptions of non-engagement, classified as either 'unable to engage' or 'unwilling to engage'. The categories of description at the lower levels of complexity in all outcome spaces are not explained well using either theoretical framework. These findings have a deeper alternative explanation when both the transnational and the individual's contexts are taken into consideration. Conclusions are drawn for theory, methodology, policy and practice. For theory, an amended definition of networked learning is suggested which allows for the multiple contexts within which learning takes place. For methodology, it is suggested non-inclusive hierarchical structures in outcome spaces are appropriate for phenomenographical studies of the processes of learning. Finally, the notion that transnational programmes can be delivered 'context-free' is challenged which has implications for institutional policy and educational practice within higher education.

Contents

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My work here is dedicated to my father and mother who always encouraged further education. To my mother, thank you from the bottom of my heart for all the support you have given me on this long road.

List of figures and tables

Figures

Tables

Chapter 1: Introduction

1.1 Introduction

Globalisation in higher education has led to increasing mobility of students, staff, programmes and institutions. This phenomenon has been growing rapidly in the last two decades and is an increasing area of research (Kosmützky & Putty, 2016). The widest definitions of cross-border education include both mobility of students (students travelling to another country for higher education) and mobility of programmes or institutions (universities travelling to other countries to provide higher education). Transnational (TN) or offshore higher education refers to the mobility of programmes and institutions only and has been defined as that which "encompasses any education delivered by an institution based in one country to students located in another" (McBurnie & Ziguras, 2007, p. 1). It is not a field without controversy. There are concerns about the commodification of education and a 'new imperialism' (R. Naidoo, 2011) and about the ability to quality assure and regulate across borders and contexts (Pyvis, 2011). However it is a growing field and there has been rapid development in recent times of TN higher education in the Middle East (Miller-Idriss & Hanauer, 2011). Of the 100 branch or overseas campuses currently estimated worldwide, one third of them are in the Gulf region of the Middle East with most opening in the last decade. But despite the "explosion" of programmes and institutions in the region "very little is known about this phenomenon" (Miller-Idriss & Hanauer, 2011, p. 182).

TN programmes tend to market themselves as 'context free', in that place does not matter, you get the same degree at the same standard, perhaps even with the same lecturers, both onshore and offshore. A question for educators involved in teaching and

assessing TN programmes is whether this is really true for students and their processes of learning. Does this particular context (studying in their home country, on a programme designed and accredited elsewhere, delivered by faculty who fly in and out) impact their processes of learning and in what ways might this manifest itself? There is limited research in this area. While there is a small but growing body of literature on the experiences of lecturers who teach abroad (e.g. Bodycott & Walker, 2000; Pherali, 2011; Seah & Edwards, 2006; Smith, 2009) and extensive studies of student experiences when they travel to receive education in another country (e.g. Andrade, 2006; Sherry, Thomas, & Chui, 2010; Zhou & Todman, 2009) there is a paucity of research on student experiences of learning when the academics fly to them.

This is the starting point for this study. It seeks to address a gap in the current literature where the TN student voice is missing. As an Irish lecturer directing a TN Masters programme in Bahrain, outside of limited programme evaluation mechanisms, there was little evidence available to me to understand the learning experience of the students in this setting. My particular interest in wanting to explore students' descriptions of their processes of learning provides the more focused research aim of the study. This chapter begins by outlining this research aim, the research questions and overall methodological approach of the study. It then describes the particular research setting, the expectations for students at Master's level, and the particular approach taken to culture in this study. The two theoretical frameworks adopted here for processes of learning are explained followed by a summary of the significance of this study. Finally, the remaining chapters of the thesis are outlined.

1.2 Overall aim, research questions and approach

Based on the above gap in the literature the aim of this study is to explore qualitative differences in transnational postgraduate students' accounts of their processes of learning within a networked learning environment. The specific research questions are:

1. In what different ways do these students describe their understandings of Master's level learning?
2. In what different ways do they describe their processes of networked learning through their interactions and connections with peers, lecturers and resources?
3. In what ways do these students describe the transnational context influencing their processes of learning?

The first research question is linked to one of the theoretical frameworks used in this study (approaches to learning) which sees a link between the individual students' conceptions of learning and their approach taken to study (deep, surface or strategic). The second research question is linked to the second theoretical framework used (networked learning) which sees learning as emerging from critical dialogues in the interactions between students, tutors and resources. These frameworks are explained in more detail in Section 1.4. The final research question explores students' accounts of their perceptions of the influences of the transnational context on their processes of learning.

This study has an interest in the collective student experience and in exploring not just the commonalities between those experiences but also, as indicated above, the differences. Chapter 3 (Research Design) outlines in depth the chosen methodology and methods. Phenomenography is the chosen methodological approach to answer the first two research questions while the final question is analysed using thematic analysis. The chosen method is interviews with transnational students on Masters programmes.

A note on terminology

With the rapid growth of TN higher education there is a multiplicity of delivery models and new regulatory arrangements and a resultant confusion in the literature as to how TN terms are defined and used (Knight, 2016). For this study the overall field of TN higher education is not being examined so two terms only are used interchangeably throughout the thesis: *transnational student* and *offshore student*. Occasionally a distinction is made between these students and *onshore students*, i.e. those who enrol on the same programmes in Ireland.

1.3 Research setting

The students who participated in this study were enrolled on two transnational Masters programmes, designed and accredited in Ireland and delivered by 'flying faculty' in Bahrain and Dubai (an emirate within the United Arab Emirates, UAE). This research setting has several aspects which are described here. Firstly, the institution, the programmes, and the mix of students are described as is my own role. As these are postgraduate students the expectations for achievement at Master's level within the

programmes are also outlined. Finally, a comment is made on the particular approach taken to culture in this study.

1.3.1 Institutional and programme setting

The participants in this study are students on two part-time two-year offshore Masters programmes (MSc in Healthcare Management, MSc in Quality & Safety in Healthcare Management) delivered in Bahrain and Dubai by an Irish medical and nursing college. The same programmes are delivered in both countries and also delivered in Ireland. They are accredited in Ireland and delivered overseas by Irish and English staff, some of whom are onsite in the Gulf region full-time, others who fly in and out.

The students

Students are mostly in full-time employment in the health sector and come from a variety of backgrounds, both clinical (doctors, nurses, physiotherapists, pharmacists, etc.) and non-clinical (managers, administrators). They also come from a variety of international backgrounds reflecting the high levels of ex-patriate populations seen in the Gulf region. Applicants must have a minimum of three years' work experience post-undergraduate so students ages range from late 20's to late 40's. The majority of students tend to be women (usually about two-thirds of the cohort). The participants in this study reflect these general characteristics. As will be described in Chapter 3 (Research Design), eighteen students were interviewed from a wide variety of clinical and international backgrounds. The structure of the programmes is also described in that chapter.

My role

At the time the study commenced I was the programme director for the MSc in Healthcare Management in Bahrain. As described in Chapter 3 my position as lecturer and programme director is taken into account in the research design. It is also an ongoing point of reflection throughout the data generation phase, which is commented on in that chapter.

1.3.2 Expectations for achievement at Master's level

Higher education in Europe has been shaped by the 2005 development of a framework for qualifications for the European Higher Education Area, known as the Bologna Process (Bologna Working Group On Qualifications Frameworks, 2005). The framework guides higher education programme accreditation and evaluation within Ireland and its influence can be seen in the programme design and assessment of the two Masters programmes in this study. What is of particular interest for this study is the students' accounts of their understandings of 'Master's level learning' because, as will be seen in the next chapter, there is a link in the literature between a student's conceptions of learning and their approaches to study. Within the European Framework of Qualifications, a clear distinction is drawn between expectations for achievements at undergraduate level (1st cycle) and at Masters level (2nd cycle). These differences are summarised in Table 1.1 which demonstrates Master's level has a focus on higher levels of thinking seen in originality of thinking, problem solving, integration of ideas, and communicating conclusions. There is also an expectation of being self-directed in study. These expectations, particularly those of thinking, are explicitly outlined for the students in this study in the assessment marking grid for their Masters programmes

where to achieve the highest grades students need to demonstrate high levels of critical thinking, some originality of ideas, and wide reading. The findings from the first research question will be compared to these stated expectations in Chapter 6 (Discussion and Conclusions).

At completion of the cycle students will have / can demonstrate	**1st cycle (Bachelors)**	**2nd cycle (Masters)**
Knowledge and understanding	*[that is] supported by advanced text books* *[with] some aspects informed by knowledge at the forefront of their field of study ..*	*provides a basis or opportunity for originality in developing or applying ideas .. often in a research context .*
Application of knowledge and understanding	*[through] devising and sustaining arguments*	*[through] problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts ..*
Ability to make judgements	*[through] gathering and interpreting relevant data ..*	*the ability to integrate knowledge and handle complexity and formulate judgments with incomplete data ..*
Ability to communicate	*information, ideas, problems and solutions ..*	*their conclusions and the underpinning knowledge and rationale to specialist and nonspecialist audiences ..*
Learning skills	*needed to study further with a high level of autonomy .*	*to study in a manner that may be largely selfdirected or autonomous..*

Table 1.1 Expectations of achievements at Bachelor's and Master's level in the European Framework of Qualifications (Bologna Working Group On Qualifications Frameworks, 2005, p. 147-150)

1.3.3 The approach taken to culture

Literature on international students can often take a particular view in relation to culture and how that might influence the students' experiences of teaching and learning on a programme. A popular approach seen in studies is to utilise the frameworks suggested by Hall (1976) or Hofstede (1986) who link culture to nationality and ethnic origin and

propose dimensions of ‘high-context’ and ‘low-context’ cultures. In a review of studies examining culture in distance learning there has been a call for a broader use of theoretical frameworks when researching culture in international education rather than this limited view (Uzuner, 2009).

This is mentioned here because, although culture is not the direct focus of this study, it is obviously an important factor in student experiences of learning whatever the setting, domestic or transnational. A simplistic approach would be to look at programmes in the Middle East and wonder what Arab students are like and in what ways this influences experiences. There are several issues with this. Firstly ‘Arab students’ is an incredibly broad term for a region with a multiplicity of nationalities and cultures. So applying a ‘dimensions framework’ is certainly questionable in this setting. However, even if the quite simplistic labelling of Arab students is accepted, the second issue is that although the programmes are delivered in Bahrain and Dubai the students are an international mix. As is described in Chapter 3 (Research Design), just over half of the participants are from four countries in the Gulf region and the rest are from India, Sudan, Australia, Canada, and Malaysia (Table 3.2). This reflects the high levels of ex-patriates in the populations in the region. So the position taken in this study is not to use a ‘dimensions framework’ as a lens through which to examine the transnational context. Rather, a more open position is taken to see what emerged from student accounts, to see in what ways their accounts refer to local culture or the transnational setting as influencing their processes of learning. This innovative position is considered more appropriate for a qualitative, interpretivist study such as this.

1.4 Theoretical frameworks

Two conceptual lenses are used to frame processes of student learning. Processes are not seen in a simplistic way (i.e. input-processes-output). Rather they are seen as the 'how' of learning, as in, how do students *do* their learning? Or in this study, how do students *describe* doing their learning? This is understood in a broad sense to be a complex context-dependent process with the individual student, with their own individual context, entering a learning environment which also has its own context, and interactions and learning occurring. The use of two frameworks therefore reflects a position of wanting to explore processes of learning from both an individual constructivist perspective as well as a social learning perspective. The first framework is one mentioned earlier, the 'approaches to learning' framework, which has a focus on the individual learner and their individual approaches to study. The second framework sees learning as a social, dialogical process and uses the 'networked learning' model to allow exploration of the interactions and connections students make between each other, resources and peers, facilitated by technology. These are considered commensurate as they both have a constructivist epistemology, but each offers a different level at which to consider the student experience of learning. Both are briefly introduced here and then explored in more depth in Chapter 2 (Literature Review).

1.4.1 Approaches to learning framework

The approaches to learning framework was first developed in Sweden in the 1970's (Marton & Säljö, 1976a, 1976b) and suggests that students tend to adopt one of two approaches to learning depending on their conceptions of learning and their perceptions

of the learning task and the learning environment. These approaches were labelled as ‘surface’ (emphasising memorisations) or ‘deep’ (emphasising a desire to understand and see more holistically). Other approaches have been suggested since, particularly a ‘strategic’ approach (emphasising a strategic focus on assessment and meeting one’s own ends). This framework is critiqued as simplistic, asocial and lacking in empirical validation as will be discussed in Chapter 2 (Literature Review). However, it is still widely used and is a helpful device in initially framing this study. Its influence is seen in the first research question which explores students’ understandings of Master’s level learning, and in the second research question, where asking students to describe their approaches to study helps reveal their processes of networked learning.

1.4.2 Networked learning

Networked learning (NL) has been described by Jones, Ferreday, and Hodgson (2008) as focusing on “the connections between learners, between learners and tutors and between learners and the resources they make use of in their learning” (p. 1). This moves learning beyond the mind of the individual learner and considers it within a wider network. At its heart NL sees “learning and knowledge construction is located in the connections and interactions between learners, teachers and resources, and seen as emerging from critical dialogues and enquiries” (Ryberg, Buus, & Georgsen, 2012, p. 45). As will be discussed in the literature review, there are some tensions within the NL literature between the individual and the wider network. This framework can be seen in the second research question which focuses on exploring how students describe their processes of learning through their interactions and connections with other parts of the network.

1.5 Significance of this study

Over the course of this thesis the theoretical frameworks and context will be explored, the study approach described, and then through analysing the data from this small qualitative study, conclusions will be drawn for theory, methodology, policy and practice. Contributions will be made for the conceptualisation of context within the chosen theoretical frameworks, in particular for the model of networked learning. A unique approach is developed to presenting phenomenographical outcome spaces and it will be suggested non-inclusive hierarchical structures in outcome spaces are appropriate depending on the phenomenon being explored. Finally, this study contributes to the gap in the literature of the voice of the transnational student and adds to our understanding of their processes of learning. The findings challenge the notion that TN programmes can be delivered 'context-free' which has implications for institutional policy and educational practice within higher education.

1.6 Thesis outline

In addition to this introductory chapter this thesis has five remaining chapters, now outlined.

- **Chapter 2: Literature Review**. This chapter explores the literature related to three key aspects of this study. Firstly, it explores the approaches to learning framework in detail, highlights its dominance in the field and discusses its critiques. Secondly, the model of networked learning is examined and processes of networked learning are discussed. Finally, research exploring the student voice in transnational education is reviewed. Conclusions for the study are drawn.

- **Chapter 3: Research Design.** This chapter introduces phenomenography as the chosen approach for generating and analysing data, and discusses its advantages and critiques. The research process is then described in detail. How ethical issues, quality, and limitations were attended to is also described.
- **Chapter 4: Review of ways to present phenomenographical findings.** This chapter reviews a selection of empirical phenomenographical studies within higher education and compares how they presented their findings. Wide differences were found which are analysed and discussed. The chosen approach for presenting findings in this study is outlined.
- **Chapter 5: Research findings.** This chapter presents the findings from the three research questions. For the first two research questions four phenomenographical outcome spaces are presented. For the final research question a thematic analysis is presented.
- **Chapter 6: Discussion and Conclusions.** This chapter discusses the findings from the previous chapter in light of the literature presented earlier and draws final conclusions for theory, methodology, policy and practice. Two initial questions are explored, which of these findings are explained by the chosen theoretical frameworks and which ones are not? Other ways to explain the findings are discussed leading to conclusions for both frameworks. An amended definition of networked learning is suggested. The chosen methodology, phenomenography, is reflected upon, and suggestions made for policy and practice for transnational and networked learning Master's programmes.

Chapter 2: Literature Review

2.1 Introduction

The aim of this study is to explore postgraduate students' accounts of their processes of learning within a transnational networked learning environment. The broader transnational context within which these programmes take place was outlined in the Introduction chapter as were the expectations of Master's level learning. The purpose of this chapter then is to explore literature related to the core aspects of this study: processes of learning (in particular the approaches to learning framework); networked learning (in particular processes of learning in these environments); and the transnational student voice (in particular the impact of that context on their experiences of learning). The chapter addresses each of these in turn.

2.2 Approaches to learning

The 'approaches to learning' (ATL) framework was first put forward by Marton & Säljö (1976a, 1976b) suggesting students choose deep or surface approaches depending on their conceptions of learning and their understanding of the context of the learning task. In 1997, Webb stated that "the notion of 'deep' and 'surface' approaches to learning has been a foundation stone upon which much of the research, theory and practice of higher education has stood for twenty years" (p. 195). In the almost twenty years since Webb's article the deep/surface metaphor of student approaches to learning continues to be highly influential. Haggis in her 2009 overview of forty years of student learning research in higher education claims that although other theoretical approaches to understanding student learning are in the literature, discussion within the field "is still

frequently either based on these ideas [deep/surface], or takes them for granted" (p. 377). Others concur, with the model referred to as "the dominant perspective" (Case, 2008, p. 322), "one of the dominant theories" (Tan, 2011, p. 126), and "one of the most distinctive approaches currently applied in [the study of teaching and learning within] the field of higher education research" (Tight, 2014, p. 103). The deep/surface model is now highly influential in teaching in higher education with two of its proponents (Biggs and Ramsden) "among the most cited authors in the academic development literature" (Tormey, 2014, p. 1).

This section of the review follows a chronological order beginning in the 1970's and 1980's with a description of the origins and development of the ATL framework, moves into the 1990's discussing its influence on the growing field of academic development, and then into the 2000's outlining some of the more recent research based on it and the parallel critiques of both the framework and its dominance in the field. Finally, other suggested approaches for researching the processes of student learning will be explored.

2.2.1 Origins and development of the framework

The original research developing the framework was carried out in the University of Goteborg in the first half of the 1970's by a research team which included Marton, Säljö, Svensson and Dahlgren. The Goteborg studies were conducted at a time when the dominant focus of research into student learning was psychological, lab-based, experimental research in areas such as understanding the mechanisms of memory, developing instruments to measure intelligence, and understanding forms of student motivation (Entwistle, 1984). As Entwistle states there was a tendency in this type of

research to use a "deficiency model of student behaviour, in which the blame for academic performance is attributed wholly to the student" (1984, p. 13). Also this type of research was studying the processes of learning regardless of the content being studied (e.g. laboratory experiments on memory involving memorising nonsense syllables) and therefore was not focused on the *meaning* of the content itself or how students engage with making meaning of course materials (Dahlgren, 1984). A qualitative focus on meaning rather than a quantitative focus on memorisation leads to the idea of exploring qualitative differences in the outcomes of learning. In other words, what processes might lead to students reaching qualitatively different understandings of the same content?

The first set of studies with this focus asked a group of 40 students to read passages of text and conducted interviews with them afterwards to explore the meaning they gleaned from the texts and the way they approached the reading task (Marton & Säljö, 1976a, 1976b). Qualitative analysis was done on these interviews to create categories of outcomes related to their levels of understanding with some categories seen as representing *descriptions* and other categories seen as representing *conclusions* and "the main difference we found in the process of learning concerned whether the students *focused on the text in itself or on what the text was about; the author's intention, the main point, the conclusion to be drawn*. Their focal point of attention was on the pages in the first case and beyond them in the second" (Marton & Säljö, 1984, p. 43, their emphasis). A surface approach is one where the student is intent on memorising facts and details. A deep approach is one where a student seeks understanding "by looking for relations between the text and phenomena of the real world, or by looking for relations between the text and its underlying structure" (Marton & Säljö, 1984, p. 43).

It is worth noting that Marton and Säljö (1984) acknowledge that students with a surface approach may be successful in their studies depending on how the assessment is carried out. They state they "are not arguing that the deep approach is always 'best': only that it is the best, indeed the only, way to *understand* learning materials" (1984, p. 49, their emphasis).

The second element that was studied was not just the students approaches to learning but also their conception of the task (Marton & Säljö, 1976b). By asking the students different types of questions aimed at either a surface or a deep understanding it was found that students adapted their approach to learning depending on how they perceived what was required of them. The same students used different approaches in different contexts. Further research by Ramsden (1979, 1984) broadened out the view of context beyond the specific learning task to the academic environment. By this he meant "the teaching, course organisation, subject areas, and assessment methods of university departments" (1979, p. 412). His 1979 research which used a questionnaire to 285 undergraduate students supplemented by interviews concluded not only were a student's choice of approach influenced by their perceptions of a specific learning task but they were also heavily influenced by their perceptions of the 'atmosphere of learning' of which two key factors were the lecturers' relationships to the students and their commitment to teaching.

In this study Ramsden (1979) also identified a third approach to learning which he called a 'strategic approach'. He identified a small group of students who were "less negatively influenced by the course and departmental context than the rest, make special

efforts to use assessment systems to their own ends, have a singleminded assurance that they will do well in their work, and are often extremely successful" (p. 424). This third approach to learning was described in more detail in Entwistle and Ramsden (1982) and is similar to an *achieving* approach which was identified by Biggs (1987) in his Australian research developing a Study Process Questionnaire.

The original studies linked two dimensions to the level of learning outcome: a student's approach to learning and their perception of the learning task. Subsequent studies added a third and final dimension which influences outcome: their conceptions of learning. Säljö (1979) asked 90 people in various higher education institutions in Sweden what 'learning' meant to them and he identified five qualitatively different conceptions of learning (later extended to six by Van Rossum, Deijkers, and Hamer (1985) and Marton, Dall'Alba, and Beaty (1993)). These conceptions of learning are now commonly viewed arranged in a hierarchy as follows:

1. Learning as a quantitative increase in knowledge;
2. Learning as memorisation;
3. Learning as acquisition of facts for future use;
4. Learning as abstraction of meaning;
5. Learning as an interpretive process aimed at understanding reality;
6. Learning as changing or developing a person.

Van Rossum and Schenk (1984) in a study with 69 psychology students in the Netherlands demonstrated a link between these conceptions of learning and the approach taken. Most of the students who had conceptions 1 to 3 had a surface approach to learning while most students who held conceptions 4 and 5 adopted a deep approach to learning. Conception 6 had not been developed at the time of this study.

A summary of the framework is seen in Figure 2.1. A student's approach to learning is a result of their conceptions of learning, their perception of the particular task at hand and their motivation towards that, and their perception of the wider learning environment. The approach taken (deep or surface) will lead to a particular outcome of learning with deep approaches suggested to lead to better outcomes than surface approaches.

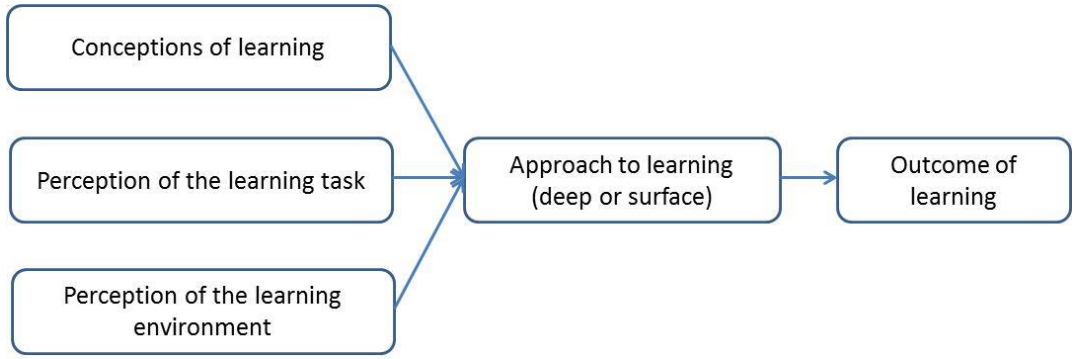

Figure 2.1 Approaches to learning framework

The dominance of the ATL framework can be seen in the field devoted to researching and developing teaching in higher education. The rising interest in teaching in higher education and the resultant growth in education development centres in universities in the 1990's coincided with the development of the ATL framework. Indeed Webb (1997b) contends the rise in educational development is one of the reasons the ATL framework became so prominent. An examination of books which were published in the 1990's related to university teaching lends credence to Webb's contention (Biggs, 1999; Gibbs, 1992; Prosser & Trigwell, 1999; Ramsden, 1992). Recent reviews of educational development literature shows these authors as still amongst the most cited within the field (Amundsen & Wilson, 2012; Kandlbinder, 2013). The overall message in these types of books is similar: academics should plan, deliver and assess their teaching with a conscious focus on encouraging and developing deep approaches to learning. This is linked to the particular aims of higher education of developing the intellectual and critical thinking skills of students and their ability to generalise from a theoretical base (Ramsden, 2003, p.22). Deep approaches to learning are seen to support these aims.

The original research utilised qualitative interviewing and was focused on discovering students' approaches to learning for particular learning tasks. As described above, Marton & Säljö's work began by exploring students' approaches to the task of reading. Other original work used interviewing to explore essay writing (Hounsell, 1984), revision strategies (Entwistle & Entwistle, 1984) and problem solving (Laurillard, 1984). However, as the field developed there has been a shift away from small-scale qualitative studies to larger scale inventory based ones. This reflected a shift away from examining particular learning tasks towards examining student approaches to learning

(or studying) at an overall course level. Inventory based research now accounts for the bulk of research into approaches to learning in higher education (Tight, 2012). A multiplicity of inventories have been developed and adapted over the years and, in a review of student learning experience literature for the Higher Education Academy, Ertl et al. (2008) claim this diversity of inventories with their associated different constructs make assessing the value and quality of the research within the field "problematic" and that smaller scale inventory studies "offer little" (p. 34). Overall they say that studies based on these inventories "shed only little light on the student learning experience per se" (p. 35). Indeed, the positivistic turn the field has taken in addition to the lack of coherence in findings forms part of a growing critique of the framework.

2.2.2 Critiques of the framework

The dominance of the ATL framework within the teaching and learning field and its associated lack of critique has raised concerns for some. Webb claimed it "has become the canon for educational development" (1997b, p. 195) and almost 20 years ago felt that "a critical discussion is long overdue" (Webb, 1997a, p. 225). The critical discussion has been slow coming and is arguably taking place at the edges of the current literature. Haggis's subsequent 2009 review of forty years of educational research literature found that the framework still forms the basis for much student learning research and is rarely questioned. More recent critiques of the framework similarly point to its central position within current student learning research and the lack of debate about its validity or dominance (Howie & Bagnall, 2013; Tormey, 2014).

One of the possible reasons for its dominance was suggested above, the adoption of the framework so readily into the newly developing field of academic development. Others point to the changing context of higher education and the move towards objectives, outcomes, and generalisable best practices (Haggis, 2004b; Malcolm & Zukas, 2001). The ATL framework fits well in this environment as it suggests principles which can be applied in all contexts to help improve outcomes. This links to the suggestion that as a relatively new field (the study of student learning within higher education) it has been seeking a generalisable 'grand theory' to explain learning and is continuing in its attempts to adapt this one framework as its 'grand theory' (Howie & Bagnall, 2013; Webb, 1997b).

However, this dominant framework is arguably dependent on a limited use of theory. Malcolm and Zukas (2001) in a critical overview of literature of higher education pedagogy suggest there is an over dependence on psychology which has limited the view of pedagogy to an 'educational transaction' between teachers and learners in isolation of the broader social context. Haggis agrees that ATL is limiting theorisation within the field (Haggis, 2003, 2009). She also suggests the dominance of this one model has narrowed the focus too much to a particular psychological view of learning to the detriment of broader debates which would include other perspectives such as sociocultural learning theories or critical theory. She uses an example of another field (adult education) to demonstrate how they have advanced their debates by "drawing upon a range of socio-cultural and postmodern/post-structural theories" (Haggis, 2009, p. 386). Boshier and Huang (2008) also discuss this limited view of learning in higher education and suggest that "psychology has to relinquish ownership of learning" (p. 646) in order to advance the field. Tight (2014) claims that in general the field of higher

education research under-uses theory. His review of 567 articles published in 15 leading higher education research journals in 2010 noted that although the vast majority of studies reviewed explicitly cited a theory "the extent of engagement was often limited and the level of theory referred to was frequently low" (Tight, 2014, p. 100).

These criticisms that the dominance of this one view of learning is limiting broader theoretical discussion stem from concerns that the framework itself is ontologically and epistemologically questionable. Webb links this to the use of phenomenography as the methodology which originated the work as it does not directly take account of the "historical and social construction of thought" (Webb, 1997b, p. 200). Others have agreed the framework is asocial, does not allow fully for agency of the student, and does not address the inherent power structures within the higher education setting (Ashwin, 2008; Boshier & Huang, 2008; Haggis, 2003; Malcolm & Zukas, 2001). It is also suggested that it is teaching-centric, rather than learning-centric where its utility is seen in improving teaching and assessment processes only and its focus is on the end product (outcomes), rather than on learning as a process (Boshier & Huang, 2008).

Within the framework its central constructs of 'deep' and 'surface' have been questioned for ambiguity and semantic slippage (Howie & Bagnall, 2013). The metaphor of deep and surface has also been questioned for its limiting dualism and its valorisation of the deep approach (Macfarlane, 2015; Webb, 1997b). This valorisation of the deep approach also reflects, according to Haggis (2003), an unquestioning imposition of the elite values of academia. In addition, Webb (1997b) suggests it reflects a Western tradition of learning which does not account for how other cultures value

what is classified as a ‘surface’ approach to learning (e.g. learning by ritual chanting, oral history).

Overall its critics see the framework as overly-simplistic and not taking account of the multiple contexts and complexities at play. However, they usually acknowledge that its simplicity is part of its appeal. Indeed in a response to Webb defending the framework, Entwistle (1997) claims it is a “useful simplifying device” (p. 215) and has been valuable in re-conceptualising teaching in higher education. He argues against Webb’s “rhetoric of post-modernism” (p. 215) and appeals to the practical utility of the metaphor. Howie and Bagnall (2013) remain unconvinced by Entwistle’s rebuttal and suggest his paper does not argue the issues substantively and is “little more than a market-based promotion of the model” (p. 395). This is perhaps a dismissive opinion. Arguably the continuing popularity of the framework in the academic development literature says something about its perceived usefulness in everyday practice. In a broader discussion of the limitations of dualisms in higher education research Macfarlane (2015) makes a more persuasive argument against over-simplification. While acknowledging “it is understandable why dualisms are well loved” (p. 115) for their explanatory appeal he nevertheless argues they have insidious effects which limit critical thinking in the field of higher education research.

A final criticism found in the literature is questions about its empirical validity. As mentioned before, the inventory research has yielded results from which it has been difficult to draw overall conclusions (Ertl et al., 2008). Although in 1997 Entwistle claimed there was ample empirical evidence supporting the framework, Tormey (2014)

in his review claims the recent evidence is far more nuanced. One summary of the data he presents questions the level to which deep learning is linked with high attainment, and indeed other studies also question this (Campbell & Cabrera, 2014). A second summary Tormey presents suggests that influencing students' approaches to learning to encourage deep approaches (the stated goal of much academic development literature) is a complex process and not easily achieved, if ever. Howie and Bagnall (2013) similarly question the lack of supporting empirical evidence for the framework and in their review claim that writers who have ambiguous results do not take that as evidence with which to engage theoretically with the model, instead they focus on "post-hoc rationalisations in seeking to explain why the research did not identify expected results" (p. 396). They see this as further evidence that the ATL framework has "become paradigmatic and reified" (p. 396).

2.2.3 Suggested alternative approaches to researching student learning

Writers are divided as to whether the whole framework is invalid (e.g. Webb, Haggis) or whether it can be useful but needs adaptation (Mann, 2001; Marshall & Case, 2005). A middle ground between the unquestioning adoption of an overly-simplistic framework and complete abandonment of same is proposed by Marshall and Case (2005) in their response to Haggis (2003). They assert that ATL provides a "powerful framework with which to make sense of aspects of student learning situations" (p. 263) and that "all research findings should be considered as heuristics or 'thinking tools', rather than as representing any sort of absolute truth" (p. 265). In their view the subsequent problems with the framework lie in the use of inventories and the shift to positivistic research. This shift has closed down thinking and they argue for more

interpretivist research which draws on sociocultural frameworks. Thus, they argue not for complete abandonment of the ATL framework but for its augmentation.

Other writers also suggest alternatives or augmentations to the existing ATL framework. Some of these alternative suggestions seem ad-hoc in the sense that the researchers review the current literature and suggest a different lens which, although it may be persuasively argued, we don't get to see in empirical action. Examples of this include Mann (2001) who proposes alienation and engagement as two ends of the spectrum rather than surface and deep. She does not discard the deep/surface dualism but instead suggests substituting those two concepts. Boshier and Huang (2008) lament the psychological approach to teaching and learning in the scholarship of teaching and learning field and instead suggest adopting approaches from fields where learning is informal or non-formal such as adult learning, lifelong education and learning, and communities of practice. Tormey (2014) sees perhaps a limited use for the deep/surface metaphor in academic development but suggests that constructs such as 'metacognition' or 'expert competence' may be more useful for research in this area. Howie and Bagnall (2015) suggest supplementing the ATL framework with Mezirow's 'transformation theory' of learning and they provide a theoretical discussion of how this might be achieved. While this engagement with the theory and attempts to develop alternatives is much needed as per previous critiques, these episodic examples demonstrate the paucity of true in-depth theoretical engagement within the field.

There were only two researchers found in this review to have critically engaged theoretically over an extended period of time with the ATL framework and used their

own empirical work to develop and suggest alternatives. Tamsin Haggis from the UK and an adult learning background, wrote two articles devoted to critiquing theoretical development within the field of student learning research which are often cited by others and indeed were woven into the discussion above (Haggis, 2003, 2009). In her main piece of empirical work, a longitudinal qualitative study following 12 students over 5 years, she utilised and developed complexity theory and dynamic systems theory as an alternative framework (Haggis, 2004a, 2004b, 2007, 2008, 2011). She suggests this as a way to explore "the 'shadows' cast by mainstream pedagogical research" (2004b, p. 350). This will be referred to again in the final chapter. Jennifer Case from South Africa and an engineering background, utilised the ATL framework in her earlier empirical work (Case & Gunstone, 2002, 2003, 2006) and initially suggested adapting it, particularly to allow for a deeper understanding of context (Case & Marshall, 2004; Marshall & Case, 2005). However, her later work moves away from it and instead she has used alternative frameworks such as alienation and engagement (Case, 2007, 2008) or academic literacies (Case & Marshall, 2008; Marshall & Case, 2010) and a more recent work sees a shift to advocating a 'social realist' position which looks to account more fully for structure (the world out there), agency (the person) and the interactions between the two (Case, 2014, 2015). Both Haggis and Case have engaged theoretically and empirically with the ATL framework using qualitative non-inventory approaches and both have worked to develop alternative views. As such their work is helpful to fully comprehend the limitations of the framework in practice and to understand why they suggest broader sociocultural lenses.

2.2.4 Summary

Before moving to explore literature related to other aspects of the research aim of this study, let us summarise where we are. Research on the processes of student learning in higher education is a rich and complex field. The development of the dominant framework, approaches to learning, was described and reasons suggested for its dominance in current research as well as current definitions of good teaching. The framework focuses on individual students and provides a model to explain why they adopt different approaches (surface, deep or strategic) depending on their conceptions of learning, their perceptions of the task, and their perceptions of the context. These approaches are linked to the learning outcomes achieved. However, the framework has been critiqued on several fronts as under-theorised, asocial, ambiguous, overly simplistic, and perhaps most importantly, not empirically valid. It is defended as a useful 'heuristic' to think about student learning and that it has been valuable in re-conceptualising learning beyond cognitivist views.

2.3 Networked learning

We move now to exploring the second theoretical framework chosen for this study, the networked learning (NL) model of learning. This section explores how NL is defined and how learning, and the processes of learning within NL, are currently being theorised. As the field is evolving, differing perspectives are highlighted.

2.3.1 Defining networked learning

The first Networked Learning Conference was held in 1998 which reflects the newer status of this field compared to the ATL field just explored. The history of NL portrays a field which originated mainly in the UK and Denmark exploring ideas of open learning and participative pedagogies alongside the development of technologies to support such learning (McConnell, Hodgson, & Dirckinck-Holmfeld, 2012). As a field it has been described by Jones et al. (2008) as focusing on "the connections between learners, between learners and tutors and between learners and the resources they make use of in their learning" (p. 90), and as an approach "that takes a critical and inquiring perspective and focuses on the potential of information communication technology (ICT) to support connections and collaboration" (McConnell et al., 2012, p. 3). The process of learning within this framework is seen as "a community relational view…where the production of meaning is a collaborative activity involving connecting people and resources" (Parchoma, 2011, p. 79). Ryberg et al. (2012) provide further detail:

> The ideas of relations and connections suggest that learning is not confined to the individual mind or the individual learner. Rather, learning and knowledge construction is located in the connections and interactions between learners, teachers and resources, and seen as emerging from critical dialogues and enquiries. As such, networked learning theory seems to encompass an understanding of learning as a social, relational phenomenon, and a view of knowledge and identity as constructed through interaction and dialogue. (p. 45)

The key elements of this definition are illustrated in Figure 2.2.

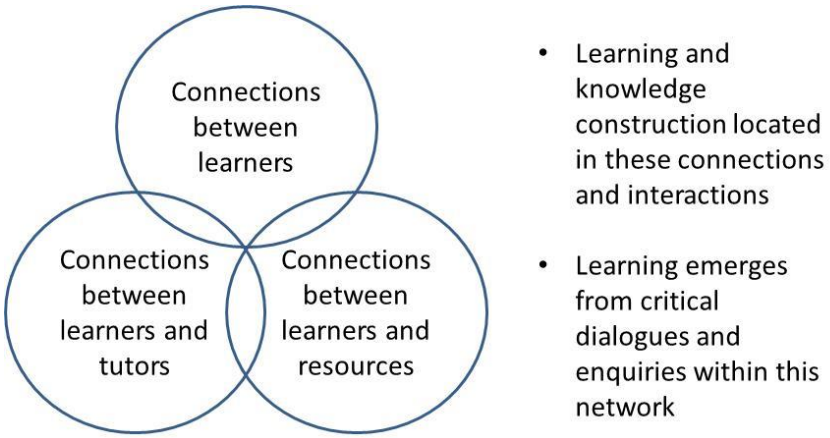

Figure 2.2 A model of networked learning

This NL view of the processes of learning certainly moves beyond the individual view of the ATL framework. Its focus is on interaction, dialogue and knowledge construction as the primary ways in which students learn.

There are different ways in which connections within a networked environment can be conceptualised. NL's relational view sees "learning takes place in relation to others and also in relation to an array of learning resources" (Jones et al., 2008, p. 90) which extend human-to-human connections to also take into account connections with learning resources. However, the human experience within the network is important. The differentiation between NL and actor-network theory (ANT) highlights this NL focus on human experience. ANT is a socio-material approach foregrounding the material and considers all elements of the network equally, without privileging human actors (Fenwick & Edwards, 2011). ANT is increasingly popular as an approach in researching learning within networks so it is interesting to note at the most recent NL conference Jones (2016) arguing for the ongoing centrality of human experience in NL research.

NL is a relatively new field of theory and research and as such is still evolving. While the core definition above gives a common focus there are different positions to be seen in the literature. For example the history of NL has been described as having its roots in "the traditions of open learning and other radical pedagogies and humanistic educational ideas" (McConnell et al., 2012, p. 4). Indeed many in the field work from a position of democratic values and participative designs (e.g. Ferreday & Hodgson, 2008; McConnell, 2006) or critical theory (Jandrić & Boras, 2015). Others however do not prioritise this and focus more on other aspects of the NL definition, the connections between peers, tutors and resources and the position that learning is a social, relational phenomenon (e.g. Jones, 2015; Ryberg et al., 2012). The differing positions observed in this evolving field will be highlighted in the remaining sections.

2.3.2 Community or network?

When considering the way the connections and interactions within NL are socially organised the metaphor of a learning community or sometimes more explicitly Community of Practice as a theoretical framework (Wenger, 1998) is often seen (e.g. McConnell, 2005, 2006; Sorensen, 2005). The community metaphor implies a level of close working, co-operation, and collaboration. However the idea of community in NL has been critiqued, most notably by Hodgson and Reynolds (2005) who suggest it is often unquestionably seen as desirable and its more problematic aspects ignored. In particular, they discuss the drive for consensus and conformity within a community which can be experienced as coercion, suggesting instead NL consider the idea of multiple communities "as a way of recognising and supporting difference and learning from difference" (p. 22). Ferreday and Hodgson (2008) similarly caution against 'the tyranny of participation and collaboration' in NL where in some cases the community

can be privileged over the individual, and members oppressed. Hammond (2016) argues against some of these critiques, praising consensus as a way to air differences and build arguments. He suggests it is still a valid educational aim worth pursuing, contending "the consensus seeking community is not the only approach to networked learning but it should not be marginal to how we think of knowledge building online" (p. 186).

Others suggest adopting the network metaphor more explicitly within NL rather than community. Community and collaboration imply strong ties and also privilege human-human ties. Instead it is suggested the metaphor of network leads to considering both strong *and* weak ties as types of connections which are important for learning (Jones et al., 2008; Ryberg & Larsen, 2008). Thus, close connections are not the only focus. Additionally, the use of network equalises the connections to more inclusively include connections with resources rather than focusing so much on human-human ties. Social network analysis has been suggested as a useful way to 'map' this (de Laat, Lally, Lipponen, & Simons, 2007a) and as will be seen it is used as an approach in some empirical NL research. While Ryberg and Larsen (2008) acknowledge the value of mapping and describing the underlying architecture of a network in this way they contend it is equally important to consider how to interpret these ties, what they say about the relationships between people and the meaning-making processes for participants.

Within and between these differing metaphors for NL (community, network) there is a tension between the individual and to what extent they are (or should be) connected to

and dependent on others in the network for their learning. At the heart of the NL view learning emerges from connections, dialogue and mutual construction of knowledge so some level of dependence is required. The concept of 'networked individualism' has been suggested by Jones (Jones, 2015; Jones & Dirckinck-Holmfeld, 2009; Jones et al., 2008) and also explored by Ryberg and Larsen (2008) as a way to consider this tension. It is a concept described as embodying "an interesting and seemingly contradictory trend; namely that we are witnessing an intensified personalization and individualization, while simultaneously being increasingly dependent on, connected to and mutually reliant on each other" (p. 104). Jones (2015) suggests networked individualism challenges ideas about learning which are based on community, co-operation and collaboration, of which NL is undoubtedly a part. This will be commented on again at the end of this section.

2.3.3 Processes of learning in a networked learning environment

Using a NL lens, as opposed to an ATL lens, means considering the processes of learning in a different way. Teacher and student roles shift as they relate to each other differently, an awareness of group dynamics is needed, and collaborative learning processes and collaborative knowledge construction should be considered. Each of these will now be examined in turn.

Shifting teacher and student roles

Cutajar (2014) in her recent PhD research on student experiences in NL environments describes NL as a shift from a traditional teacher-centric approach of dissemination of

agreed academic knowledge towards a shared responsibility for learning and changed roles for all involved, as the community works to construct knowledge together. In a review of empirical NL research by de Laat, Lally, Simons, and Wenger (2006) themes highlighted at that time in the research included changed roles for both student and teacher and the changing teacher-student relationship. They discussed the participative, democratic principles of NL diminishing the traditional boundaries between teacher and student with students adopting roles traditionally taken by teachers. Research has found these role changes for students to be complex (Cutajar, 2014) and students are sometimes uncertain as to their responsibility for group dynamics (de Laat & Lally, 2004). Changed tutor roles in NL are similarly complex with teaching described in this environment as "a rich and delicate undertaking" (de Laat, Lally, Lipponen, & Simons, 2007b, p. 280) balanced between allowing students to lead their own learning and yet providing a supporting framework. This transition to new ways of NL teaching can be challenging to an academic not only in terms of the roles they may adopt but also their identity, the way they engage with students, and their use of time (Boon & Sinclair, 2012).

Groups dynamics and the individual learner

In addition to changed roles for teachers and students, the processes of learning in NL means having awareness of group processes as all connect, interact and often, collaborate. Group processes are separated here into two aspects: group dynamics (the social, affective side of group processes); and collaborative learning processes. A differentiation is made sometimes between group dynamics in face to face environments and online environments. Perriton and Reynolds (2012) acknowledge that while there are clear differences between working in the online space and face-to-face (such as the

fragmented nature of asynchronous online discourse, greater opportunity online to craft contributions and feedback, lack of non-verbal communication clues) they suggest that the fundamental social dynamics at play are the same in both environments. McConnell (2005) examined group dynamics of three collaborative NL groups on a Masters programme, comparing two 'harmonious' groups with one 'anxious' group. He found the more harmonious groups had a clearer group identity, clearer group processes and control, more positive self-talk (ontological security) and better levels of trust and dependency. Overall they were more willing to give the time needed to engage in the processes of negotiation and co-operation. However, McConnell does not recommend any 'set of best practices' for NL groups as he finds the dynamics complex and diverse and dependent on the particular context for each group and the contexts for each individual involved. Perriton and Reynolds (2012, 2014) have explored the role of the tutor in intervening (or not) with group dynamics. They argue NL needs to pay attention to group dynamics and, as with McConnell, provide no simple set of rules. Rather they present a rich discussion of different perspectives which can be taken and a series of questions for NL tutors to consider when groups run into difficulty.

Others highlight the difficulties of collaboration. As presented earlier Ferreday and Hodgson (2008), while supportive of participative designs, caution against the coercion of participation where individuals may be labelled as 'unsupportive' within groups and marginalised as a result. One of the reasons they suggest for individuals not supporting the group is the difficulty of balancing the identity of being a learner in such an environment with other identities such as parent, spouse or worker. This links somewhat to McConnell's (2005) comments on the amount of time individuals need to have available to participate in NL groups. This raises questions about individual students'

motivation to engage in collaborative learning. Bradley and McConnell (2008) found that although an undergraduate programme had been designed from a constructivist perspective students still approached it from an individualistic one. They posit one of the reasons for this is the skills needed for collaborative, self-directed networked learning are perhaps better suited to postgraduate students than undergraduate ones. Sorensen (2005) sees non-participation largely as a design issue and provides an example of using Community of Practice principles in design to improve participation and engagement on an online Masters programme. It should be noted that those here suggesting you can design for co-operation or engagement are themselves instructional designers and others (e.g. Jones, 2015) suggest learning cannot be directly designed. In an interesting analysis Dohn (2014b) explores the concepts of 'motivation' and 'engagement' as they are discussed within NL. She suggests they are often unthinkingly used, with motivation positioned from an individualistic cognitivist position and engagement from a socio-cultural one, each of which has implications for how participation and non-participation in NL is explained. She suggests instead a bridge between the two and proposes "a continuum of possible states and processes, anchored in the individual, as 'motivational' or 'engaging' from the very self-directed to the fully socially constituted" (p. 108). The difficulties with collaboration and close-co-operation in NL and the consequent analysis of levels of motivation and engagement of participants raises again within NL the tensions between the individual and the wider social group.

Collaborative learning processes

In addition to the social processes and dynamics of groups, the collaborative learning processes in NL have also been studied and within that some have directly explored

knowledge construction. It should be noted that within NL designs this is often seen visibly in online forums, whether asynchronous or synchronous, where postings and discussion are available for analysis. Therefore, much NL research into collaborative learning processes starts from an examination of forum postings and this single approach is arguably quite limited. In addition, no common framework for collaborative learning processes in NL was found being used or being developed in this review, rather a variety of methods and frameworks are proposed. Several 'process' type frameworks were observed by which is meant a somewhat mechanical labelling and categorising of observed learning processes.

Pilkington and Walker (2003) examined the learning process of facilitating debate in a NL online synchronous discussion by mapping the roles students play (categorised as three types: management of task roles, community-building roles, argumentation roles) and seeing if raising awareness of roles led to improved debate. They found it did, although they were not sure if this would be sustained over the longer term and also noted students found it hardest to adopt the role of focusing the debate as they tended to rely on the tutor for that. This links to work cited earlier on the difficulties for students in adopting roles traditionally those of the teacher. Veldhuis-Diermanse, Biemans, Mulder, and Mahdizadeh (2006) proposing a coding scheme for specifically analysing learning processes in NL groups in asynchronous forums using three types of processes: cognitive, affective and metacognitive. This produces a description of what is happening in the online discussion and they also suggest a second coding scheme to analyse further and rate the quality of knowledge construction observed. Blake and Scanlon (2012) propose a method to map collaborative learning processes in online discussions using six categories of collaborative action (e.g. asking questions or

dialogue extension prompts, supporting the argument with a reference or an example). They also suggest mapping interaction patterns using social network analysis. As suggested earlier by Ryberg and Larsen (2008) there are limitations to these types of analyses which 'map' online behaviour as, although they can provide useful descriptions of what is happening, they provide limited understanding as to actual student experience which raises questions as to how to interpret such maps. A further approach is suggested by Zenios (2011) in an investigation of students in a doctoral programme engaged in online collaborative discourse. This builds on earlier work (Goodyear & Zenios, 2007) by suggesting epistemic fluency as a framework for examining knowledge construction. She builds on Ohlsen's list (1995, as cited in Zenios, 2011) of epistemic activities (or tasks) which include describing, explaining, predicting and arguing and suggests adding activities such as reasoning, negotiating, comparing and clarifying meaning. By examining these activities, she suggests we can gain insight into how 'epistemic fluency' can be developed in higher education.

As outlined above all of these 'process mapping' frameworks have been suggested by studying postings on online discussion forums. The only other proposed framework found in this review for processes of learning in NL environments is not from a higher education setting and did not come from analysing forum postings. Ryberg (2008) conducted a small case study observing processes of networked learning in a team of teenagers working on an open-ended problem. He suggests a further interesting metaphor, that of 'patchworking' to describe the processes which were observed to extend the view of learning emerging from connections and interactions to also consider the 'flow of activities' engaged in within the network. This study is interesting in that it more centrally includes interactions with resources in the network.

2.3.4 Summary

NL was defined and the metaphor of community was compared with that of network as both are being discussed in the literature and they have implications for how learning is conceptualised. The processes of learning within an NL environment are complex and many angles are being explored in the literature. No one view or approach is emerging. What can be summarised from this review is that the shift in teacher and student roles is complex and not easily achieved. Group dynamics need attention by both students and tutors and there is a possibility they may end up being coercive. The role of design, tutor interventions and how individual motivation and engagement in groups is conceptualised have also been explored. In terms of collaborative learning processes multiple frameworks have been suggested including process-type frameworks which map categories of roles or behaviour, a framework of building epistemic fluency, and a metaphor of patchworking to examine flows of activities.

A final comment is on a theme found in this review around theoretical discussions of the tensions between individualistic and sociocultural views within the NL field. This was observed at the more macro level when comparing NL as a field to connectivism (Ryberg et al., 2012), or a broad discussion of cognition in NL (Parchoma, 2016), as well as at the more micro level of the particular constructs of motivation and engagement within NL (Dohn, 2014b). These types of discussions acknowledge that both individualistic and sociocultural views are useful but limited and suggest some kind of bridge between the two as "a route to transcend dualisms" (Parchoma, 2016, p. 118).

2.4 Transnational student voices

The final research question of this study focuses on students' accounts of influences of the transnational context on their processes of learning. As outlined in Chapter 1, transnational or offshore programmes are those where institutions or programmes cross borders to come to the student rather than the student travelling to the 'home' country of the institution (Kosmützky & Putty, 2016). When searching the topic of transnational education (TNE) there is quite a body of work at the policy/institutional level discussing issues such as the drivers for internationalising (Mason, 1998; R. Naidoo, 2011), the patterns of export and import of TNE (Ahmad, 2015; V. Naidoo, 2009), or the quality assurance challenges with these types of programmes (McBurnie & Ziguras, 2007). When it comes to the specifics of teaching and learning and experiences at programme delivery level, as mentioned in the opening chapter, there have been a number of studies exploring the experiences of lecturers as 'flying faculty' or discussing how to prepare faculty for overseas teaching but there is less research to date on the student experience. This section of the review focuses on this smaller body of literature to learn what has been found so far when the transnational student has been directly studied.

Searches were conducted based on the following criteria:

- Empirical studies focusing on the experiences or voice of the 'transnational' or 'offshore' student;
- In a higher education setting;
- Within the last ten years (2005 to 2015);
- Excluded: Studies focusing on teaching styles or learning styles in transnational education and relating them to national characteristics (e.g. Heffernan,

Morrison, Basu, & Sweeney, 2010; Ho, 2010). The rationale for this is more fully outlined in Chapter 1 (Section 1.3.3).

Sixteen articles were selected which fit these criteria. For the majority Australia is the 'onshore' country (7), followed by the UK (4), and cross-institutional studies/mix of onshore countries (5). The offshore countries are: Hong Kong (4), Singapore (3), UAE (3), Malaysia (2), China (2), Vietnam (1), and South Africa (1). As will be seen they study a mix of undergraduate and postgraduate students. The majority of the studies are some form of qualitative research (11), followed by quantitative research (4), and one mixed methods study.

When analysed for the focus of each study, three themes emerged. Firstly, studies which focus on student choice and understanding why students choose a transnational programme. Secondly, studies which explore student satisfaction or student perception of quality with transnational programmes. Thirdly, those which use other frameworks to explore the student experience on transnational programmes. In each of these themes students' experiences or perceptions of teaching and learning might be explored to some extent or another.

2.4.1 Student choice

TNE is often discussed within a wider framework of the growing influence of neoliberalism in higher education and consequent commodification of programmes. With this lens the use of 'market' language sits comfortably, so understanding the

transnational market and exploring the student as a consumer choosing a programme is an approach seen in several studies. It can be seen in Fang and Wang (2014) who interviewed 30 students in China about their choice of programme, or in Wilkins, Balakrishnan, and Huisman (2011) who surveyed 320 students in the UAE about their choice of international branch campus. Each study uses a different framework but both are a form of 'push/pull' model which is a marketing lens exploring the push and pull factors influencing a student decision to choose a programme. Both studies suggest augmenting their frameworks as they find transnational students are influenced by some additional push/pull factors than the standard 'international' student who travels to another country for education.

Other studies also explore student choice but link it with broader issues. Chapman and Pyvis (2005) interviewed offshore students of an Australian university, 21 doctoral students in Hong Kong and 26 Masters students in Singapore. They examined student choice of programme as part of understanding students' social practices on the programme and their formation of identity. Their discussion of choice in this paper is initially similar to the kind of 'pull' factors seen in other papers (e.g. the desirability of an international education, the perceived high quality of the programme) but they then also contrast the students' stated desire for personal growth and intrinsic rewards when they chose the programme with the reality of their practices on the programme which often focus on extrinsic rewards such as assessment requirements rather than, for example, completing in-depth reading. They re-visit choice more directly in a later study (Pyvis & Chapman, 2007) where 26 undergraduate and postgraduate students in Malaysia were interviewed asking why they chose an international education. Again these were offshore students of an Australian university. What is interesting in this study

is a distinction they found between cohorts of students, those they labelled 'self-transformative' (they chose the programme as they wanted to change their outlook, gain a new identity) and those they labelled 'positional' (their choice was based on improving employment prospects). They suggested self-transformative students "generally were more accepting and welcoming of novel educational experiences and requirements associated with being a student at the campus than were students seeking positional advantage" (p. 236). It is difficult to read too much into a statement such as this as it was not explored in much depth in their study but linking students 'investments' in the programme with their openness to the learning environment is an interesting proposition. Hoare (2012) uses Pyvis and Chapman's terminology of positional and self-transformative in her longitudinal study of offshore students in Singapore (again an Australian university). Thirty students were interviewed during their undergraduate degree and 16 of them were interviewed again five years later. She found they had achieved high-level positional outcomes and had developed transformative learning habits. She states these findings are a 'good news story' which "both counters the author's initial expectations and contrasts with much of the negative press that TNE is attracting at the time of writing" (2012, p. 283).

This raises the idea of what exactly one expects to find when studying the experiences of transnational students. Do we expect these experiences to be worse, better, different, or exactly the same as their onshore counterparts? Arguably some of the findings discussed so far and many of those which will be discussed in the rest of this section are the same kind of findings you might expect for 'onshore' students. For example, surely student reasons or motivations for choosing a programme influence their openness to learning on a programme, whatever the context? A deficit seen in the

literature here is a tendency to discuss findings as *transnational* student experiences only rather than sitting them in the wider student literature or being more explicit about whether the transnational aspect is a truly unique feature. Another example of this is in the first Chapman and Pyvis (2005) study mentioned above where arguably the student practices described (e.g. lack of pre-reading for class, struggle balancing work, life and study) are more shaped by being part-time students working full-time than being transnational students.

2.4.2 Student satisfaction

Another theme which emerged in this review is studies which focus on measuring student satisfaction or perceptions of quality. Six studies had this as their focus and four of these used quantitative surveys. None of the studies used the same questionnaire although within all are scales or dimensions related to teaching and learning. In a conference paper Shah, Roth, and Nair (2010) combined student satisfaction surveys from the offshore students in three Australian universities and looked for commonalities. Overall students had high satisfaction with the course outcomes (e.g. an ability to think critically, the skills necessary to undertake ongoing self-directed learning) while lower satisfaction was seen in areas related to administration, library access and local support and resources. There was also low satisfaction with timely and constructive feedback on learning. Nair, Murdoch, and Mertova (2011) used the Student Experience Questionnaire which has seven scales, and compared results from the onshore campus (Australia) with the offshore campus (South Africa). They had similar findings as in the previous study: offshore students were overall satisfied with their learning experience but highlighted key areas for improvement in timeliness and

usefulness of feedback, computer facilities and library resources. This study also found several areas where offshore students were more satisfied (e.g. social life at campus). The authors speculated findings such as this were due to the offshore campus being significantly smaller in size than the onshore one and did not attribute any differences to the transnational context in particular.

Wilkins and Balakrishnan (2013) administered a self-developed questionnaire with seven dimensions of student satisfaction to 247 students in the UAE across multiple international branch campuses. Overall they found students were very satisfied and, similar to Hoare (2012), they comment on this positive finding in light of the criticisms of TNE in the literature. Similar to the previous two studies, the findings here also indicate students want more detailed and helpful assessment feedback and want more consultation time with lecturers. This paper engages in more direct discussion of the transnational context and what it might mean for teaching and learning. For example, there was only moderate agreement to statements that the course content was made relevant to the UAE or was intellectually stimulating. The authors then discuss debates in the TNE literature about localising content, concluding that the tension between localising curriculum versus offering the same course onshore and offshore is a big challenge. They also discuss the differences between employing local faculty and using 'fly in-fly out' lecturers, both of which have advantages and disadvantages. Of particular interest to this study is their discussion of the international mix of students seen in the UAE in particular, due to its high levels of ex-patriates (up to 80% of the population are not local). This means a diverse range of previous educational backgrounds at secondary and undergraduate level which "makes the teaching task more complex and difficult" (p. 550). They discuss the likelihood being higher of

students already having experience of self-directed learning or writing essays if they come from a US or UK based educational system rather than from the local UAE system. Their specific analysis of this showed that students who had completed secondary school in the UAE perceived their higher education course as more challenging and requiring more independent learning than students who had Indian, Pakistani, UK or US secondary qualifications. This echoes findings from Burnapp and Zhao (2009) who analysed online postings on social networks of Chinese transnational students. A theme emerged there of students discussing the differences seen in theories of education on the transnational course compared to previous education (e.g. not relying on memorisation, the need for creativity). A second associated theme identified by Burnapp and Zhao was discussion on the differences in study methods also not previously experienced, specifically self-directed learning and group work. The use of English as a second language on the programmes was identified as a theme which permeated all discussions.

Ahmad (2015) also explored satisfaction with international branch campuses and administered a self-developed questionnaire (245 students), supplemented with interviews (21) to offshore students in Malaysia. Overall again the findings indicate student satisfaction with international branch campuses is high. There is limited discussion of the transnational context here expect in the dimension of 'student learning environment' when the interview data is described. Here students report:

> having adapted well to the new learning situations at international branch campuses in Malaysia, although they still had difficulty adapting to the customs, culture and learning process inasmuch as some of them still retained their own

> cultural traits, such as language, expectations, achieving motivation, strong sense of competition and deep respect for lecturers. (p. 500)

The final study (Ly, Vickers, & Fernandez, 2015) interviews students in Vietnam exploring whether their expectations on the programmes were met and overall, as with previous studies, they were. The only 'offshore' issues discussed here were to do with the institutional arrangements and the different expectations students sometimes perceived from the onshore 'home' university and the local partner university.

Overall studies which took a student satisfaction lens found satisfaction was high in all instances and comparable (if not better) than onshore students. In three studies a lower score related to the timeliness and usefulness of feedback which, although it may be similar for onshore students, could possibly be exacerbated in the transnational context due to a number of factors such as misunderstanding of feedback (English as second language, previous educational experience) or faculty not nearby onsite. Specific features of the transnational context discussed here were previous educational background influencing the students' experience of teaching and learning (seen in three papers) and the discussion in one paper of the challenges of localising content and the appropriateness of using local faculty.

2.4.3 Other frameworks to explore transnational student experience

If understanding student choice or rating student satisfaction is not the focus of a study, other frameworks can be used to explore the student experience on TN programmes and this type of research tends to be qualitative. Seven studies were identified in this theme.

Two were already discussed in the 'student choice' theme (Chapman & Pyvis, 2005; Hoare, 2012) and Hoare's 2012 ethnographic longitudinal study of offshore students in Singapore in particular laments the dearth of qualitative research in this context.

Chapman and Pyvis's original study (2005) combined both Masters students in Singapore and doctoral students in Hong Kong. Two later papers looked at these groups separately and used different lenses. Revisiting the data on the Masters students Pyvis and Chapman (2005) used a framework of 'culture shock' to explore whether transnational students experience this within the classroom. They define it as situations which require role adjustment and new identities and where previous learning does not apply and they specifically focus on classroom culture, not ethnic/national culture. They compared findings to another study where onshore international students in Australia had reported difficulties in understanding, making sense of their learning and feeling excluded. Their study found some examples of culture shock. It is another study where the findings are possible to explain as due to other factors, not just the transnational context. For example, feelings of exclusion could be due more to the practice of admitting new students in each module rather than the offshore context, and the author's acknowledge this. But their overall contention that international students both onshore and offshore experience culture shock in the classroom is interesting.

Their next paper revisited the data from 21 interviews with doctoral students in Hong Kong (Chapman & Pyvis, 2006) where they cite the work of Lave and Wenger (1991) to provide a theoretical lens of social practice and developing identities within learning communities. They suggest identity for these students is "characterized by a series of

dilemmas experienced by the students as they seek to become members of the academic community" (p. 291). These dilemmas include: sense of belonging (to a university located far away); educational goals (the compromise identified earlier of initial goals of personal development and the pragmatic social practices engaged in on the programme); learning style preferences (work within the group, individual work on my own research); and relationships with supervisors (how to establish and manage at a distance). With their lens of identity formation within a community these findings are seen to demonstrate membership of communities which operate at several levels, from the wider onshore university community, to the local classroom, to the supervision community. In their conclusion they state that "academics involved in offshore programmes need to be aware of the cultural and social adjustments that are required of both themselves and their students" (p. 301) although within the paper itself the specific cultural adjustments are not strongly discussed.

Another study which talks somewhat more directly about cultural adjustment is from Kadiwal and Rind (2013) who conducted an ethnographic study of a UK offshore teacher-training programme in Dubai. They interviewed 4 students and 8 tutors, observed meetings and teaching, and conducted a documentary analysis. Although the title of the paper indicates they are exploring student and tutor experiences of offshore education they are actually more specifically exploring experiences of adapting a UK maths and science curriculum for teaching in secondary schools in the UAE. They draw on cosmopolitan theory and propose a term 'selective cosmopolitans' which means:

> individuals who are keen to advantageously position themselves in the contemporary globalised world. While doing so they negotiate between different cultural influences pragmatically, simultaneously experiencing ambivalence and tensions in terms of their sense of identity. (p. 697)

In higher education in the Middle East the tension of balancing Westernisation with local culture and identity is an acknowledged issue in some literature (Miller-Idriss & Hanauer, 2011). The suggestion of 'selective cosmopolitans' as a concept captures this tension well. A specific example of this found within their study is where trainee-teachers, while appreciating what they saw as modern student-centred teaching methods, adapted group learning activities so that only the same genders worked together. The paper overall though is more focused on how this group (trainee-teachers and tutors) negotiated the inherent tensions of adapting a UK school curriculum for local cultural and religious norms. For that process they suggest both groups were 'selective cosmopolitans' and negotiated these tensions pragmatically and ambivalently.

Two papers published from a study of offshore students of a British university in Hong Kong are more critical in their findings than previous studies, particularly compared to the 'student satisfaction' theme discussed earlier. In the first study Leung and Waters (2013) use a lens of 'space and place' to examine how this shaped student experiences. Seventy transnational students were interviewed on programmes which were run in partnership with a local university. A particular arrangement of these programmes seems to have had a large impact on the findings. Although there was a local partner, the offshore students did not go to the main campus of that institution for classes, instead they were taught in an office space in the city centre, mainly by local faculty with occasional UK fly-in lecturers. They also had restricted access to student supports compared to the local university students, such as reduced access to the library (both offline and online), or to sports resources. With such an arrangement it is perhaps no surprise they conclude that, despite the overt marketing of these programmes which

claim it does not matter where you study (in the UK or in Hong Kong) the reality is that space and place matter hugely and can lead to exclusion of offshore students within the wider 'local' body. They fundamentally question whether "academic credentials, education experiences and related social and cultural capital can, when packaged as TNE, travel across space" (p. 50). In their second paper Waters and Leung (2013) take the same data but examine it through a lens of spatial mobility and educational opportunities which they link to cultural capital and class reproduction. While this is an interesting analysis it is not related to the focus of this study (the experiences of learning within the programmes) and is not pursued further here. It is noted though as another theoretical lens seen in the literature.

Within this theme, there is a broad differentiation between those who take a more critical stance on TNE in general (two articles), questioning its purpose and impact, and those who do not (five articles, although one (Hoare, 2012) acknowledges the wider questioning of TNE). Culture is addressed in three articles as either 'culture shock' in the classroom, the need for 'cultural adjustments' by both staff and students, or as 'selective cosmopolitans' where cultural tensions are pragmatically and ambivalently negotiated. Finally, two studies examined formation of student identity within a learning community.

2.4.4 Summary

It is difficult to draw conclusions from this literature. While some common themes emerged which were discussed, true comparison of studies or looking to build findings into a common argument is hard to do. Partly this is because of the limited amount of empirical research found and selected. But another challenge is the multiplicity of transnational delivery models resulting in almost every teaching and learning environment under study in this review being different. Another challenge is the different frameworks used in each study, even where the topic being studied is nominally the same (e.g. choice or satisfaction). No study reviewed here used the same framework or instrument. A final challenge is within the literature itself there is not always an explicit discussion of the relevance of the transnational setting for the student learning experience and, as mentioned, a tendency to not sit the transnational student experience within the wider student experience literature.

Having said that, examining these articles specifically for how the transnational context seems to impact the student experience of teaching and learning on offshore programmes brings several issues to light. The previous educational experience of the student, if it is different from a Western system, was highlighted (Ahmad, 2015; Burnapp & Zhao, 2009; Wilkins, Balakrishnan, & Huisman, 2012). English as a second language was also highlighted (Burnapp & Zhao, 2009; Kadiwal & Rind, 2013; Wilkins et al., 2012). The idea of culture shock or adjustment in the classroom was also discussed (Chapman & Pyvis, 2006; Kadiwal & Rind, 2013; Pyvis & Chapman, 2005). The desire for more feedback, and more explicit, helpful feedback was seen in student satisfaction surveys (Nair et al., 2011; Shah et al., 2010; Wilkins & Balakrishnan, 2013).

The advantages and disadvantages of using local faculty was also discussed (Leung & Waters, 2013; Wilkins et al., 2012). Finally the appropriateness of adapting content for the local context was highlighted (Wilkins et al., 2012).

2.5 Conclusions

Three core aspects of this study were explored for literature related to the ATL framework (summary in Section 2.2.4), the NL framework (summary in Section 2.3.4) and the voice of the transnational student (summary in Section 2.4.4). This study aims to address gaps in all three aspects. Empirical research using the ATL framework has evolved to be primarily quantitative using a variety of instruments so this qualitative study is welcome. Following this review, the limitations and questionable empirical validity of the framework are noted, but its dominance in higher education research and the wide usage of the deep and surface metaphor make it an interesting framework to explore further. The NL framework has a social view of learning which, as outlined in the last chapter, is another level of context within which to examine students' processes of learning and is used to complement the ATL framework. The review highlights a focus in the NL empirical research on collaborative learning processes, those with close ties, so a study such as this which does not focus solely on collaboration is welcome. Finally, the review of literature on transnational students highlights a gap in qualitative research exploring the student experiences of learning within these contexts so, again, this study will contribute to addressing that gap.

Chapter 3: Research Design

3.1 Introduction

A qualitative, interpretivist approach was chosen in this study to fill gaps identified in the previous chapter, where more qualitative research has been called for in this setting. This approach is outlined over two chapters. This one describes my overall research approach and the next one discusses in detail a review of literature exploring how to present phenomenographical findings. This chapter begins with an explanation of why I chose phenomenography to explore my research questions and addresses some of the critiques of that approach. I then describe how I generated and analysed data, why I returned to the literature to review how to present findings, and how I attended to concerns about quality in my study.

This is a very personal chapter in which I try to convey the journey I have taken as a novice researcher. It is necessarily a reflective chapter, written in the first person, which touches on my concerns, struggles and learning as the study progressed. Being so open and reflective about my process serves two functions. Firstly, it is part of the transparency needed for qualitative research to be trustworthy, more of which is discussed below. Secondly, it is about sharing this experience with other novice researchers. The fine details of the research journey are often only seen in thesis documents such as this and can be valuable for those of us in the early stages of our research career, struggling to understand how competence and confidence are built.

My ontology and epistemology

Over the course of the project my view of the world and how knowledge is created has been the subject of much reflection and challenge. The position I now hold is similar to that described by Ashwin (2012). Ontologically this is a view of the social world which is 'realist' (after Sayer, 2010). The social world is real (exists independently of us), complex and emergent. Epistemologically I believe, again agreeing with Ashwin, that this complex, emergent social world cannot be known directly "rather, the world can only be known through our constructs of it" (p. 17). This combination of realism and constructionism has implications for the way I framed my questions and approached data generation and analysis, as will be discussed below.

3.2 Chosen approach

As outlined in Chapter 1 my research aim and questions were as follows:

Aim

To explore the variation of transnational postgraduate students' accounts of their processes of learning within a networked learning environment.

Research questions

1. In what different ways do these students describe their understandings of Master's level learning?

2. In what different ways do they describe their processes of learning through their interactions and connections with peers, lecturers and resources in a networked learning environment?
3. In what ways do these students describe the transnational context influencing their processes of learning?

As outlined in the introductory chapter, the first question was chosen from the approaches to learning framework, the second question specifically explores the heart of the aim of the research (processes of networked learning), while the final question explores the context in which the students are studying.

Obvious methodologies to explore student experience are phenomenology or phenomenography and both were considered. Phenomenology seeks to uncover the essence of a phenomenon but the notion of essence and providing a single description of the phenomenon did not sit well with the overall aim of my study. Phenomenography allows not just for commonality of experience but also variation (Åkerlind, 2005c). In phenomenography, experience is seen as nondualistic. In other words, experiences are not located out there in the world nor internally within the person, they are internally constituted between the person and the world. Therefore, experiences of phenomena are expected to be different for different people. Descriptions of these experiences "are descriptions of the internal relationship between persons and phenomena" (Marton & Booth, 1997, p.122). The outcomes of phenomenography are "a number of qualitatively different meanings or ways of experiencing the phenomenon […] including the structural relationships linking those ways of experiencing" (Åkerlind, 2005c, p.322). These outcomes would provide a rich description and a useful understanding of the

various ways postgraduate students describe their processes of learning on the programmes and so this approach to designing my study was chosen. It should be noted that phenomenographical analysis was carried out in relation to the first two research questions only. The final question explores the context within which the phenomenon takes place and, as will be explained, the phenomenographical analysis did not address this well so a thematic analysis was carried out for that question.

3.2.1 Marton's framework

Phenomenography originated as a research approach from the Goteborg studies of the 1970's which suggested the approaches to learning framework (as was outlined in Chapter 2). Ference Marton in particular led the development of it as a separate research approach with his influential articles commencing in the 1980's (Marton, 1981, 1986) and his book with Shirley Booth (Marton & Booth, 1997) which articulated in more depth the underlying philosophies. His work is firmly based in the field of educational research and he proposes it as an approach which is useful for examining both the content and process of learning (Marton, 1981) which was a good fit with my study.

According to Marton and Booth (1997) the unit of analysis in phenomenography is *a way of experiencing something* and the object of the research is the *variation* in the ways of experiencing. In later work Marton clarified that the unit of analysis was a 'conception' which is considered analogous to 'ways of experiencing', 'ways of understanding', 'ways of apprehending', and so on (Marton & Pong, 2005). This conception or way of experiencing something occurs when a person discerns something from the broader context within which it sits and assigns it both structure (key features)

and meaning. These two aspects of the conception (structural and referential) are intertwined and occur simultaneously. As humans we cannot be aware of all aspects of everything and so our awareness itself has a structure to it, where we choose to foreground certain things (differentiate them from the context) and allow others to recede (Marton & Booth, 1997). A key element of phenomenography is that while people may experience a phenomenon differently "that which they encounter appears to them in a limited number of qualitatively different ways" (p. 112). This argument is linked to the idea of a structure of awareness. We do not have the capability to be aware of all aspects of everything at once and in fact it is necessary to be able to discern or foreground certain things to be able to give them meaning. Exactly because of this "limited capacity for simultaneous focal awareness" (p. 101) of a phenomenon we are constrained into a limited number of qualitatively different ways of experiencing it even though it is experientially inexhaustible. These limited numbers of different ways emerge from data analysis as 'categories of description'.

Phenomenographers see the categories of description of the experiences or conceptions of a phenomenon as logically related to each other in a hierarchy or structure. The hierarchy is ordered based on the level of complexity or inclusiveness of the descriptions which have emerged. This is justified in the educational context where this approach was developed:

> Educationally, it is a reasonable assumption that there is a norm, a particular way of experiencing a phenomenon that is to be preferred over others, and that is what the educational effort is designed to foster. Some ways of experiencing it are more complex, more inclusive, or more specific than others, and they coincide to a greater or lesser extent with those considered to be critical for further educational development. Thus, we seek an identifiably hierarchical structure of increasing complexity, inclusivity, or specificity in the categories, according to which the quality of each one can be weighed against that of the others. (Marton & Booth, 1997, p. 126)

This claim is central to my understanding of the hierarchical structure of phenomenographical outcomes and I will return to it later.

Once a final set of categories of descriptions related to each other in a hierarchical structure is reached, it is known as the outcome space. This outcome space is a description of variation in the ways of experiencing the phenomenon. It is a description at the collective level, the voices of individuals have been lost in an effort to arrive at "a stripped description in which the structure and essential meaning of the differing ways of experiencing the phenomenon are retained" (p.114). Marton & Booth (1997) also acknowledge this is only ever a partial description of the phenomenon.

3.2.2 Critiques of phenomenography

Phenomenography was a good fit with my overall interest in wanting to understand both what was common and what was different in the ways students were experiencing learning on the Masters programmes. However, Marton's approach is not without criticism and several of the issues raised in the literature were similarly concerns of mine. Firstly, Marton (1981) claims that phenomenography can reach a set of categories of description which are "stable and generalizable between situations, even if the individual moves from one category to another on different occasions" (p. 195). This is an essentialist view with which I do not concur and Richardson's (1999) suggested approach for resolving this dilemma is to apply a constructionist approach to phenomenography. This would mean not claiming that the outcomes of my research are "stable and generalizable" but are instead merely my constructions of the participants'

constructions (although based on solid data). This is the approach I chose to take as it sat more comfortably with my constructionist epistemology.

Another related critique of Marton's 'pure phenomenography' approach is his claim that the research interview is a mechanism which can access the student experience directly, that the unit of analysis is 'a way of experiencing something'. Richardson (1999) and others (Ashwin, 2006; Säljö, 1997) dispute this, instead suggesting that the interview can only access the student's *account* of their experience. My research aim was adjusted to reflect this view and I only claim access to students' *accounts* of their processes of learning.

Webb (1997b) critiqued both the notion of deep and surface learning (seen in Chapter 2) and phenomenography as a methodology. His concern with it as a research approach is the hierarchical structure of the outcome space and the idea that the most highly developed category of description (the most inclusive, the most complex) is seen as the "correct meaning, correct knowledge or correct understanding" (p. 200), the one which teachers should be focused on guiding their students towards. This carries with it value judgements and prejudices as to what is 'correct'. Webb claims this also means that phenomenographical researchers are not open in their analysis, they are framing all categories of description as more or less complete aspects of what has already been deemed as 'the correct way' to experience or conceive of something. Thus "phenomenographic explanation is prone to reproduction of the discourses it studies" (Webb, 1997b, p. 201).

This has been a strong concern of mine. While Åkerlind, Bowden, and Green (2005) state "the hierarchy [of the outcome space] is not one based on value judgements of better and worse ways of understanding, but on evidence of some categories being inclusive of others" (p.95), Marton & Booth (1997) acknowledge that value judgements are made as to what is a more or less inclusive category of description of the phenomenon:

> The way in which we describe the variation reflects our, the researchers' understanding of what differences are critically significant. It also represents our value judgments about what counts as a good, or a better, understanding of a text, of a problem, or whatever. (p. 107)

They also claim "value judgements cannot be empirically grounded, but they can be argued" (p. 107) and this is where, for me, educational context is central to their argument. As they stated previously in education settings a norm is usually agreed as to what we are fostering in our students and is seen in the chosen curriculum, textbooks or agreed disciplinary understandings of key concepts. Therefore, using phenomenography to explore variation of the understandings of disciplinary concepts, and arranging these variations in a hierarchical structure, makes eminent sense if the goal for that research is to improve teaching towards such concepts. Indeed Ekeblad (1997) in her response to Webb argues for the same. However, for my own study I am not exploring the 'what' of learning (programme content), I am exploring the 'how' of learning (processes). Does a hierarchical structure of variation make sense for processes of learning? If I argue for a value judgement which sees deeper approaches as what is being aimed for in the programmes then perhaps I can arrange a hierarchy of more or less inclusive and complex descriptions of 'deep'. Arguably my first research question (understandings of Master's level learning) could have outcome spaces based on this value judgement. My concern in advance of commencing data analysis with such a position was how limiting

and closed it might be and indeed my first attempt at data analysis (as discussed below) proved to be just that – I was finding exactly what I was expecting, reproducing the discourse and had to adjust my approach. For my second research question (processes of networked learning) I don't believe a value judgement as to what is the 'correct' way to experience networked learning could or should be made. Therefore I was open to seeing if either a hierarchical or an alternative, non-linear structure would emerge, such as a branching structure as suggested by Åkerlind (2005c).

Tight (2015) in a recent overview of the development of phenomenography within higher education claims "the tone of most critical discussions has…been accepting of phenomenography as a research design" (p. 11). And so more recent critical discussions have been focused on clarifying methods and practices and discussing issues of quality and trustworthiness (e.g. Bowden & Green, 2005; Collier-Reed, Ingerman, & Berglund, 2009; Sin, 2010) which I will be referring to throughout the remainder of this chapter.

3.3 Generating data

Reflecting a constructionist view I consider the data and findings in my study have been generated rather than collected or discovered (Richardson, 1999). As stated above I consider the interview data to be accounts (constructions) of experience, not directly the experience itself. The findings have been generated by my interpretation of the participants' constructions of their experience with the phenomenon. I state all of this here to lay the ground for the limited claims I will make later.

3.3.1 Selecting and inviting participants

Potential participants in the study included students in Masters programmes in Dubai and Bahrain. Two part-time Masters programmes in the field of healthcare management are run in each site. Both programmes also run in Ireland. The structure is described in the prospectus as blended learning which is a mix of in-class teaching and online support through Moodle. A brief outline of the programme structure which is the same in all three countries is as follows:

- *Year 1:* Six sequentially taught modules. Each module is taught in a block of four days. Students may have some pre-class work to do, usually some reading provided on Moodle. The overseas modules are delivered by a mix of fly-in/fly-out faculty from Ireland and the locally based Irish/English faculty. Once the class days are over there are usually 4-5 weeks while the students work on assignments. During this period, they are supported by the lecturer through Moodle who has provided at a minimum reading lists and will answer questions on the forums but may also provide podcasts about how to approach the assignment, useful video links, or host online meetings to discuss issues.
- *Year 1 Assessment:* Four of the modules are assessed individually through either essay assignment or exam and the other two are assessed collaboratively, one paired assignment, one team assignment.
- *Year 2:* Students complete an individual dissertation through an action learning project supported by a series of seminars and participation in an action learning group.

To ensure variation in the target group, a requirement for credibility of method in my study (Collier-Reed et al., 2009), I decided to interview students from Year 1, Year 2 and recent graduates of the programmes. This would create a participant group of students who were at different stages of their learning and thus "maximise conceptual variations in the data" (Sin, 2010, p. 313). Where I was programme director and had direct responsibility over students for assessment (MSc in Healthcare Management in Bahrain) students were not invited to participate. I had hoped to interview between eighteen and twenty-four students (six to eight in each category of Year 1, Year 2 and recent graduates).

Once ethical approval for the study was received (see below), invitations were sent by email at the beginning of February 2014 through a gatekeeper, the programme administrator in Bahrain, to the relevant pool of students. They were provided an information sheet and asked to volunteer for an interview with a deadline of mid-February to respond. Twenty-eight students responded to the invitation. Once they volunteered through the gatekeeper I contacted them directly to schedule the interview. As I was finishing my work contract and moving back to Europe in early April 2014 there was a six-week period (mid-Feb to end March 2014) during which the majority of the interviews took place.

Of the twenty-eight initial volunteers, eighteen were interviewed. This left a group of ten who did not participate for a variety of reasons. Two formally withdrew once I engaged with them (one citing discomfort and one citing time). Eight others either did not turn up for interview or stopped responding to communication which I had to take as informal withdrawal. Six of these were Year 2 students which was a particular

concern as the breakdown of the eighteen students by stage of study who were interviewed is seen in Table 3.1.

Year 1 students (completed first semester, 3 modules)	8
Year 2 students (completed 6 modules, in thesis stage)	3
Recent graduates (completed programme in 2013)	7

Table 3.1 Participants by stage of study

The smallest group interviewed were Year 2 students and I made many attempts to engage with the six Year 2 volunteers who ideally would have participated. They were all based in Dubai which I visited twice during my six-week window of interviewing. Despite each student agreeing to various appointment times they did not turn up. One possible reason is they were in their thesis stage with full drafts due to be submitted in the first week of April and they did not have the time available to interview. In June 2014 despite multiple agreed appointments and offers to interview over Skype, I decided further engagement with the remaining volunteers was futile and perhaps could be seen as coercive. At that stage I also had completed eighteen interviews, the final one by Skype in June 2014, and concluded that it was sufficient. I felt the variation within the group had been captured, particularly as the last two interviews did not seem to introduce any new angles. Also from a data management point of view eighteen interviews, each almost an hour long, where the set of transcripts would need to be treated as a whole was reaching the upper end of the manageable range (Trigwell, 2000) particularly for a solo researcher.

The final breakdown of those interviewed by location was ten students enrolled in Bahrain and eight in Dubai. One student from Bahrain and one from Dubai were interviewed by Skype, all others were interviewed in person. Fourteen were women (78%) and four were men (22%) which reflects the gender breakdown of the programme participants overall (usually 70 – 80% women students). They were from a wide range of international backgrounds and a mix of professions as seen in Tables 3.2 and 3.3. Ages ranged from 25 to 55 (average age 36). Two students were native English speakers, for all others English was a second language.

Country	No. of interviewees
Bahrain	4
United Arab Emirates	4
India	3
Sudan	2
Palestine	1
Saudi Arabia	1
Malaysia	1
Canada	1
Australia	1

Table 3.2 Participants by nationality

Profession	No. of interviewees
Doctor	8
Nurse	5
Biomedical scientist	2
Dentist	1
Physiotherapist	1
Pharmacist	1

Table 3.3 Participants by profession

3.3.2 Preparing for the interviews

Two main elements needed to be attended to in preparation for the interviews: preparing the schedule of questions and preparing myself.

The interview schedule

Firstly, to explore my research questions I needed to devise a schedule of questions which allowed the students to talk about their processes of learning within the networked learning environment. Asking students to talk about their experiences of a phenomenon is working with them "to bring forth [their] awareness of undertaking the task, a state of meta-awareness" (Marton & Booth, 1997, p. 130). This is difficult to do spontaneously. Marton & Booth (1997) recommend an approach of having a first level concrete reference point from which a deeper second level exploration of meta-awareness can be approached. In practical terms this meant devising a schedule which asked students to talk about concrete examples of what they did in practice such as how they prepared assignments, how they studied, and how they interacted with others

before moving to deeper questions such as how they defined learning and what they understood was meant by Master's level learning. I was also aware of needing to elucidate not just the structural aspect of the students' experiences (the key features) but the referential aspects (the underlying meaning). This meant developing an interview schedule and technique which allowed me to probe for clarification and to ask students to confirm and elucidate the meanings of the expressions they might use rather than make my own assumptions about what was meant (Sin, 2010). As will be seen later, when English is a second language for participants this adds another layer of complexity to the process.

The interview schedule was built over a period of time, beginning with core questions, augmented and re-ordered (final version in Appendix A). After asking general information about educational and professional background (Q1), all students were asked to describe how they approached their study in each phase of the modules (pre-class, in-class, and post-class (Q2) and to describe step-by-step how they prepared their assignments (Q3). These questions were designed so students commenced the interview talking more generally about their studying patterns to get a sense of their approaches to learning (deep/surface/strategic) as well as their interactions with others and resources. After that other questions were used to probe their understandings of Master's level learning (the first research question) and their interactions and connections with others and resources (the second research question). Examples for the first research question include asking how they define learning (Q 10) and Master's level learning (Q 9), what they think is the difference between what was required of them in their undergraduate programmes and this programme (Q 9), and how they judge their own work (Q 4). Examples of interview questions to probe the second research

question include asking what kind of things help you learn best (Q8) as a way to see what student's foregrounded in their description of the network, what they considered more important for their own learning. For the third research question Q11 directly asked about influences of the transnational context but as we shall see later this was not a totally successful question.

Preparing myself

The context in which the interviews were taking place needed to be considered. The students were on a transnational programme in the Middle East so most participants were likely to be Arab and English would not be their first language. In the Middle Eastern context (particularly the Gulf region) being a woman interviewing men should also be reflected upon. Finally, as a lecturer on these programmes interviewing students my own experiences, opinions and power position would have to be considered. I took several steps to address each of these aspects.

Once the interview schedule was devised I had two meetings with Bahraini colleagues (one man, one woman, both lecturers) to review it and talk about the interview process. On a technical level I wanted to ensure the questions made sense to anyone for whom English is their second language. I also wanted to ask my colleagues if there was any aspect of the interview that could be seen as culturally sensitive or if there was anything I should be aware of in conducting the interviews with Arab students which would impact the level of openness. I had a particular concern about being a woman interviewing male students and whether that would unduly influence the interview process. Both colleagues assured me that my gender should not be a concern on two

levels. Firstly, they felt the students who chose to attend an Irish college were aware faculty were of mixed gender and also classes were of mixed gender, therefore there was a level of comfort in that environment. Secondly, any man who volunteered for my study was aware of my gender from the invitation so they were obviously comfortable to do the interview with me.

In terms of any other cultural sensitivity both of my colleagues felt the topics being explored were not controversial and students should feel they could easily discuss them. Issues which would impact the level of revelation would be anything political or anything viewed as tightly connected to religious beliefs/values, neither of which I was exploring. Both colleagues believed English as a second language was the bigger issue and advised me to spend time explaining each question if it wasn't immediately clear as well as clarifying responses. This was particularly pertinent as it linked with advice from Sin (2010) for phenomenographic interviewing to ensure time is spent clarifying underlying meaning.

I also spent quite some time reflecting on my own position. I was guided by Ashworth and Lucas (2000) to consider 'bracketing' my own preconceived ideas which may have come from the literature or from my own experiences. I used an idea from Peshkin (1988) which was to be "meaningfully attentive" (p. 17) to my own subjectivity by writing (and revisiting regularly) a subjectivity statement. This highlighted six areas for me where I had strong opinions or feelings which could be 'activated' during the interview and therefore I should be aware of limiting their influence. These six areas were my personal opinions about: the students; the programme; learning and pedagogy

in general; the college and school; my colleagues; and the local culture. For the last area, my personal opinions and experiences of the local culture, I was particularly helped by reading Sanderson (2004) and his discussion of engaging with the 'cultural other' which made me reflect more honestly and consciously on how I was constructing the 'otherness' I was experiencing as a Westerner in the Middle East.

3.3.3 Conducting the interviews

Sixteen of the interviews took place in person and two interviews were conducted by Skype. The first two interviews were conducted as pilots and both the schedule and my interviewing technique were assessed (Åkerlind, 2005a). As a result of piloting the order of the questions was changed to stay grounded for longer in discussion of specific examples of student practice before moving toward more general meta-awareness questions. My own questioning style was also adjusted so that I talked less, a trend that continued. While the pilot interviews were the shortest two conducted (28 minutes and 35 minutes) they were still included in data analysis as the interview questions were not radically altered for subsequent interviews. On average the remaining interviews were 51 minutes in length, with the longest one lasting 78 minutes. After each interview I wrote a short paragraph of field notes capturing my immediate reflections about the student and the process.

Within the first three interviews I realised that my agenda for the interview (explore accounts of their experiences) was sometimes as odds with the student's agenda which was to use the opportunity to give feedback on the programme itself. To allow the students space for this I added two questions at the end of the schedule: what advice

would you give new students to get the most learning from the programme (Q 12); and what advice would you give the college to help improve the learning for students on the programme (Q 13). The first of these was somewhat linked to my research questions and so any relevant responses were included as part of data analysis. The second question was not directly related to my study but it was something most students wanted to talk about. The responses to that question were not included in data analysis but were summarised as themes and given as feedback to faculty.

In general, I felt my interviewing improved over time. I allowed the students to talk more and, as I became more familiar with my own schedule of questions I often did not have to directly ask some questions as they had already been answered. I became better at letting the phenomenon emerge rather than focusing on a structured schedule. In early interviews students often asked if what they were saying was 'the right thing', they had a concern that they were answering the questions 'correctly'. I often had to reassure them that there was no right or wrong answer. Some of this is perhaps cultural and I made clearer efforts in the interview set-up to explain qualitative interviewing and that it was their experiences I wanted to understand. English as a second language was sometimes a concern particularly where I asked for clarification and then still was not sure what the student meant. However, by exploring each aspect of my research questions through several different probes I felt that by the end of each interview I had a good sense of their accounts.

Two interviews were conducted through Skype, one with video enabled and one without. The one with video did not seem markedly different from the face to face interviews although I had to account for delay in audio at some stages and ask for some

statements to be repeated. The interview without video was my most challenging. English as a second language being a barrier was most obvious here as there was no body language to help with translation on both sides. All my questions had to be shortened, simplified and repeated.

Although I did as much as possible to address the issues of power dynamics, second language and different cultures in the interviews I found the process challenged my epistemology and forced me to more deeply engage with my thinking about how knowledge is generated. What exactly was I collecting? Whatever it was it was undoubtedly shaped by some participants' need to please, my role as a lecturer and the cultural deference towards such a role, some participants' desire to give feedback about their frustrations with the programme rather than talk about their processes of learning, and some participants previous experience of me. There was nothing 'objective' or 'truthful' about what I collected. It is undoubtedly a construction between me and the interviewees at a particular moment in time.

3.4 Analysing data

In the initial stages of data analysis, I was predominantly guided by the writings of Åkerlind and Bowden. Åkerlind has written about comparing different approaches to data analysis in phenomenography (Åkerlind, 2005c) as well as describing in detail her own approach as a solo phenomenographic researcher (Åkerlind, 2005a, 2005b). Bowden has written about phenomenographical analysis as a team effort (Bowden, 2005) which was not my situation, but I came to rely on his approach to constituting the structure of the outcome space as will be explained in Section 3.4.3.

3.4.1 Transcribing the interviews

I transcribed the interviews myself using f4transkript (version 5.2) software. The first three interviews were transcribed at the same time as other interviews were being conducted and that was helpful to improve my interview technique. The remaining interviews were transcribed over the following months. At first every utterance was transcribed but over time I focused on the main speech only although I noted silences, laughter, emphases, and any other utterances which gave further meaning to the students' words. As I was not doing detailed linguistic or discourse analysis this was considered a sufficient approach to transcription (Collier-Reed et al., 2009). I was also aware while I was doing transcription that this could be considered a first level of analysis so I took notes of my thoughts as I transcribed, noting links to the literature, links between transcripts and often making notes about my interview technique. As each interview was transcribed it was emailed to the student to review it, as agreed at the interview. Only one student wanted her transcript amended slightly to clarify meaning and her amended transcript was the one used in analysis. Initially IDs were used to label each transcript for anonymity. These were later changed to pseudonyms which are used in Chapter 4 (Findings).

3.4.2 Preparing for data analysis

Data analysis did not start until all interviews were complete which is advocated by Bowden (2005). While there can be considerable variation in the way data is analysed by phenomenographers there are some common approaches when it comes to preparing yourself for this phase. Before analysis I listened again to all interview recordings to re-familiarise myself with all that was said and to hear it again in individual context. I also

re-read each transcript as I was listening and made final minor adjustments to the text where anything was missed. While there is a focus on the collective in phenomenography I felt this re-immersion in the individual voices was important preparation as there had been a gap between completing my final interview and commencing analysis. I was also aware as Brinkmann and Kvale (2015) say that "transcripts are impoverished, decontextualized renderings of live interview conversations" (p. 204) and going back to the audio before commencing analysis would bring more of the original meaning and context to my mind. I also revisited my interview field notes and my transcription notes. All of this immersion in the data was complemented by reflection on my attitude which I needed to commence analysis (and retain throughout analysis) as an "open and thorough attitude, eschewing preconceived ideas and being receptive for the meaning that interviews themselves reveal" (Collier-Reed et al., 2009, p. 346).

3.4.3 Conducting data analysis

Data analysis was a lengthy, iterative process over eight months. As I had three research questions I conducted three separate data analysis exercises, sequentially. In her PhD thesis Cutajar (2014) discusses the challenges of multiple research questions in phenomenography and whether to do analysis simultaneously or sequentially, particularly if you feel your questions are inter-related. Guided by her experiences I chose to address one question at a time. This evolved into a process of four phases. The first phase was an attempt at phenomenographical data analysis for the first research question (understandings of Master's level learning) generating categories and structure at the same time which was unsuccessful and meant a return to the literature. The second

phase was the production of categories of description for the first two research questions. The third phase was a return to the literature to develop my own position on how to structure the outcome spaces and present my phenomenographical findings. The final phase was conducting a thematic analysis for the third research question (transnational context).

Phase One: Generating categories and structure contemporaneously

I first attempted data analysis fully guided by Åkerlind's approach as she, like me, was a solo researcher and defends that approach compared to working in a team. However she adopts a particular position regarding when structure should be focused on which proved problematic for me based on my previous discussion. In fact, by commencing with her approach it forced me to stop, reflect, read further and develop my own position outlined above and here. Åkerlind and Bowden both acknowledge the importance of not just constituting categories of description but also constituting the structural relationships between these categories (Åkerlind et al., 2005). However they differ regarding *when* this relationship should be considered by the researcher with Bowden contesting it should only be done after all categories of description have been finalised (to reduce the chance of researcher bias) and Åkerlind contesting "meaning and structure should be co-constituted contemperaneously" (p.97).

I initally used her approach with my first research question but found it frustrating and felt it was closing down my analysis rather than keeping it open. This is likely due to the fact that, unlike in Åkerlind's study, I already had a 'norm' in my mind as to what would be the most complex, inclusive description of Master's level learning and so the

structural relationship seemed immediately obvious. As discussed previously this norm is arguably approriatiate and I could perhaps defend that approach in my findings. However, by looking for structural relationships so early in the analysis I found myself echoing Webb's (1997) concerns that all I was doing was reproducing the already existing discourse rather than being open to other possible inerpretations. My frustrations with analysis made me question the entire phenomenographical approach and I spent some months reading alternative approaches to researching student processes of learning before I returned to it. My resolution came through a deeper reading of Marton's framwork until I felt I more fully underestood structure in phenomenographical outcome spaces and by adopting Bowden's approach of not looking for stuctural realtionships until after the categories of description have been established.

Phase Two: Generating categories first

The steps I followed to generate the categories of description when I returned to the data were a combination of both approaches and some adaptations that suited my particular study. I chose a 'whole-transcript' approach rather than extracting small chunks of meaning from each transcript and pooling them for analysis. The advantage of the whole-transcript approach is you retain each utterance in context which helps retain the underlying meaning as much as possible. Åkerlind (2005b) suggests taking a sub-set of transcripts (between 10 and 15) to begin analysis as a way to make the data more manageable. On my first attempt at data analysis I tried this approach with 10 transcripts but I found it unsatisfactory and on my second approach to data analysis I included all 18 transcripts from the beginning so the process now described includes

the whole set. Using a whole transcript approach I found it was not beneficial for me to use software to code and extract short excerpts, therefore this was a manual process. The tools and techniques used in the process of generating categories is outlined in detail below for the first research question and the same techniques were used for the second research question. While this description may read like a 'step by step' process the reality was far more circular and iterative.

Reading all 18 transcripts in their entirety was overwhelming in terms of the amount of data so I needed a way to somehow manage this and get a clearer sense of both each individual transcript and the whole set. I initially tried creating a 'summary note' for each transcript as described by Åkerlind (2005a) but switched to mind maps of each transcript as I find them more helpful. The initial mind map was of the entire interview mapped under a common set of headings which represented various aspects of all research questions. Mind-mapping was then used again as I worked through each research question. For the first research question (understandings of Master's level learning) I used a different colour A4 paper and created a second mind map of each transcript related to that question only, noting which structural and referential aspects were emerging for each interview (see photo examples of mind maps in Appendix B). Next I did what Bowden refers to as cataloguing (rather than mapping) where I created two tables (Bowden, 2005). One was a complete list of all structural aspects and referential aspects that I had noted in the students' accounts. The purpose was to give me an initial sense of the complete phenomenon as described and to help me shift focus from the individual transcript to the whole set of transcripts. The second table was my first iteration of categories where I listed all the range of meanings I saw in the transcripts, resulting in an initial 16 categories.

I was next guided by Åkerlind (2005b) to group the transcripts which were similar and this began the process of grouping these 16 categories as well. The criterion for grouping was the level of complexity seen in the transcript (comprehensiveness of understanding) and each transcript was given a post-it representing my judgement on whether it had a limited understanding of Master's level learning, some understanding, good understanding or strong understanding. This mapping produced the second iteration of four categories related to the post-its (Appendix C, Table A). In this step, I was still focused on the individual and where they sat on this spectrum of complexity (notwithstanding that the same student could in fact have several aspects present, I still on the whole made a judgement and put them into one category where I felt they predominantly fit). So I also at this stage conducted a non-phenomenographical check to see which year of the programme they were in to see if there is a developmental aspect to Master's level learning i.e. a limited understanding in Year 1, a better understanding later, a strong understanding by the time you graduate. The answer is no. Some Year 1 students had very sophisticated understandings and some graduates had very limited understandings. This is noted in Chapter 5 (Findings).

Further iterations were focused on the variation between categories and making the differences clearer. Guided again by Bowden (2005) I went back to the complete transcripts with the set of categories from each iteration and looked for evidence to test them. Each transcript was read again in full, not just the highlighted text. In addition to searching for evidence to support or contradict each category I was looking for better descriptions of each category which would more truly reflect the language the students used. My initial four categories changed to six by the fifth iteration (Appendix C, Table B). At that stage I started considering structure and could not see how they were related

to each other. On further reflection I realised these categories represented two different aspects of the experiences of Master's level learning for the students: their *understandings* of Master's level learning (my research question) and the *impacts* of Master's level learning (not my research question, but it had emerged in the data). So the final iteration had three categories of description related to my question only (Appendix C, Table C).

For the second research question on processes of networked learning a similar process was followed. This is a more complex question and a first attempt at analysis sought a single outcome space. This was not possible and instead each element of the network was approached separately and three sets of categories of description were developed, one each for interactions with resources, lecturers and peers. Again mind-mapping, cataloguing and multiple iterations were gone through to reach the final categories for this question. Further specific aspects of analysis for this question will be described later in the Chapter 5 (Findings).

Phase Three: Structuring the outcome space

After the categories of description were reached for the first two research questions the structure of the outcome spaces needed to be addressed. I first attempted this by looking at increasing complexity and inclusiveness and using what I considered 'dimensions of variation' (a common term in empirical phenomenographical papers) running across the categories. However, this was not bringing things together well for me so I returned to the literature, seeking examples of how others presented their outcome spaces and how they discussed the relationship between the categories. This led to a review of a set of

studies and a deeper appreciation of this phase of analysis. The review is seen in the next chapter where I analyse and discuss the commonalities and differences across selected papers and conclude with the implications this had on my own chosen approach for structuring the outcome spaces for my study. I present this in a separate chapter as it is more than just a description of my research process (the main focus of this chapter). It includes a level of analysis and discussion of literature which sits better in its own space. As a result of this level of engagement with the methodology my chosen approach to structuring the outcome space includes a distinction made between complexity and inclusivity which has not been seen elsewhere in the literature.

Phase Four: Thematic analysis

The final phase of analysis addressed the third research question:

- In what ways do these students describe the transnational context influencing their processes of learning?

Initially I had thought this would emerge in the phenomenographical analysis but it only did so tangentially. While students were directly asked in each interview how they felt the transnational context impacted their learning on the programme this was not a successful interview question. It mostly yielded general discussions of the merits of doing an international programme or explanations of why they chose the programme. On reflection I realised this is because outcome spaces are focused on directly describing the phenomena under study (understandings of Master's level learning, accounts of processes of networked learning) not the context in which they occur. Thus I decided to do a thematic analysis of the transcripts for this question. To do this each transcript was read again using the following more specific sub-questions:

a) In what ways do these students describe the transnational context as influencing their understandings of Master's level learning?
b) In what ways do these students describe the transnational context as influencing their processes of learning (interactions, connections, and critical dialogue) with resources, peers and lecturers?

Using these questions each transcript was marked for relevant quotes. Unlike the previous analysis these quotes were extracted, pooled and then analysed for common themes. These are presented in Chapter 5 (Findings).

3.5 Attending to quality

Creswell (2014) encourages researchers to consider what criteria they want to use to evaluate the quality of their own study while being aware of the particular philosophical underpinnings of the approach taken and the standards of the wider research community. The criteria I used to evaluate the quality of my study as I designed and conducted it were: that I conducted an ethical study; that I demonstrated trustworthiness throughout (including credibility, dependability and an awareness of transferability); and that I was committed to reflexivity and reflection throughout about my process. Each of these is now discussed.

3.5.1 Ethics processes and ethical conduct

Permission for the study was sought and received from the management school in RCSI Dublin in October 2013. Subsequently three ethics applications had to be completed in

three colleges: Lancaster University (LU), RCSI Dublin and RCSI Bahrain. Approval was received from LU in November 2013, RCSI Dublin in January 2014 and RCSI Bahrain in February 2014.

For all of these approval processes I had to guarantee my ethical conduct throughout the study by obtaining informed consent (the use of an information letter and consent form) and non-coerced consent (the use of a gatekeeper to issue invitations, not interviewing students who I assessed, and my acceptance of when some students who initially volunteered no longer engaged with me). I also assured anonymity by assigning IDs and pseudonyms to each participant which was utilised on the transcripts and in data analysis. Data has been stored on my password-protected laptop within an encrypted folder and anonymised copies have been stored on an RCSI server and can be kept for up to 7 years per LU requirements.

The topic being investigated was not itself sensitive but as much as possible I tried to attend to the cross-cultural aspects of the study. As described I 'proofed' my interview process by discussing it with Arab colleagues and amended my approach accordingly. As much as possible I tried to be aware of English as a second language both in conducting the interview and in the way I communicated with students about the transcripts. I continuously reflected about the way I was engaging with the students and they with me through my field notes after each interview and my ongoing reflective diary. I was aware of 'giving back' not just taking from participants (Creswell, 2013, p. 58) so I amended my interview schedule to respect their need to give feedback about the programmes and although I did not use that in my data analysis I summarised it and passed it on to faculty in the management school.

3.5.2 Trustworthiness

Collier-Reed et al. (2009) discuss how to ensure trustworthiness in phenomenographical research. They build on the work of Lincoln and Guba (1985) who suggested interpretive researchers use trustworthiness (rather than validity and reliability) as the way to apply rigour to their work. Trustworthiness comprises credibility, transferability and dependability. Collier-Reed et al. (2009) propose trustworthiness has an internal and external horizon where credibility and dependability applies to the internal horizon (within the study itself and how it is carried out) and transferability applies to the external horizon (outside the study, how the findings relate to the wider context).

Hopefully I have attended to the internal horizon of trustworthiness in my detailed descriptions in this chapter of how I approached the interviews, transcription and data analysis. I will discuss the credibility and dependability of my findings below. Still to be seen is my communicative credibility in being able to persuasively argue my interpretation of the findings which will be addressed in Chapters 5 and 6. In attending to the external horizon of trustworthiness I saw transferability in my study in three ways. Firstly, would the findings be useful within the context of the study setting? In other words, could the management school apply these findings in some way to improve the programme and the learning experience for international students? Secondly, would other researchers be able to extrapolate these findings to other contexts if I was detailed enough in explaining my process? Thirdly, could these findings be linked to the wider literature and contribute to the broader debate about processes of postgraduate student learning? The second question has been addressed as much as possible within this chapter. The other two questions will be addressed in the remaining chapters.

3.5.3 Credibility and dependability of findings

There are several issues to be addressed regarding the credibility and dependability of my findings, generated as they were through the process described. Collier-Reed et al. (2009) in their discussion of trustworthiness in phenomenographic research suggest that findings should have internal and external communicative credibility in addition to dependability. For other research approaches internal communicative credibility usually means going back to the participants of the study to see if the findings make sense to them (member-checking). In phenomenography this is not seen as a useful exercise primarily as the outcome space represents the collective experience, not the individual one. The individual is not likely to see themselves in these findings and therefore member-checking does not have any utility (Bowden, 2005). External communicative credibility means checking to see if the findings make sense to the wider interested community. This is usually accomplished by presenting at conferences or publishing articles. In my case I presented findings to relevant faculty within the management school in RCSI and received feedback that they were credible to them.

Dependability of findings is more challenging to address as a solo researcher. No-one else was involved with my data to confirm if they reached the same categories or structure as me as is recommended by Sin (2010) or by Bowden's team approach (2005). However Åkerlind (2005c) defends the solo researcher in terms of contribution to be made. She claims that as all outcome spaces are partial what can be presented is "more or less complete outcome spaces, not right or wrong outcome spaces" (p. 328) although she acknowledges that understanding may have been extended further if others had been involved.

3.5.4 Reflexivity and reflection

Reflexivity and reflection were fundamental parts of my process in this study. I have described how I approached reflexivity in preparing myself for and conducted the interviews (my subjectivity statement, reflections before and after each interview, assessing and adjusting my interview technique) and in the data analysis stage (revisited my subjectivity statement, continuous reflection throughout the process). Reflection as a broader process was conducted through my reflective diary. That is where I expressed my concerns and doubts, challenged my own thinking, 'talked back' to the literature, and developed my ontology and epistemology. By doing this I ended up fundamentally questioning my entire approach before I committed to it again. Many of my challenges have been included in this chapter to more transparently reflect how my thinking developed throughout the project.

3.6 Summary

This chapter described the approach chosen to answer the research questions for this study. Its limitations are acknowledged throughout and ways to address limitations where possible are described. Phenomenography was used for the first two research questions while a thematic analysis was conducted for the final question. Phenomenography as a methodology was discussed and its critiques acknowledged. Concerns about the concept of structuring outcome spaces was raised. A detailed description was provided of how data was generated which included selecting and inviting participants, preparing for and conducting interviews and how ethical concerns were attended to throughout. A detailed description of the iterative data analysis process was also provided as it moved through a series of four phases. In this process once again

the issue of structuring the outcome space was encountered which led to an in-depth analysis of how other empirical studies dealt with this issue. That analysis is presented in the next chapter as it resulted in the choices made for how to present phenomenographical findings for this study, an approach not seen in other studies. Finally, how quality was addressed in the study was described which included outlining the ethical processes followed and ethical conduct throughout, how trustworthiness, credibility and dependability of findings was attended to, and the reflexivity and reflection which informed the entire project.

Chapter 4: Review of ways to present phenomenographical findings

4.1 Introduction

As described in the last chapter a point had been reached in data analysis where categories of description had emerged but how to complete the structure and present the outcome space was not immediately obvious. A review of recent phenomenographical studies was then conducted with the intention of forming a position on how to present findings for this study. Recent empirical examples were sought because books devoted to phenomenographical methods are rare. The most recent one often cited is the decade-old edited book by Bowden and Green (2005), *Doing Developmental Phenomenography*. While the influence of the methods used in the two specific examples in that book are still evident, reading more recent empirical work highlights a multiplicity of other approaches in use.

Papers were selected using the following criteria:

- Empirical study using phenomenographical methods;
- In a higher education setting;
- Date range: 2010 – 2015.

Fifteen studies were selected which encompassed a range of different ways of presentation. These were analysed for the commonalities and differences seen in their ways of presenting phenomenographical findings. Three broad approaches were found.

These are now described followed by a comparison of the two more complex approaches. Some final conclusions and implications for this study are drawn.

4.2 Differences in approach

Variation in practice in data analysis was highlighted by Åkerlind (2005c) over a decade ago where she reviewed phenomenographic studies and discussed the differences in *when* the structure of the outcome space might emerge during analysis (as categories are emerging or afterwards). However more explicit detail in that review of exactly how the structure is developed and described was not discussed. This review of more recent articles shows different approaches to this aspect of data analysis and essentially compares her approach (as described in Åkerlind, 2005b) or variations thereof, with one other. These approaches will be described below.

One way to explain these differences in approach to the structure of the outcome space is to contend they come from different branches of phenomenography. Indeed Bowden (2000) suggests a difference between the 'pure' phenomenography of Marton and his own 'developmental' approach. However, although in these two branches the purposes of the phenomenographic study may be different, Bowden contends the methods are the same. Tight (2015) in his review of the use of phenomenography in higher education also points to variation in practice and cites an article from almost 20 years ago (Hasselgran and Beach, 1997) which labelled five different types of phenomenography. In this review none of the articles mentioned a loyalty to a particular branch of phenomenography and therefore it is difficult to conclude that there is a clear-cut philosophical explanation for the differences seen in the structuring of the outcome

spaces. One possible explanation is that particular researchers choose an approach to this aspect of data analysis which suits their level of understanding or experience, or suits the purposes of the study. Indeed Marton and Booth (1997) who were cited by 14 of the 15 articles reviewed are consciously not overly prescriptive in their description of phenomenographical methods (p. 111) so this variation is perhaps to be expected. However, as will be seen, the breadth of variation currently seen in the field can lead to confusion when reading across papers.

4.3 Ways to present findings

While all studies claiming to be phenomenographical present categories of description there is variation after that as to how the relationships and variation between the categories is discussed. The following mechanisms for describing the relationships between the categories (if it is addressed) were seen:

a) Increasing complexity and inclusivity is said to be seen in the ordering of the list of categories (no further diagrams or analysis);
b) A cross-tabulation of elements of variation[1] with the categories of description is presented;
c) A cross-tabulation of the structural and referential aspects of each category is presented;
d) A branching diagram is presented demonstrating which categories include each other and which do not.

[1] I consciously use the word 'elements' to avoid confusion with other commonly used phenomenographical words such as dimensions or aspects. As will be seen 'dimensions of variation' and 'aspects of variation' and other terms are used to mean different things in different papers. To overcome this and to cut across the papers in my review I use 'elements of variation' to include any labelling used for the chosen facet of variation being highlighted.

The most simplistic of studies present categories of description only and in some cases may not use the term ‘outcome space’. At most there might be a very brief discussion of relationships between the categories. Five of the fifteen studies were categorised this way (Baughan, 2013; Bliuc, Ellis, Goodyear, & Piggott, 2011; Hallett, 2013; Liff & Rovio-Johansson, 2014; Prinsloo, Slade, & Galpin, 2011) and they raise questions as to whether they are truly phenomenographical studies. Arguably what they have presented could be seen as a more traditional thematic analysis of data. Studies presenting more complex phenomenographical analysis directly address the relationship between categories and do so using two or more of the mechanisms listed above.

The more complex studies were initially broadly grouped into two approaches. The first was studies presenting a *cross-tabulation of the elements of variation across each category,* seen in four studies (Bruce & Stoodley, 2013; Light & Calkins, 2015; Wakimoto & Bruce, 2014; Woollacott, Booth, & Cameron, 2014). See Table 4.1 for an example where textual detail for each of the six categories is provided across the identified elements of variation. In the second grouping, studies present a *cross-tabulation of the structural aspects and referential aspects of the categories of description.* The second approach was seen in Ashwin (2006) and again more recently in two studies (Ashwin, Abbas, & McLean, 2014; Hallett, 2010). See an example in Table 4.2. In this approach each category (represented by the numbers 1 to 5 in the example) is placed somewhere in the ‘matrix’ of structural and referential aspects. It should be noted there are also examples of combinations of these two approaches (González, 2011) or other adaptations (Cutajar, 2014; Macmillan, 2014; Sorva, Lönnberg, & Malmi, 2013).

Aspects of variation	Categories of variation in Mastering-Practice					
	Superficial	**Comprehension**	**Consolidation**	**Integration**	**Refinement**	**Know-how**
Theory focused practice	Information –oriented practice	Comprehension- –oriented practice	Consolidation –oriented practice	Integration –oriented practice	Refinement –oriented practice	Know-How– oriented practice
Problem focused practice	Formula-application practice	Theory-application practice	Theory-application practice	Theory-application practice	Heuristic problem-solving practice	World-application practice
Nature of Association	Sequentially associated	Sequentially associated	Sequentially associated	Integrated	Integrated	Integrated

Table 4.1: Example of relationships between categories explained by cross-tabulation of the elements of variation (in this paper called 'aspects of variation') and the categories of description (as seen in Woolacott, Booth & Cameron, 2014, p. 751)

Structural aspects	**Referential aspects**	
	Issues/topics	Ways of understanding the world
Undifferentiated whole defined by my interest	1	
Pre-defined parts separate from me	2	3
Relational whole which includes me		4
Partial relational whole which includes me		5

Table 4.2: Example of relationships between categories explained by cross-tabulation of the structural and referential aspects of the categories of description (as seen in Ashwin, Abbas and McLean, 2014, p. 225)

On first reading the immediate question is why do they present findings in these different ways? Does each reflect a different approach to data analysis or just a different approach to presentation of findings? To explore these questions nine of the more complex articles which used the mechanisms above to present findings were selected for deeper analysis: five with an elements of variation table; three with a structural/referential table; and one which presented both. What broadly emerged from this analysis is that the following areas are often addressed differently across papers:

- Structural and referential aspects of each category;
- Dimensions of variation across the categories;
- The hierarchy of the outcome space.

Also the initial categorisation of papers into ‘elements of variation table’ or ‘structural/referential table’ breaks down somewhat on closer inspection. However, to reach these conclusions we must start by looking at each type of table separately.

4.3.1 Cross-tabulation of elements of variation and categories of description

First let us look at studies which present tables including textual descriptions of elements of variation across the categories, an example of which is seen in Table 4.1. To analyse these types of outcome spaces six articles were analysed (Table 4.3). While all showed tables which selected certain elements of variation and described them across each category (usually in increasing complexity), differences were found in the elements chosen, the terminology used, and in the explanation of the relationships between the categories. Table 4.3 shows these differences under three headings which are terms often seen in phenomenographical studies (structural aspects and referential aspects of the categories of description and dimensions of variation). These terms are explored now in more detail as are the methods used to explain the hierarchical relationships between categories in these particular studies.

Article	Terminology used for structural aspects	Terminology used for referential aspects	Terminology used for dimensions of variation
Gonzalez (2011)	None (separate table)	None (separate table)	Dimensions of variation
Sorva, Lonnburg and Malmi (2013)	Internal horizon External horizon	Referential aspect	None
Bruce and Stoodley (2013)	Theme Margin (see Note 1)	None	Dimensions of variation
Wakimoto and Bruce (2014)	Focus Thematic Field	Meaning	Dimensions of variation
Woolacott, Booth and Cameron (2014)	None	None	Aspects of variation Distinguishing features
Light & Calkins (2015)	None	None	Features Aspects of variation
Note 1: Placing these terms in the 'structural aspects' column is questionable. They may reflect both structural and referential aspects. See discussion.			

Table 4.3: Terminology used for the elements of variation in tables in selected studies

Structural and referential aspects of the categories

The first two headings in Table 4.3, structural and referential aspects, are concepts discussed by Marton and Booth (1997) where they state that whatever is held in focal awareness at a particular moment for an individual has structural aspects (features) and referential aspects (meaning) which are intertwined. As seen in Table 4.3, four studies chose structural aspects as a way to describe differences between categories while two did not. For the four who did, the terms used are all different. Gonzalez (2011) used the broad term 'structural aspects' in a separate table without breaking the construct down further. The others break structural aspects down into more detailed elements discussed in Marton and Booth: the internal and external horizon of the structural aspects of what is held in focal awareness; and citing Gurwitsch (1964), the theme, thematic field and

margin of what is held in awareness. Marton and Booth also discuss the thematic field and margin belonging to the external horizon of the experience.

Looking at Table 4.3 it seems that internal horizon, theme and focus are being used in an equivalent way (what is in the foreground), as are external horizon, thematic field and margin[2] (what is in the background). While an equivalency is being suggested here for structural aspects which sounds simple, the reality of reading multiple papers with multiple terms makes understanding and comparing the findings from phenomenographic studies anything but simple. The equivalency suggested is also limited and questionable. It is suggesting only an equivalency in what is foregrounded or backgrounded but not that there is any real intended equivalency between the researchers' understanding and use of the terms.

Three of the four studies which described structural aspects also described referential aspects. Here the terminology is more consistent and immediately understandable ('meaning' or 'referential' labels). A question is raised though about the study which chose not to explicitly describe this aspect (Bruce & Stoodley, 2013). Can it be assumed that the referential aspect is intertwined with the structural aspect in the words 'theme' and 'margin'? In the methodology section of that paper they call these 'structural elements'. However, Marton and Booth only link 'margin' with 'external horizon' (a structural element). Going back further to Gurwitsch's field of consciousness theory from which the language of theme, thematic field and margin comes, he does not discuss structural and referential aspects of the experience of the phenomenon (Yoshimi &

[2] There is difference between 'thematic field' and 'margin' (as explained in Marton & Booth, 1997 and indeed by their originator, Gurwitsch (1964)), but in these studies they seem to be used to indicate what is at the edge or just beyond the boundaries of what is in focal awareness.

Vinson, 2015). He focuses on differentiating what is in focal awareness (the theme) from what is peripheral and spends quite some time exploring the difference between thematic field and margin. The blending of these terms by Marton and Booth (1997) in their discussion of structural and referential aspects is not completely coherent and so its usage in current studies is also arguably not coherent.

Another possible reason for confusion such as this and the varying use of other terminology is that Marton and Booth raise such terms in their detailed discussion of the 'anatomy of awareness' (the theoretical background to understanding how individual's experience phenomena) but they do not carry them through to their later chapter on phenomenographic methods, a chapter arguably light on detail and a chapter which moves from the individual to the collective[3]. And while Bowden and Green (2005) later provide much needed discussion of and examples of methods they did not use the approach of specifically describing the structural and referential aspects of each category, they focused instead on dimensions of variation, or an adaptation of that term.

Dimensions of variation

Dimensions of variation, the third common term seen in the six articles (Table 4.3), was originally discussed by Marton and Booth (1997) as a concept when describing the individual's structure of awareness. On my reading they propose dimension of variation as a way to explain how the discernment from context occurs for the individual (see p.

[3] It should be noted that in later work Marton, with Pong (based on Pong's PhD research), specifically highlighted and discussed the structural and referential aspects of the categories of description (Marton & Pong, 2005). However, one of the purposes of that paper was to "bridge between phenomenography and variation theory" (p, 347) and structural and referential aspects are being highlighted to serve a different purpose linked to variation theory. Variation theory was not the stated focus of any of the papers in this review, nor is it the focus of my own study, so I do not pursue it further here other than the next footnote.

100, 107, 112). In other words, some aspect of a phenomenon or situation become figural or thematised because the individual discerns it as a dimension of variation from the context:

> As we have already pointed out, an aspect that is discerned and held in focus is associated with a dimension of explicit or implicit variation. What *is* the case is explicitly or implicitly seen against the background of what *could be* the case. (p. 112)

In this reading, a dimension of variation runs between the aspect in focus and the background[4]. Consequent phenomenographic studies are using the term dimension of variation somewhat differently. They use it to look *across* the collective categories of description, to highlight a common dimension (or theme) and show how that dimension is present in all categories yet varies across them. It is a way to show the similarities and differences between the categories and also shows the hierarchy of the outcome space as the dimensions (or themes) tend to run from lesser to more complex. This approach is seen in the original work of Åkerlind (2005b) and Bowden, Green, Barnacle, Cherry, and Usher (2005). Åkerlind (2005b, p. 127) specifically comments on her adaptation of the term in her own research (she uses 'themes of expanding awareness' rather than dimensions of variation), stating the Marton and Booth use of it is ambiguous. I would agree and again suggest some ambiguity comes in the shift in their work from discussing the individual's structure of awareness to discussing the collective outcome space where concepts are not fully carried through from one setting to the other.

Three studies analysed here used dimensions of variation between categories in addition to highlighting structural and referential aspects, while one study chose not to do so

[4] Indeed this seems to be the basis of variation theory, or the 'second face of variation' (Pang, 2003).

(Sorva et al., 2013). Only one of the three defined the term in any way by stating "these dimensions are present in all categories but vary qualitatively across the categories" (Wakimoto & Bruce, 2014, p.454). This does not clarify specifically *what* the dimensions are, so further analysis is needed to understand in what way the concept is being used. The titles of the dimensions of variation in each of the three studies are seen in Table 4.4.

Gonzales (2011)	Bruce and Stoodley (2013)	Wakimoto and Bruce (2014)
Four dimensions of variation across conceptions of teaching: • Role of lecturer • Role of student • Course content (comes from where) • Motivation (of student)	Two dimensions of variation across the ways in which supervision is experienced as teaching: • View of research • View of learning to research	Three dimensions of variation across the ways that academic librarians experience archives: • Purpose (of the archives) • Technology (preferred) • Collections (view of)

Table 4.4: Examples of dimensions of variation

These three studies also presented structural and referential aspects of each category so the dimensions of variation are being used to highlight some *different* element of the variation. It is difficult to draw an overall conclusion from looking at just these three studies but dimensions such as 'role of…', 'view of…', 'purpose of…' seem to elaborate further on the variation between the categories. They seem to capture something both broader and more specific about the phenomenon than the structural and referential aspects. Certainly reading the papers in question the dimensions add a depth to the understanding of the variation between the categories and an interesting layer of analysis.

Two studies chose to present elements of variation tables only, without specifically describing structural and referential aspects (Light & Calkins, 2015; Woollacott et al., 2014) . While they didn't use the term 'dimensions of variation' as it was used in the other studies they both presented elements that could be seen as analogous, although they used language such as 'aspects of variation' and 'features' but each in different ways. While they both present detailed and credible findings, again the use of different terminology (or the same terminology being used in different ways) is confusing when reading across papers and it adds to the sense that the field is in flux.

Explaining hierarchical relationships

A further difference between the six studies in Table 4.3 was in the explanation of the hierarchical relationships between the categories. This varied considerably with four approaches found. Two studies, using the term 'expanding awareness' coined by Åkerlind (2005b), stated it was seen within the variation table itself as categories ranged from least to most complex (Bruce & Stoodley, 2013; Woollacott et al., 2014). This is a common approach and indeed reflects Marton and Booth's original discussion of the relationship between the categories (1997). In that discussion when talking about the structure of an outcome space Marton and Booth only say that the categories are logically related in a hierarchy of more or less complex or inclusive categories. That is the only relationship they directly discuss. Neither dimensions of variation across the outcome space nor structural and referential aspects of the collective categories of description are addressed.

A second approach taken by two other studies was to draw a separate diagram showing the relationship between the categories as a branching structure (Sorva et al., 2013; Wakimoto & Bruce, 2014). The branching clarifies which categories are inclusive of each other and which are not, a relationship which cannot be seen in a variation table or a simple listing of categories. See an example in Figure 4.5 below. This reflects an approach seen in Bowden and Green's influential book (Bowden et al., 2005).

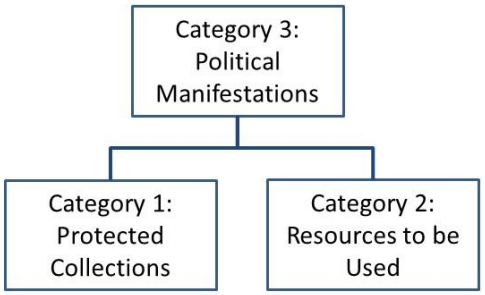

Figure 4.5: Example of a branching structure in an outcome space (as seen in Wakimoto and Bruce, 2014, p. 456)

A third approach seen to explore the hierarchical relationships between the categories is to use a cross tabulation of structural and referential aspects which will be explored next. This was seen in one study which combined the two types of cross-tabulated spaces being discussed here (González, 2011). The final approach is to not directly address the hierarchical relationships between the categories at all. This was seen in one study of the sub-set (Light & Calkins, 2015) but also seen in the studies categorised at the beginning of the review as 'simplistic' in their approach to phenomenographical analysis.

4.3.2 Cross-tabulation of structural and referential aspects of the categories

Now let us turn to studies which present cross-tabulations of the structural and referential aspects of the categories of description, an example of which was provided in Table 4.2. Four studies were compared which used this table as a way to describe the relationships between the categories (Ashwin, 2006; Ashwin et al., 2014; González, 2011; Hallett, 2010)[5]. In comparing these four studies there were more immediate commonalities than the previous type of table. All defined structural and referential aspects either in their methods or findings sections and these definitions were broadly similar. All presented a table using the same axes labels (structural aspects, referential aspects) and placed their categories, labelled as numbers or letters, somewhere in the matrix. All stated in some way the cross-tabulation of the structural and referential aspects was a mechanism to demonstrate the hierarchy of the categories, their increasing complexity and/or their inclusiveness. Therefore, these might be expected to be easily comprehensible to the reader. However, each study needed careful reading to really understand what the table says for that particular study.

One reason for this is the use of category numbers/letters in the table. The reader needs to go back to the textual descriptions of the categories and link this with the table to make full sense of it. See Cutajar (2014) for an alternative presentation here using textual descriptions to overcome this issue. Another reason is the slightly differing approaches to structural and referential aspects. For example, both the structural and referential aspects identified ranged from less to more complex in three studies. However, in the fourth study (Hallett, 2010) the referential aspect only ranges from less

[5] One of these was from outside the date range of the rest of the articles in this review (Ashwin, 2006) but was included to aid deeper understanding of this approach.

to more complex. In that study she used the term "referential hierarchy" (p. 233) when describing the table. This begs the question should the structural aspects not also go from less to more complex in this type of analysis? And if not, what are the implications, if any, of presenting hierarchies based one aspect (structural or referential) only?

It is worth noting that of the four studies two also referred to dimensions of variation. One had a separate table for these as discussed in the last section (González, 2011) while the other mentions four 'dimensions' in the textual descriptions of the categories but chose not to show these elements in table form (Ashwin, 2006).

4.4 Commonalities and differences across all papers

What is clear from looking across all papers is the wide variation in presentation of phenomenographical findings. Of the fifteen papers reviewed there was an even split across the three identified approaches from simplistic to more complex. Within that however, once you get beyond the simplistic papers, the differences can seem bewildering. There is clearly no common way to present findings, nor a common way to address features seen in more complex papers: structural and referential aspects of the categories; dimensions of variation; and explaining the hierarchy of the categories.

Looking at these three areas across ten of the more complex papers highlights the differences (Table 4.5, full details in Appendix D). Structural and referential aspects can be presented in either an elements of variation table or a structural/referential table, although the second table uses the cross-referencing of them to explicitly demonstrate inclusivity. Some papers chose not to address structural and referential aspects and

describe dimensions of variation only while some papers chose to describe both. If a structural/referential table is chosen as a way to describe it generally also describes a hierarchy of inclusivity although that is not always the case. For elements of variation tables, the hierarchy is sometimes seen within the table although a branching structure diagram may have to be used where inclusivity is more complex. In some cases, a hierarchy is not mentioned at all.

Describes structural and referential aspects only	**Describes dimensions of variation only**	**Describes both**
Sorva, Lonnburg and Malmi (2013): Variation Table *Hierarchy seen in:* Branching diagram	Woolacott, Booth and Cameron (2014): Variation table *Hierarchy seen in:* Variation table	Gonzalez (2011). Two tables: Variation Table and S/R Table *Hierarchy seen in:* S/R table
Hallett (2010): S/R Table (with numbers) *Hierarchy seen in:* Listing of categories	Light & Calkins (2015): Variation Table *Hierarchy seen in:* Not described	Bruce and Stoodley (2013): Both in the Variation Table *Hierarchy seen in:* Variation table
Ashwin, Abbas and McClean (2013): S/R Table (with numbers) *Hierarchy seen in:* S/R table		Wakimoto and Bruce (2014): Both in the Variation Table *Hierarchy seen in:* Branching diagram
Cujatar (2014): S/R Table (with text) *Hierarchy seen in:* S/R table		Ashwin (2006): S/R Table; Discusses dimensions in text in descriptions of each category *Hierarchy seen in:* S/R table

Table 4.5: Analysis of ten papers and how they address three commonly seen areas of phenomenographical analysis

The differences in the ways of describing the hierarchical relationships between the categories links to the final difference noted across the studies: what exactly is 'the

outcome space'? Studies described many different things as 'the outcome space' (the list of categories, the elements of variation table, the structural/referential table, the branching diagram). On first reading across papers this also adds to the confusion and the ability to compare one paper to another. On this deeper reading, if the outcome space is seen as the hierarchical structure which links the categories together through relationships of complexity and inclusivity then all of these things can singly or together be the outcome space. It is not contradictory in any way but it also needs clearer definition within studies and perhaps more discussion on what is the minimum expectation for phenomenographical analysis.

4.5 Summary of review and analysis

Wide differences in the use of terminology and the way to analyse relationships between the categories is seen. Describing structural and referential aspects of the categories is common in most complex papers although the terminology used for structural aspects in particular is variable and often confusing. Where structural and referential aspects are cross-referenced it seems mainly as a way to demonstrate the inclusiveness of the categories. Describing dimensions of variation is also common in complex papers although again, the terminology is variable and can be confusing. A definition of 'dimensions of variation' is not usually seen and it is an ambiguous term in the wider literature. Where it is used it does seem to highlight something which supplements the structural and referential aspects seen in the same papers but I hesitate to attempt a definition here. The final outcome space showing the relationship and hierarchy between categories differs widely across papers. It can be seen in a variety of ways – the listing of the categories, the tables, or a branching diagram.

An immediate conclusion from this review about the current state of phenomenography as a research approach is that it is a newer methodology which is still evolving. The differences in approach can make it an opaque and confusing methodology for the novice researcher (and non-phenomenographer) particularly once you get beyond the more simplistic papers and try to compare across more complex approaches. The lack of coherence in the use of fundamental terminology is a concern. However, it is an interesting approach and as each paper stated, its unique offering is the focus on exploring variation in experiences. All the papers involved certainly explored that and offered interesting analysis and discussion as a result.

The implications from the review for my own study are obvious in that there is no one way to present my findings. A more complex approach is needed of course. I need to define all of my own terms clearly, to consider if 'dimensions of variation' is an element for me to explore, and to explicitly address the hierarchy of a final outcome space.

4.6 Approach to presenting phenomenographical findings in this study

The chosen approach to presenting findings for this study was an iterative process moving back and forth between the literature and the data. The review discussed above clarified my thinking but I did not choose any specific approach used by the papers in this review. Rather the way of presenting findings here reflects both the type of study I have done, and therefore the particular data generated, as well as my thinking about the methodology as I engaged with it more deeply. This way of analysing and presenting structure uses an approach not seen elsewhere in the literature by drawing a clear

distinction between complexity and inclusivity within the second research question. This is discussed further in the next chapter when the findings are presented.

Outcome spaces

Each outcome space is first presented in a diagram which shows the number of categories, the focus of each category (a brief textual description of what is in the foreground for that category both structurally and referentially), the increasing complexity of the categories and where there is (or is not) inclusiveness between them.

Categories of description

Each category of description is then described in detail with a selection of appropriate quotes from participants. These descriptions highlight the structural and referential aspects of each category as well as clearly describing the differences between the categories. Structural aspects are defined as those features of the phenomenon which are foregrounded while referential aspects are defined as those which give meaning to that particular category of description.

Relationships between the categories

The relationship between the categories is addressed in three ways.

- Firstly, the structural and referential aspects of the categories are presented in tabular form. In doing this, the table demonstrates the differences between the

categories, increasing complexity and where inclusiveness does or does not occur.

- Secondly, the increasing complexity is described in terms of 'themes of increasing complexity', which are seen in the expanding focus along the structural and referential aspects of each category. Any other theme of increasing complexity which emerged in analysis is also described. This use of 'theme' is similar to Åkerlind's 'theme of expanding awareness' but I approached it by firstly looking specifically for increasing complexity along the structural and referential aspects of each category and then secondly looking for any other themes of increasing complexity, which were seen in the category descriptions but had not been captured in the first analysis.
- Finally, as phenomenography is focused on variation between categories, the key qualitative difference between categories in each outcome space is noted.

The term 'dimensions of variation' is not used as it was found to be ill-defined in the literature other than in relation to variation theory. This approach to presenting findings is now seen in the next chapter.

Chapter 5: Findings

5.1 Introduction

This chapter presents the findings from three research questions which explore the qualitative differences in accounts of postgraduate students of their processes of learning in a transnational, networked learning environment. The research questions are:

1. In what different ways do these students describe their understandings of Master's level learning?
2. In what different ways do these students describe their processes of learning through their interactions and connections with resources, lecturers and peers in a networked learning environment?
3. In what ways do these students describe the transnational context influencing their processes of learning?

As outlined in the Chapter 3 a phenomenographical approach is taken with the first two research questions. The particular approach developed to presenting these findings and the definitions of phenomenographical terms used here was outlined in Chapter 4. Each outcome space will initially be presented in diagrammatic form, the categories of description are then described with appropriate illustrative quotes, and the relationships between the categories are addressed by outlining their structural and referential aspects. Themes of increasing complexity are noted. Finally, the key qualitative differences between categories in the outcome spaces are described. The final research question exploring the transnational context was analysed by thematic analysis. A series

of themes is presented for this question. Initial commentaries are made throughout this chapter highlighting points which will be discussed again in the next chapter.

5.2 Findings related to the first research question: Accounts of understandings of Master's level learning

This section describes the outcome space which emerged related to the first research question.

- In what different ways do these students describe their understandings of Master's level learning?

5.2.1 Outcome space

The outcome space for accounts of understandings of Master's level learning is seen in Figure 5.1. The diagram captures three categories of description in increasing levels of complexity with Category 1 at the lowest level of complexity and Category 3 at the highest level. The focus of each category is described to highlight the differences between them. Focus here means what is foregrounded in the descriptions and is a combination of structural and referential aspects. The outcome space also reflects the inclusiveness of the categories where Category 2 is seen to include Category 1, and Category 3 is seen to include the previous two categories.

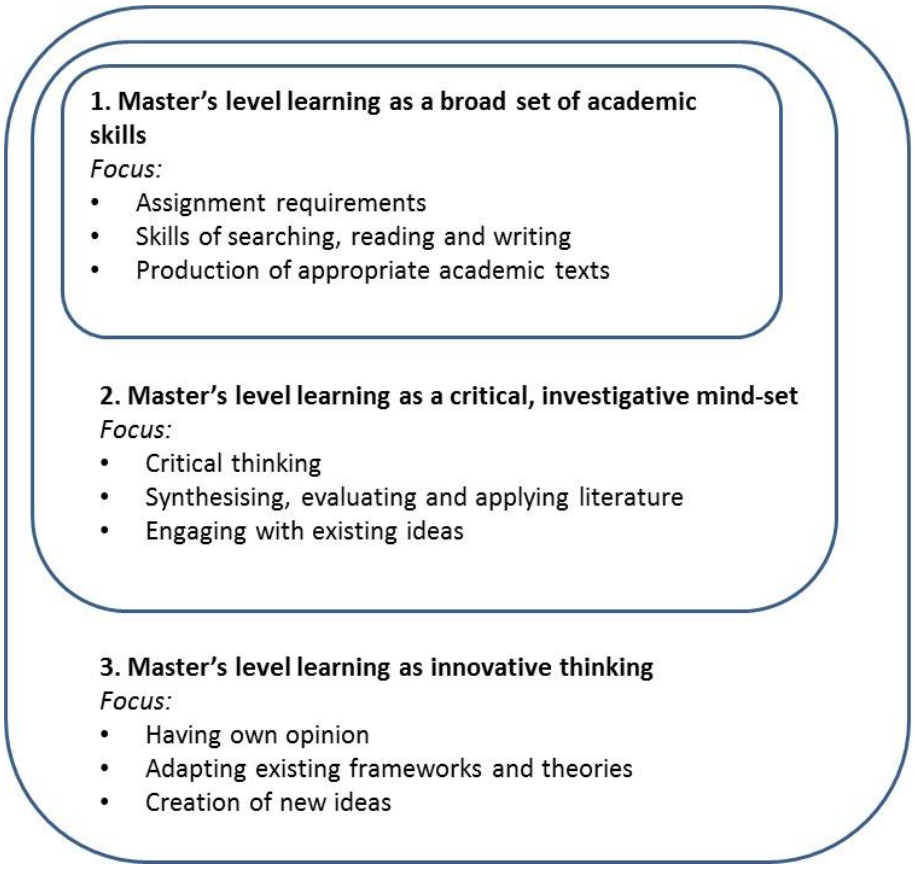

Figure 5.1 Outcome space: Accounts of understandings of Master's level learning

5.2.2 Categories of description

Three categories of description emerged from the students' accounts of their understanding of Master's level learning:

1. Master's level learning as a broad set of academic skills;
2. Master's level learning as a critical, investigative mind-set;
3. Master's level learning as innovative thinking.

Category 1: Master's level learning as a broad set of academic skills

Students' accounts which aligned with this category describe Master's level learning as involving a broad set of four key academic skills: searching the literature, reading well, being able to write academically well (such as having introductions and conclusions, being able to cite and reference correctly, having a 'flow' to the work), and having a strong awareness of assignment requirements and learning outcomes. The referential aspect of this category is seen as a focal awareness on the production of appropriate academic texts. As part of this focus these accounts highlight English as a second language and needing the ability to read and write well in English (good vocabulary, good grammar). The volume of reading and writing required is described as much more than undergraduate level. Writing long essays in particular is a new skill for clinical students who have mainly done examinations at undergraduate level. Therefore, the need to find and use literature are often new skills. These accounts describe academic essay writing improving over time. Reading is also a skill which improves over time as reading in English becomes faster and awareness of being more strategic in how to read increases (e.g. reading abstracts, knowing how to skim and get key points from articles). While this is a broad category it has a coherent focus on skills and production of texts and is clearly differentiated from the other two categories in the space which move to a more complex understanding of Master's level learning.

> In the first assignment the problem which I faced in the first and second assignment as I have never written any assignment or thesis or study material I was unable to gain good marks. I got help from my friends also regarding the quotations, citation. I did not know how to do the citation, what is the Harvard style and what's the other style. … I think the module which I score less it was only due to references and citation … Because if I knew how to do the exact

> references, what's the method and all these things I would have achieved more. (Kareem, p. 1)[6]

> Like I got some friends who've studied in different universities and they had this academic writing thing and everything, but us in med school it was quite different so we're a bit lost. It doesn't mean if I'm good in English or if I have a high score in TOEFL or IELTS means I'll do well in academic writing because it needs a certain type of precision and you need to really describe yourself well. And not describe even, go the Blooms taxonomy, be able to break down things and put them together and then compare and contrast. (Niesha, p. 1)

> Before I didn't read that much. Now I have finished so many books. And yeah I read a lot now. I read a lot a lot more than what I used to before. […] Like in the beginning my reading in English was not that fast. So it wasn't, like not as now, I can read lots of things in the same day. But previously and especially in the first module it was hard for me to read everything. (Fatemah, p. 3)

> When I'm doing the assignments I sit with the learning outcomes beside me and the questions and as [lecturer] has beaten into us, read the question, answer the question. So when I'm putting it together and when I'm actually proofreading it and editing it at the end I read the question and I see how I answered the question and does it cover the learning outcomes. (Emma, p. 6)

Category 2: Master's level learning as a critical, investigative mind-set

The accounts of students which aligned with this category describe Master's level learning as a deeper way to think, particularly compared to undergraduate level. This is a clear differentiation from the previous category and its focus on skills. In these accounts learning involves critical reading, thinking and writing. It means looking at the research, at other people's experiences, at the evidence, and learning from that. When asked to define critical thinking in more detail the following elements were

[6] In the quotations for participants the following convention is used: … indicates participant's natural pause in speech. […] indicates where unrelated text has been edited out of the quote. Where this is seen the quotes presented are still within the same original paragraph of text. Where additional text is needed for a quote to make sense or text needs to be replaced to ensure confidentiality square brackets are used. Where extra information is needed to ensure the quote make sense it is inserted using round brackets.

highlighted: being able to evaluate literature (is it valid, reliable), to practically apply theories & frameworks to the clinical setting/workplace, to analyse (break things down, see them from different perspectives), and synthesise (make relationships, link ideas together). Students see themselves as investigators, researchers and problem solvers. The referential aspect of this category is a focal awareness on engaging with existing ideas and literature. The structural aspects which emerged are particular aspects of critical thinking: synthesising, evaluating and applying.

> I started with a descriptive way of writing and analysing. Just to describe this and the positives and negatives in a very shallow way. But later on I thought like really analyse what's written in between of the lines. Like reading an article or a study, don't just think of whatever is written or what they want you to understand. Just analyse what's in between. Or is it a valid or reliable? Why do you think it's valid, why do you think this is reliable? (Mariam, p. 7)

> It's like the students become kind of investigators. They investigate the problem that they are given like in case studies, even in regular assignments…. I think I also have an analytical personality and that worked very well with my personality. To analyse situations and to be clever, to feel like you are clever. You are not just memorising. That was so different. (Fatemah, p. 2)

> Well, not only describing what you're talking about but looking at the benefits and the limitations and the positives and negatives. How it applies to the clinical environment that I come from, how I can use it to develop the clinical environment that I come from. So it's more about really getting into the nuts and bolts of whatever it is I'm talking about. And trying to sort of tease out what it is, how I can use it and develop it into something in the clinical environment. (Emma, p. 2)

> So now I understand that you need a person who...who can look at things from so many angles. To be able to analyse and see things from a different perspective. I think that's it because of all the critical writing and the critical thinking. With the undergraduate programme I don't think people expect that because people are not that mature as well. (Aisha, p. 5)

Category 3: Master's level learning as innovative thinking

The difference between this category and the last is the level of complexity in thinking. Students' accounts which aligned with this category described Master's level learning as a more complex level of thinking: innovative thinking. Accounts describe this in two ways. Firstly, moving beyond analysing the literature to having your own opinion on what you read, having the freedom to comment on the evidence you have gathered. Secondly at a deeper level again it means being innovative with the theories and frameworks by adapting them and suggesting improvements. The referential aspect of this category is a focal awareness on creation of new ideas (beyond engaging with existing ideas seen in the previous category). The structural aspects which these accounts are aware of describe aspects of critical thinking but the focus is on theory building, a deeper level of thinking again than synthesising or evaluating.

> The Indian system is very, very different because they focus more on what is in the book. It's more of...you'll go by the book. You don't have freedom of expression, what is your view. What do you think. But of course it was medical so you don't have that much freedom. That's one of the things I thought. In Masters I found that if I don't agree with one of the writers, one of the literature or something, I have the freedom of expression that I don't agree. There is always, this can be done through these ways, or I can propose something. So it also brings out creativity out of me. I can also become an initiator. I can initiate something. So it gives me chance where I can think that I can do it differently. That's what I found. (Chandra, p. 5)

> I liked it actually. It's, again it's not, it's different when its spoon-feeding and you just...eh how can I say it...again maybe because my background was medicine so I can't really put my opinion in anything...and in this course it was totally different...more even if I had...it was more of, not my opinion, let's say, my perspective about everything in general. (Jamila, p. 1)

> Yeah, the ones that I got higher I used to change a few of the models we had. Like in the clinical indicators that they had certain models so I used to change or remodel the same model. I think doing something new made me get higher. And the second thing is always linking it to my organisation, our culture, and

> why did I modify this because we need it in our culture. So I thought like integrating it within my organisation and like adapting a newish models that suits me rather than taking a model from the book. Whenever I did that I noticed I got higher marks. (Mariam, p. 2)

> I think it's to really...they keep saying critical thinking, critical thinking. It's to find new solutions, to be innovative in the way you think, not to just be like this what needs to be done, this is how everyone else is doing it and this is how I'm going to apply it. I think it's to bring new thoughts. Your own ideas to the table. (Zahra, p. 4*)*

5.2.3 Relationships between the categories

As indicated earlier there is a hierarchy of complexity where the categories are seen to increase in complexity from 1 to 3. These categories also have a hierarchy of inclusivity. This is illustrated in Table 5.1 which shows the structural and referential aspects of each category and how the higher categories include the lower ones. There is increasing complexity within structural aspects from a focus on skills, to a focus on reading and writing critically, to becoming innovative and adapting existing frameworks. This is reflected in the expanding referential focus from academic texts to engaging with existing ideas and creating new ideas.

Category	**Structural Aspects** What's in the foreground? Features?	**Referential Aspects** Master's level learning is about (means)….
1. Master's level learning as a broad set of academic skills	• Assignment requirements • Searching skills • Reading and writing a lot • Reading and writing well in English	Production of appropriate academic texts
2. Master's level learning as a critical, investigative mind-set	**As in Category 1 <u>and</u>:** • Critical reading, writing, thinking: synthesising, evaluating, applying	Engaging with existing ideas
3. Master's level learning as innovative thinking	**As in Category 2 <u>and</u>:** • Needing own opinion and ideas • Adapting exiting theories and frameworks • Critical thinking: theory building	Creation of new ideas

Table 5.1: Structural and referential aspects of the categories of description for understandings of Master's level learning

Another theme of increasing complexity found is increasing independence in study from Category 1 to 3. This is seen in the accounts as lower or higher levels of reliance on the college, peers or others to learn the key academic skills described above and the ability to independently research and clarify any intellectual questions which arise. The understanding that Master's level learning means more self-directed study is seen in all categories but at different levels. In Category 1 and for some accounts in Category 2 lower levels of independence means students look to the college or their peers to provide structure, clarity and answers. For others in Category 2 and all in Category 3 there are higher levels of independence and accounts describe confidence in their abilities to find their own answers. Indeed, Category 3 displays not only higher levels of independence in study but also higher levels of independence in thinking as was seen in the category description. This aspect fits well with the expectations of Masters' students seen in the

European Framework of Qualifications (Table 1.1). Students are aware of this growing independence as illustrated in the following quotes.

> Well I felt as an undergrad I was still, even though it wasn't like schoolwork, it was still very much a little bit of spoon-feeding and a little bit of do this, do that, don't do this, and giving you a lot of direction. I think the difference with the Master's level programme it's a different level altogether. I mean as [lecturer] was sort of saying to us Day 1, it's level 9 learning. It's got to be very self-directed. (Emma, p. 2)

> And I had the experience of learning on my own. And I think that's what he wanted us to do. The information is there and the way he answered the questions I started figuring it out, like OK he wants us to figure it out on our own. So I started just doing that instead of just hammering him with questions. I started figuring it out on my own. (Zahra, p. 6)

Two other aspects of analysis should be noted. Firstly, developing these academic skills and independence of study and thinking was often described as a challenging process in these accounts. Secondly, these categories do not represent a set of developmental phases student move through. Phenomenography examines collective accounts, not individual voices, but a brief review of the transcripts revealed no link between year of study and category of description. In other words, a graduate may have provided an account which sits primarily in Category 1 or a Year 1 student may have provided one which has aspects of Category 3.

5.2.4 Key qualitative difference in the outcome space: Skills and ideas

Overall, the key qualitative difference between the categories is seen between the focus on skills seen in the least complex category (Category 1) and the focus on ideas in the more complex categories (Categories 2 and 3).

Ideas

The rationale for exploring the students' understandings of Master's level learning is its part in the 'approaches to learning' (ATL) framework (Figure 2.1), where simpler conceptions of learning are said to be linked with surface approaches to learning and more complex conceptions are linked to deeper approaches (Van Rossum & Schenk, 1984). Certainly the categories within the outcome space which focus on engaging with ideas reflect simpler and more complex understandings of learning. Links can be seen between Category 2 (a critical investigative mind-set), Category 3 (innovative thinking) and the ATL framework. The differences between Categories 2 and 3 also link to Bloom's taxonomy of learning which underpins the marking grid for the programmes with Category 3 demonstrating the higher levels within that taxonomy of synthesis and evaluation. There is also a link to the expectations for Master's level learning outlined in the European Framework of Qualifications (Table 1.1) where both categories of description fit well. So these two categories are findings that are perhaps to be expected.

Skills

Category 1 in this outcome space is a description of a broad set of academic skills focused on producing appropriate academic texts. These skills are described as

searching the literature, reading, writing well, referencing correctly, and strong awareness of assignment requirements and learning outcomes. In one sense this is an unexpected finding when comparing these categories to the 'conceptions of learning' framework (Säljö, 1979; Van Rossum & Schenk, 1984) as this category has a focus on skills, not on levels of thinking. These skills are also not to be found in the descriptors of the European Framework of Qualifications where the only skill included is that of self-direction (Table 1.1). One could say this category reflects not the students' understandings of Master's level *learning* but their understandings of Master's level *requirements*. However, the fact that this emerged so strongly in response to questions exploring their understandings of Master's level learning is interesting. The hierarchy of inclusivity in the outcome space indicates this category is included in all higher level ones. This means all accounts describe these skills as a core part of their understanding of Master's level learning. It is an area where students describe being challenged and where they seem to focus a lot of their energy. Arguably this strong focus on what might be considered fundamental academic skills, perhaps expected to have been developed at undergraduate level, can detract from reaching higher levels of learning at Master's level. Indeed, some students seemed aware of this.

> I think I spent too much time in learning basic things which shouldn't be in Master degree. Maybe this is my weakness, I don't know. Or maybe I was expecting the course to teach me these things. For example, searching technique it was very difficult to me. Even we have the online site and all these things. But I really spent a lot of time in getting to the information I want. This was taking all my time. And I felt in one stage that I want to learn more but I don't have time to learn more. (Layla, p. 1)

> Like at the end both students, the one who is supported with [academic skills support] and the other who is interested and will try to close the gaps himself, both of them will pass. But maybe the first one will gain more from the course. And will suffer less. Suffer less and gain more. (Nahla, p. 10)

> The referencing shouldn't be a question. Structure of a paper shouldn't be something that you are bogged down in because once you get bogged down in those little things you won't be able to focus on understanding the topic and getting what the assignment is trying to get at. So I find people are really getting bogged down in 'how do I reference' and 'how do I structure the assignment' and 'how do I creatively put it together' rather than on actually getting to the pulp, the juicy stuff. (Zahra, p. 9)

This key qualitative difference as well as the other findings described here (increasing independence in study and thought, the challenge of reaching what is understood as Master's level learning) will be discussed again in the next chapter.

5.3 Findings related to second research question: Accounts of processes of learning in a networked learning environment

This section of the chapter presents the findings which emerged related to the second research question.

- In what different ways do these students describe their processes of learning through their interactions and connections with resources, lecturers and peers in a networked learning environment?

To approach this question each part of the network was analysed individually and three outcome spaces emerged: one for resources, one for lecturers, and one for peers. Before the findings are presented a brief description is provided on how the categories of description were developed for this question and the different situations identified in which the phenomenon was experienced. This is followed by an explanation of why

this study chose to distinguish between the concepts of complexity and inclusivity for this research question.

Looking for connections, interactions and critical engagement

In the networked learning model (Figure 2.2) learning and knowledge construction are seen as located in connections and interactions between resources, lecturers and peers. Learning emerges from critical dialogues and enquiries within these connections and interactions. Using this framework, analysis for this question was approached by looking for two aspects of the phenomenon under study (processes of learning):

1. levels and types of *connection and interaction* with each part of the network (how much and in what ways are interactions occurring);
2. levels of *critical engagement* with each part of the network (how much critical dialogue, questioning, analysing, evaluating, etc.).

Analysis was approached assuming no link between interaction and critical engagement. In other words, high levels of interaction were not assumed to imply high levels of critical engagement. And as will be seen, the findings bear this out. This approach yields categories of description which are labelled as 'Processes of learning with [resources/lecturers/peers] as [description (type)] interactions' where each type of interaction has lower or higher levels of critical engagement.

Experiencing the phenomenon in different situations

The ways of experiencing processes of learning for these students occurred in different situations. Marton & Booth (1997) discuss the researcher's "responsibility to contemplate the phenomenon, to discern its structure against the backgrounds of the situations in which it might be experienced" (p. 129) as they claim the ways of experiencing a phenomenon can manifest themselves in a multiplicity of situations (p.115). For two of the outcome spaces in this study (lecturers and peers) students described connections and interactions in different situations. For example, interactions with lecturers can occur face to face in the classroom (situation A), 'virtually' out of the classroom through email, forums or online meetings (situation B), or through the formal process of assignment feedback (situation C). The different situations are noted where appropriate in the categories of description.

5.3.1 Distinguishing between complexity and inclusivity

When describing the relationships between the categories which form an outcome space Marton & Booth (1997) discuss categories being logically related in a hierarchy of increasing complexity and inclusivity. The category of description at the top of the hierarchy therefore is the one which is most complex and is usually seen as inclusive of all other categories. This study examines both an aspect of the *what* of learning (the academic subject, the content, as seen in the first research question on understandings of Master's level learning) and an aspect of the *how* of learning (the act of learning, as seen in the second research question on the processes of networked learning). As discussed in Chapter 3 (Research Design) there was a concern before analysis began about the potential differences in structuring outcome spaces for these different aspects

of learning. These findings suggest there are differences. Specifically, complexity and inclusivity need to be distinguished and full inclusivity may not always be found when examining the act of learning.

It is logical for increasing complexity to be seen from lowest to highest for *both* types of studies. It is easy to imagine less and more complex descriptions of someone's understanding of an academic concept or a subject, usually seen in differences between more partial and more complete understandings of that concept or subject which also reflects increasing levels of inclusivity. It is also easy to imagine less and more complex descriptions of the act of learning. In this study this is seen in the descriptions of less and more complex critical engagement in connecting and interacting with other parts of the network. However, a key qualitative difference found for the second research question is between categories of description where engagement in the act of networked learning occurs, and those where it does not occur. This difference is so profound that there cannot be a fully inclusive outcome space. How can the most complex category which describes the highest level of critical engagement with the act of networked learning also be inclusive of descriptions which do not engage in the act of networked learning at all? Arguably they can only be inclusive of categories of lower levels of complexity where the act of networked learning is occurring. Therefore, these outcome spaces present a hierarchy of *increasing complexity only* and one where the category at the highest level of complexity is *not fully inclusive* of the categories below. This is considered appropriate for the act of learning, an idea which will be returned to in Chapter 6 (Discussion and Conclusions).

5.3.2 Accounts of processes of learning through interactions with resources

Outcome space

The outcome space for accounts of processes of learning through interactions with resources is seen in Figure 5.2. The diagram captures four categories of description in increasing levels of complexity with Category 1 at the lowest level of complexity and Category 4 at the highest level. A hierarchy of inclusivity is seen in the relationships between Categories 2, 3 and 4 only, where increasing levels of critical engagement with resources was found. However, Category 1 is not included in this hierarchy as critical engagement with resources is absent. It should be noted that the arrangement of the Categories from 1 to 4 also does not represent increasing levels of interaction. As will be seen there are higher levels of interaction with resources in Category 1 than Category 2. Finally, the focus of each category in the outcome space demonstrates the explicit differences between the categories.

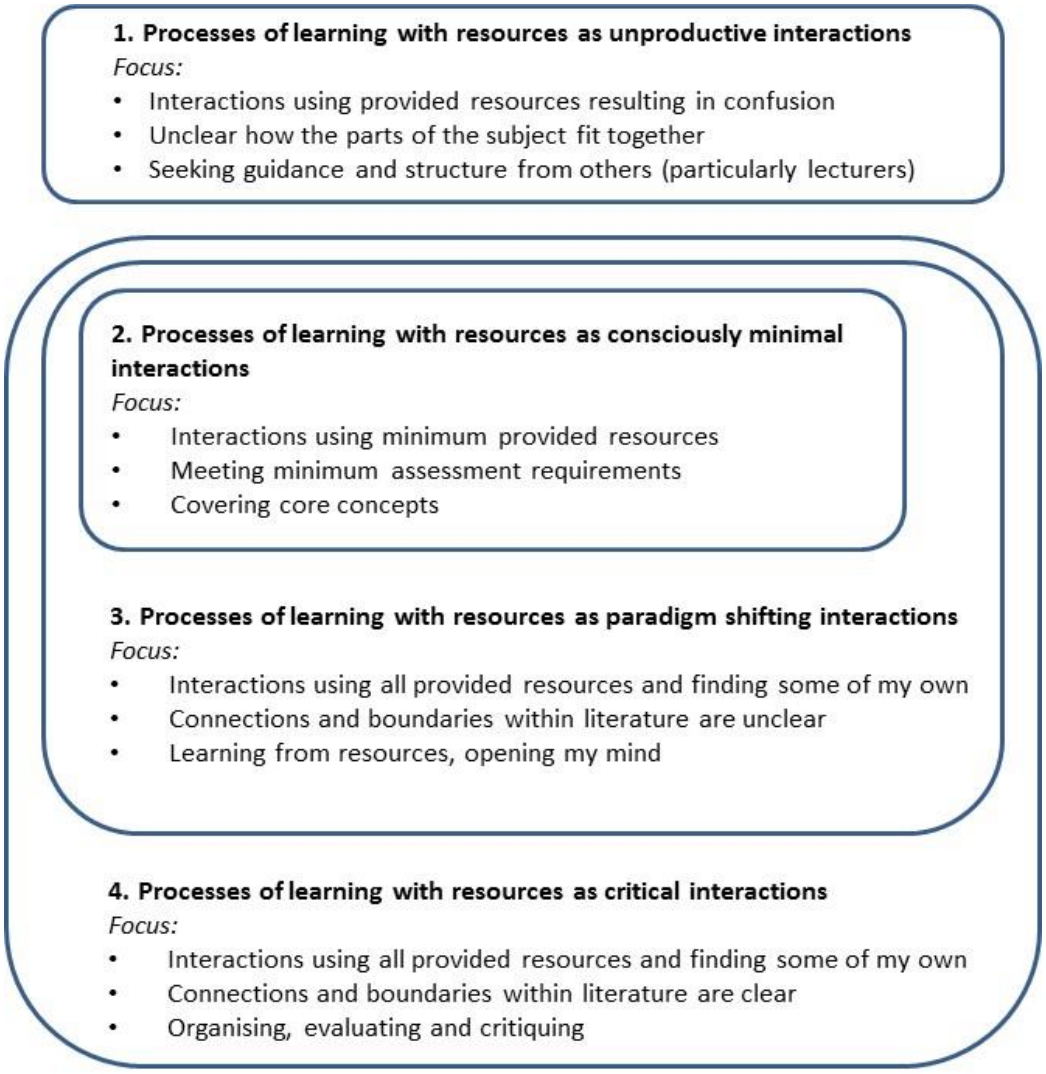

Figure 5.2 Outcome space: Accounts of processes of learning through interactions with resources

Categories of description

Four categories of description emerged from the students' accounts of their interactions with resources:

1. Processes of learning with resources as unproductive interactions;
2. Processes of learning with resources as consciously minimal interactions;

3. Processes of learning with resources as paradigm shifting interactions;
4. Processes of learning with resources as critical interactions.

Category 1: Processes of learning with resources as unproductive interactions

The accounts of students which aligned with this category described reading most of the provided resources (slides, textbooks, provided articles). However, they describe being lost and confused. This confusion can appear at several levels. It can arise if they do not see a clear link between the topics covered in class, the resources available online, and the assignment. Once reading starts after lectures if extra topics are discovered that were not covered in class this can also be seen as confusing. If a textbook was not provided for a subject it makes it difficult to know where to start. The literature itself is seen as confusing, what is relevant or not relevant. Accounts aligned with this category usually stated a desire for more guidance and structure. Interaction levels are higher with the resources than the next category but critical engagement is absent.

> Even the books what you are going to read, from which chapter you are going to start? For me I am used to study systematic way. I cannot jump from for example Chapter 1 of any book as Introductory to Chapter 10. One of our lecturers I think the previous module say we can jump from here and here. And for me I get lost actually, reading here or going there or coming back to here. Especially when I'm going to face a new terminology. […] And Module 3 there was no reference books so I don't know what shall we do. Swim with the internet, search here in the articles. (Khalid, p. 2)

> You know like when they give you a question and you go back and you read, you discover things that you did not know. Sometimes you feel like, oh, that's totally different from class. Like there is nothing that has been said in class that I can write in this assignment. So maybe that's why I'm confused. […] Whatever module we had a book I was so happy. […] Because I don't have to go search for the information. Because with articles you have to go, you have to find, exclude this article and read it and then find out it's nonsense and it's a waste of time. You get frustrated. (Aisha, p. 3)

Category 2: Processes of learning with resources as consciously minimal interactions

Students' accounts which aligned with this category describe a conscious minimum level of engagement with resources. This was attributed either to a desire to only reach pass levels in the assessment or to a lack of interest in the subject. There is a focus on covering core concepts only. The resources used are mostly lecture slides and provided textbooks but not much beyond that into the wider literature. There are low levels of both interactions with resources and critical engagement.

> Many a times what I do is that I take the printout of the slides and then at the leisure of us I will just go through them and couple of times like the books I have either in hardcopy or soft copy I will just go through them as well. […] Because as I said like at this juncture of life it's just to meet the deadline. As for its learning or reading is concerned that is over getting the concept. […] So I may not get very good marks but I know that is not my target. Mine is to get to the deadline as I told you. To look at other aspects of the life. (Sandeep, p. 3)

> In Change Management I did a lot of reading cos I liked it. And Finance I don't think I ever read anything except the things he gave us in class. […] If I'm not really interested I will just read to finish the assignment to tell you the truth (laughs). Just to get enough references, that's it. (Jamila, p. 3)

Category 3: Processes of learning with resources as paradigm shifting interactions

Accounts which aligned with this category describe connections with resources which have higher levels of both interaction (searching more, reading more) and critical engagement than previous categories. Resources are seen as potentially vast and students are aware of the need to put a structure on them to be able to utilise them for assignments. These accounts describe higher levels of comfort with the skills of searching, reading and organising and include reading all provided resources (slides,

textbooks, provided articles) as well as searching for their own literature. They describe reading a lot. When they are unclear about a topic they read further or find other resources (e.g. videos, online courses) to help them. In addition to this growing independence from provided resources they describe the impact this reading has on their thinking which reveals the referential aspect of the phenomenon. Reading about other people's experiences (e.g. case studies, research in other organisations) is seen to broaden thinking, open the mind. The difference between this category and the final one is that, although there are deeper levels of interaction with resources, the student still finds them difficult to negotiate, particularly in the ability to filter and integrate all of these different ideas from different sources. The final category of description overcomes this hurdle.

> The case study is an experience of someone else so these all are experiences from someone different and learning from them. I never thought about that, about learning from other people's experience. I always thought that experiencing things yourself will help you but other's experiences are only helping others, they're helping *themselves* to grow. But actually now I know that other's experiences will help me grow as well. So I care about reading that. Reading about other people's experiences. (Zaineb, p. 8)

> The thing that I love to learn here is searching the literature about the topic because we're not used to doing this previously. And honestly I learned really a nice thing about literature review and following the literature and just skimming the literature about the things that you're doing. Because doing things without exploring the experiences before, it makes you like still stuck in a place, you think you're doing something you're not doing. So I love the thing, that you look at others what they did. (Amina, p. 3)

> I still struggle [with the literature review]. Because it's like when I see the video that was presented how you put things together, that sort of thing is the critical thinking thing that I find it a bit hard because it's like I understand, I understand the pieces, but *how* to put it up that is the thing. I kind of find it hard. […]. But [I read more] you know to get more ideas. Because it does have a paradigm shift as well. Like you know certain things that I view, certain things, it really has changed. (Lisa, p. 4)

Category 4: Processes of learning with resources as critical interactions

The accounts of students which align with this category are similar to the last category in terms of their high level of interactions with resources. However, the structural aspects here not only reveal high levels of reading and finding additional resources but also evaluation of what is being read, categorising and critiquing it. Overall the level of critical engagement is higher. Again interactions with resources are seen to open the mind but there is a higher perceived ability to negotiate the terrain and connect ideas together.

> And my way of studying is I need to see everything. I can't start work because I find something nice. I need to see everything at different levels, all the things around this subject. This is the hardest time. How to get all this information and how to integrate all these in one thing […] and then I will just collect all these, the important thing in the lecture and what I got in the literature. I will try to mix them and link them in a way which is not a usual way. Because what I felt in this Master that I need to be creative, I need to bring ideas, not a usual assignment that I just collect and put the ideas. I need to make a sense of different information and critique them. So I need to take from here and there. (Layla, p. 1, 3)

> I gathered all my research articles and then I just like, pulled out the ones I didn't want to use and the ones I wanted to use I just read them. And I had my main points that I wanted discuss, I had already narrowed down what I want to talk about. And I just started pulling out those points. It was just such a long process but I wanted the marks so I did it (laughs). And from each article I would take out what they said about this topic. Just by author and by article and then I just grouped everything in similar sheets. And that's how I wrote my literature review and that's what informed the rest of the paper. I found that really, really helpful even though it took a really long time. Because it narrowed down my focus. (Zahra, p. 2)

Relationships between the categories

As indicated above there is a hierarchy of complexity where the categories are seen to increase in complexity from 1 to 4. However as seen in Figure 5.2 there is a hierarchy of inclusivity from Category 2 to 4 only. Category 1 is not included in the higher level descriptions as accounts in Category 1 do not demonstrate critical engagement in their interactions with resources. When the structural and referential aspects of each category are drawn out and cross-referenced (Table 5.2) this is more explicitly seen in the referential aspects where a distinction is made between engaging and not engaging in the act of learning with resources. Accounts in Category 1 do not seem to be able to engage with the act of learning with resources resulting in processes of learning which are confusing. Once the act of learning is engaged in from Category 2 onwards, inclusivity is seen.

In Table 5.2 the structural aspects refer to what is in focus for the student and shows a theme of increasing complexity from a partial to a more holistic view of resources, from the relationships between various parts of the subject being less apparent to more apparent. The referential aspect, once learning is engaged in, shows a theme of increasing complexity from assessment to learning to critical engagement.

One further theme of increasing complexity noted across the categories, as seen in the structural aspects, is the increasing use of resources beyond those provided by the college (expanding independence). The higher categories of description demonstrated higher levels of skills in finding and using their own resources while accounts in the lower categories depend on college-provided resources only.

The key qualitative difference between the categories in this outcome space is between categories which engage in the act of learning through interactions with resources (Categories 2, 3, 4) and the category which does not (Category 1). As will be seen in the remaining outcome spaces for this research question this distinction between engaging and not engaging in the act of networked learning emerges each time, resulting in other non-inclusive outcome spaces. This will be discussed in more depth in the next chapter.

Category	Structural Aspects *What's in the foreground? Features?*	Referential Aspects *Processes of learning with resources are (about)….*	
		Unable to engage in act of learning with resources	*Engaging in act of learning with resources*
1. Processes of learning with resources as unproductive interactions	• Unclear how parts of the subject fit together • Some interaction with provided • resources • Seeking guidance and structure from lecturers	Confusion	
2. Processes of learning with resources as consciously minimal interactions	• Focus on core concepts (boundaries are clear) • Minimal interaction with provided resources • Meeting minimum assessment requirements		Assessment
3. Processes of learning with resources as paradigm shifting interactions	**As in Category 2 <u>and</u>:** • Using all provided resources and finding own literature (wider view of subject) • Using skills of searching, reading, organising • Struggling to integrate parts of course together (boundaries not clear) • Learning from reading		Learning
4. Processes of learning with resources as critical interactions	**As in Category 3 <u>and</u>:** • Connecting resources together, categorising, seeing relationships (boundaries are clear) • Evaluating reading		Critical engagement

Table 5.2: The structural and referential aspects of processes of learning through interactions with resources

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5.3.3 Accounts of processes of learning with lecturers

As described in Chapter 3 (Research Design), most lecturers fly in to Dubai and Bahrain to deliver four days of teaching in their subject. They may have provided some online reading in advance and perhaps encouraged a forum discussion on Moodle. Once teaching is finished they fly back to Ireland and communicate with the students through Moodle (forums, podcasts, online meetings) with the entire group, or through one-on-one contact initiated by individual students (email, phone). The final mode of interaction is through assignment feedback where students receive written lecturer feedback and can individually choose to contact the lecturer for further discussion. This programme design led to three different situations identified in the transcripts in which students can interact with lecturers and all three were included in the analysis.

- Situation A: Classroom lectures
- Situation B: Out of classroom contact
- Situation C: Assignment feedback

These situations will be referred to in the categories of description.

Outcome space

The outcome space for accounts of processes of learning through interactions with lecturers is seen in Figure 5.3. The diagram captures four categories of description in increasing levels of complexity. Category 4 is inclusive of Category 3 representing increasing levels of critical engagement in interactions with lecturers. Categories 1 and 2 are not part of this hierarchy as critical engagement with lecturers is not seen. They are placed at the same lowest level of complexity. The focus of each category in the

outcome space demonstrates the explicit differences between the categories. Category 1 describes lecturers as not important for learning, either in or out of the classroom, while the remaining categories ascribe them importance for learning.

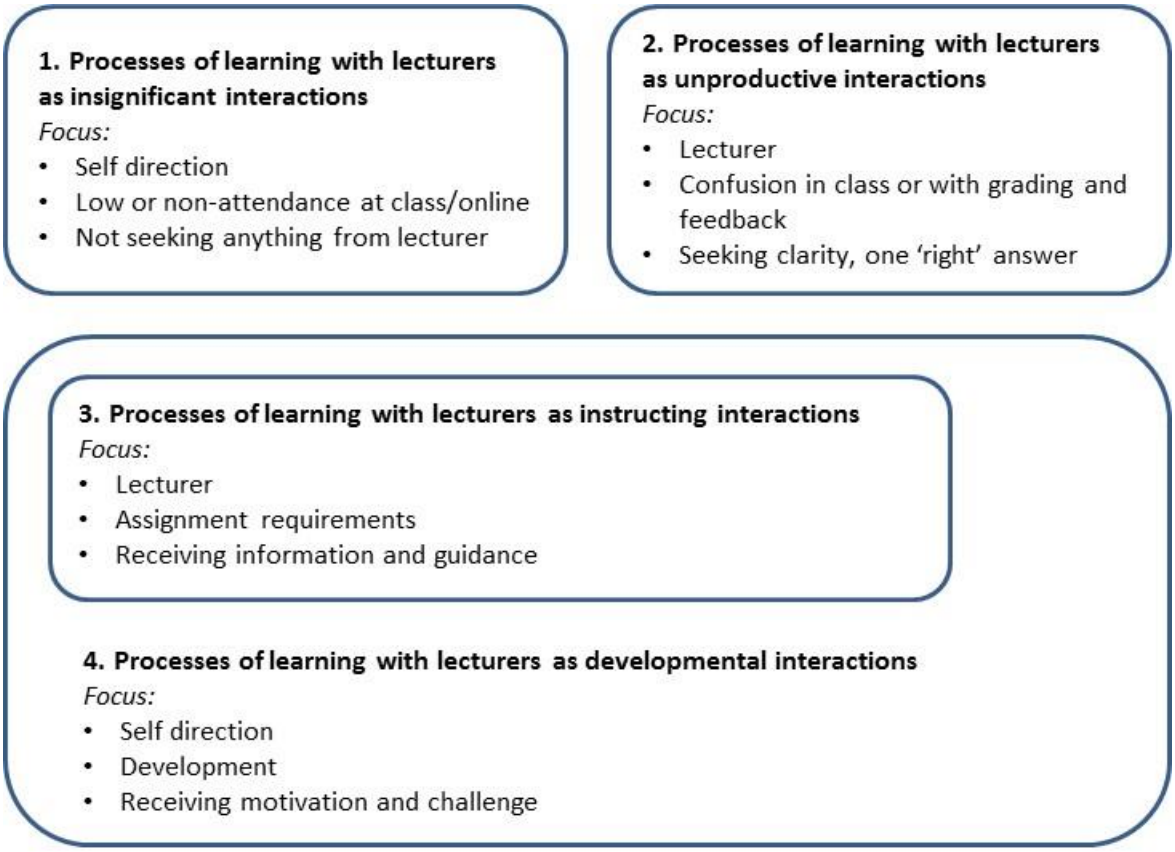


Figure 5.3 Outcome space: Accounts of processes of learning through interactions with lecturers

Categories of description

Four categories of description emerged from the students' accounts of their interactions with lecturers:

1. Processes of learning with lecturers as insignificant interactions;
2. Processes of learning with lecturers as unproductive interactions;

3. Processes of learning with lecturers as instructing interactions;
4. Processes of learning with lecturers as developmental interactions.

Category 1: Processes of learning with lecturers as insignificant interactions

Students whose accounts aligned with this category described interactions with lecturers as minimal and insignificant for their learning across all situations. Attendance in-class is low due to busy work schedules or to deeming the classroom lectures not useful. Lecturers are also not contacted outside the classroom. These accounts describe relying on the slides and other resources for their learning instead.

> In the classroom I think reading even the slides without attending would be same. Yeah. Some of the lecturers they are presenting only stories of, for example, how to apply these principles. Most of them they are presenting stories. So there is no, I don't know, there is no relation sometimes between the slides and the subject. (Khalid, p. 6)

> I think that if I do not think that [the lecturer] has a good grasp of the lecture or you're just reading off the slides then I wouldn't be focusing much with what you're saying. I would drift off and focus on other things or I would just get out of the lecture and do something else or something better. (Niesha, p. 8)

> So those 4 days are very strenuous for me so couple of times because of the work commitment I had to skip them also sometimes […] [When I cannot attend] I talk with the colleagues who attend, then I go through the slides. Many a times what I do is that I take the printout of the slides and then at the leisure of us I will just go through them a couple of times. Like the books I have either in hardcopy or soft copy I will just go through them as well. […] If you are stuck somewhere you immediately Google it or search somewhere and get the things done rather than writing a post or writing a mail [to the lecturer]. (Sandeep, p. 2, 3)

Category 2: Processes of learning with lecturers as unproductive interactions

Accounts of students in this category describe being confused or frustrated by their interactions with lecturers. Confusion can come in the classroom when lecturers do not answer questions clearly or provide one 'right' answer. Confusion can also come in the assessment process when students do not understand the feedback provided.

> That group discussion sometimes it has its benefits, sometimes it has its negatives. Because you will share information at the end sometimes we will not have time to get feedback from the instructor himself. His view, what he thinks the group is going on the right track or not. […] So at the end you will come out you don't know whether what knowledge you attained is correct one or not. (Khalila, p. 3)

> And the thing is even in the lectures when you ask some module leaders a question he doesn't answer you. He doesn't say what you're thinking is wrong, not wrong, your thinking is a bit different I need to direct you back again. Some they just tell you, huh, it might be right. So you think ok so whatever I think is right. I don't think it's possible. So we end up even more confused. (Niesha, p. 8)

> I submitted just two assignments and I really don't know exactly what the module leader is looking at. If I look at learning outcomes, I can say OK I have achieved it but when I get the results it's entirely different sometimes. (Chandra, p. 3)

Category 3: Processes of learning with lecturers as instructing interactions

Accounts in this category describe high attendance at classroom lectures and the importance of paying attention, particularly to assignment instructions. There is a preference for structure and clear guidance. Outside of the classroom interactions with the lecturer are primarily for clarifying assignment requirements. The referential aspect of this category is seeing the lecturer in an instructor role. Outside of the classroom

there are two different features apparent. One where students are comfortable contacting the lecturer directly (‘close’) and one were students are not comfortable and go to colleagues first to clarify questions or never contact the lecturer at all (‘distant’). Initially the outcome space had these as two separate categories but as the underlying referential aspect was the same it was decided to keep them as one category but highlight this structural difference in the out of classroom situation.

> During the module itself me and other students we were trying to take the maximum because it's only like 4 days per month. So we were trying to take the maximum information from the lecturer. Especially when it comes to the assignment because it's the way we score our Masters. (Nahla, p. 1)

> Actually it is most beneficial the last day of the in-class. The last day is very effective actually, they are telling us what about the assignment. Very, very careful to listen to every word they say in this one. (Ahmad, p. 2)

> *Close:*
>
> And if I had any questions I would email the professor. [...] I find them really helpful. And it's just that kind of support, am I on the right track kind of way. So far they've been amazing. (Zahra, p. 3)

> I find that if there's a concept that I'm struggling with as soon as I...I'll usually bring it into the forum so that I can see if someone else in the class is struggling with it or maybe has a better grasp of it. And generally speaking you'll also get some buy in of course from [the lecturers] who are facilitating us as well. And that usually steers you on the correct path. […] And you know I'm in touch with the facilitator if there’s something that I really don't grasp. (Emma, p. 4)

> *Distant:*
>
> [I didn’t use the] discussion forums so much because we tend to discuss it outside. But then what we do is that we let one of my friends speak on behalf of us and ask the professors a question or something. (Niesha, p. 11)

> Because for me I wish, I wish that I had more access. I know that there is the email because you know everybody always tell us, all the instructors, that please email, call, come to the college. But we never do that. I don't know why. Maybe

> I'm a shy person? So that's why I don't like to email or maybe trouble somebody. So I end up calling my friends. (Aisha, p. 4)

Category 4: Processes of learning with lecturers as developmental interactions

Students whose accounts aligned with this category describe interactions with lecturers as more than a one-way information-giving interaction or one-way guidance on assignments. These accounts describe lecturers as people who motivate the student, or challenge them to improve, or hope to develop them. There is more interaction with the lecturer as the student sees them as important for their learning and development.

> I think you wanted us to grow. I always believed that. I always thought yeah they put this because they want us to you know...they put this article because they want us to read more about that. Even if there are articles that some instructors put up that aren't useful for the *assignment* but it's useful for us, you know. So it shows that the instructors are trying to... illuminate us I think. Illuminate is the right word? They want us to be *into* it, they don't want us to just do it for the assignment and I like that. (Zaineb, p. 5)

> And also I sent emails to the instructors about the assignment. Sometimes I'm just seeking motivation, just the positive door, where the positive energy come. That's why I like the online meeting. Even if we didn't ask. Even if you don't ask anything, the instructor when they come online they encourage you to work. They give you some kind of, this is the positive energy I mean. (Fatemah, p. 8)

> Then there was a lot of people confused and lost about it [the assignment]. But what I found good about [lecturer] is when you ask him a question he doesn't give you the answer, he tells you how to find it. Which is nice cos it's kind of a challenge. Like OK I'm going to find it. He's helping you help yourself kind of way. […] And I had the experience of learning on my own. And I think that's what he wanted us to. The information is there and the way he answered the questions I started figuring it out, like OK he wants us to figure it out on our own. (Zahra, p. 6)

Relationships between the categories

As indicated above there is a hierarchy of complexity where the categories are seen to increase in complexity from 1 to 4. However as seen in Figure 5.3 there is a hierarchy of inclusivity between Categories 3 and 4 only. Categories 1 and 2 are not included in the higher level accounts as they do not demonstrate critical engagement in their interactions with lecturers. This is seen more explicitly in the analysis of the structural and referential aspects of each category which are cross-referenced in Table 5.3. The referential aspects of Categories 1 and 2 show either an unwillingness or an inability to engage in the act of learning with lecturers, while the remaining two categories engage in the act of learning. This distinction also shows that Category 1 and 2 are not inclusive of each other while Category 4 is inclusive of Category 3. This distinction between categories which do or do not engage in the act of learning through interactions with lecturers represents the key qualitative difference between categories noted for this outcome space.

Table 5.3 also demonstrated a theme of increasing complexity along the structural aspects of each category, increasing in complexity from self being foregrounded only, to lecturer only, to a combination of lecturer and self-direction. The referential aspect, once the act of learning with lecturers begins, demonstrates a theme of increasing complexity from assessment to development.

Category	Structural Aspects *What's in the foreground? Features?*	Referential Aspects *Processes of learning with lecturers are (about)….*	
		Unwilling/Unable to engage in act of learning with lecturers	*Engaging in act of learning with lecturers*
1. Processes of learning with lecturers as insignificant interactions	• Self-direction • Minimal interaction with lecturer • Rely on other resources for learning	Insignificant *(unwilling)*	
2. Processes of learning with lecturers as unproductive interactions	• Lecturer • Some interaction • Seeking clarity from lecturers, the one 'right' answer to questions.	Confusing *(unable)*	
3. Processes of learning with lecturers as instructing interactions	• Lecturer • More interaction both in and out of class • Assignment requirements • Seeking information and guidance		Assessment and instruction
4. Processes of learning with lecturers as developmental interactions	**As in Category 3 <u>and</u>:** • Self-direction • Receiving motivation and challenge from lecturers		Facilitating learning and development

Table 5.3: Structural and referential aspects of processes of learning through interactions with lecturers

While higher complexity and expanding awareness of the role of the lecturer can be seen in Table 5.3 it is worth noting what is not seen. The roles described in the accounts above are all one-directional (providing clarity, assignment guidance, challenge). There is no sense in the accounts, even in the most complex category, of a two-way critical dialogue with lecturers. This point will be returned to in the Discussion chapter.

5.3.4 Accounts of processes of learning through interactions with peers

As with the previous outcome space, different situations were identified in which peer interactions occur on these programmes.

- Situation A: Lecturer facilitated unassessed group work (in-class).
- Situation B: Student facilitated assessed group work (out-of-class).
- Situation C: Voluntary student interactions (out-of-class).

The first two are consciously designed into the programme while the last is not. The first situation is lecturer facilitated group work. This occurs mostly face to face in the classroom although there are small instances of facilitated online group work in Moodle. This work is unassessed and participation is voluntary. It typically involves working on a task or discussion topic in small groups and presenting back to the rest of the class. The second situation, also designed into the programme, is assessed group work where students must submit a paired or team assignment for a group mark. All students have one paired and one team assignment as part of their overall assessment regime[7]. In this context group work occurs out-of-class and is facilitated by the students themselves. The third situation, which is not designed into the programme, is voluntary student interactions which occur out-of-class. These interactions take place through face to face meetings or through technology (e.g. WhatsApp, Skype, FaceTime).

[7] Each programme requires students to submit one paired, one team and three individual module assignments in Year 1. A sixth module was assessed by examination and all students complete an individual thesis in Year 2.

These different situations made analysis more complex as the same student might describe different experiences depending on the situation. For example, they could describe peer interactions as important for their learning in situation A, frustrating in situation B and insignificant in situation C. Or a different student might describe peer interactions as important across all situations. The final outcome space combines all individual accounts into a 'whole' experience and so this individual nuance is lost as would be expected in phenomenography. However, some of it is captured where appropriate and possible within the category descriptions when different situations are mentioned.

Outcome space

The outcome space for accounts of processes of learning through interactions with peers is seen in Figure 5.4. The diagram captures five categories of description in increasing levels of complexity. Category 3, 4 and 5 are seen in a hierarchy of inclusivity and increasing levels of critical engagement with peers. Categories 1 and 2 are not part of this hierarchy as critical engagement with peers is not seen. They are placed at the same lowest level of complexity. The focus of each category in the outcome space demonstrates the explicit differences between the categories.

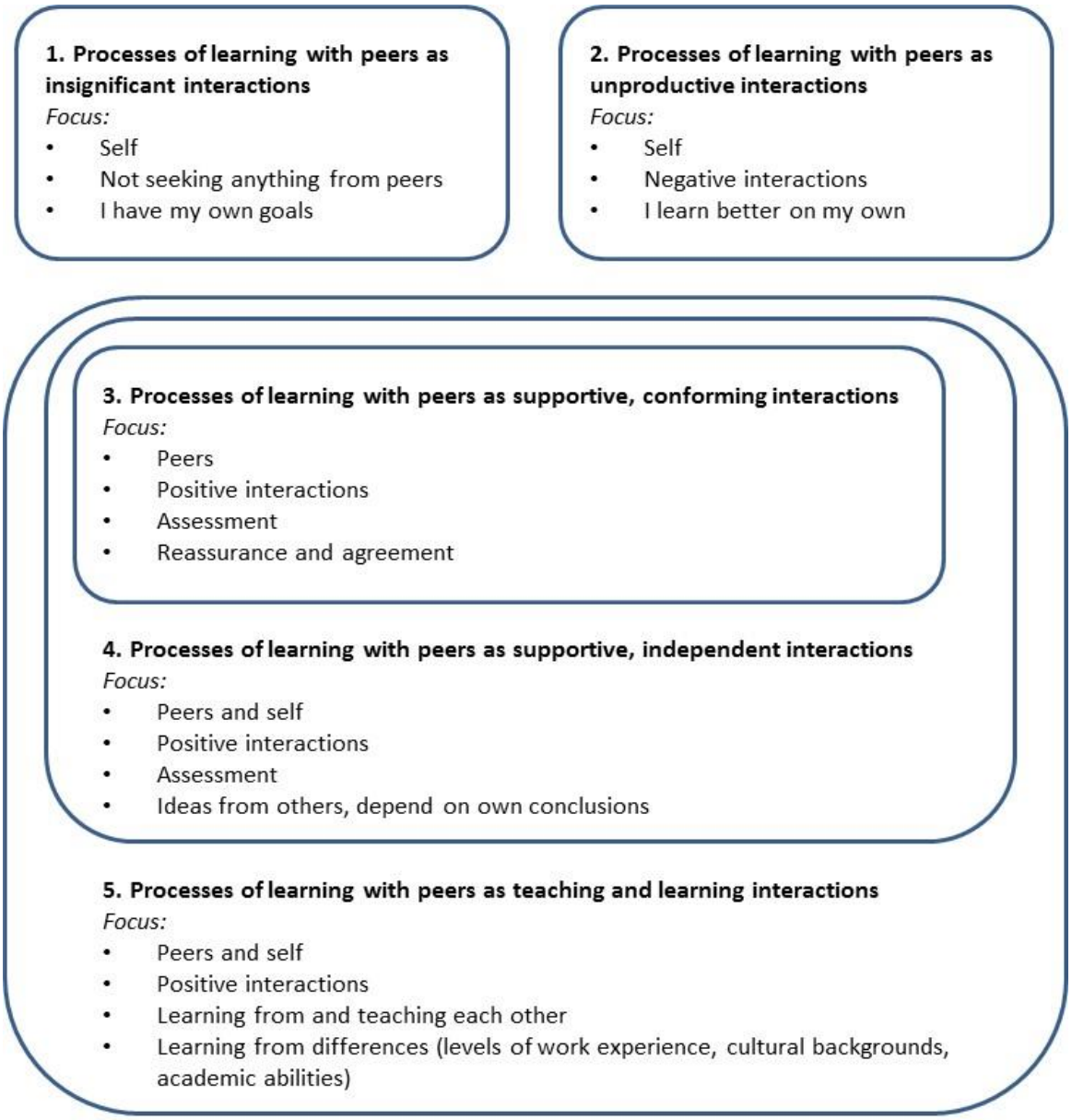


Figure 5.4 Outcome space: Accounts of processes of learning through interactions with peers

As will be seen, Categories 1 and 2 describe peer interactions as not important for learning. These categories are present across all situations. The remaining categories describe increasing levels of critical engagement and ascribe importance to peer interactions for learning. Categories 3 and 4 are primarily present in situation B

(voluntary out-of-class interactions) while Category 5 is primarily present in situation A (lecturer facilitated in-class interactions).

Categories of description

Five categories of description emerged from the students' accounts of their interactions with peers:

1. Processes of learning with peers as insignificant interactions;
2. Processes of learning with peers as unproductive interactions;
3. Processes of learning with peers as supportive, conforming interactions;
4. Processes of learning with peers as supportive, independent interactions;
5. Processes of learning with peers as teaching and learning interactions.

Category 1: Processes of learning with peers as insignificant interactions

Students' accounts which align with this category describe a minimal level of interaction and engagement with peers. This is seen across all situations but particularly out-of-class with low levels of contributions to team assignments or low levels of interest in supporting others or looking for support from others. This was attributed to a lack of time or having different goals.

> So I think the other members of the team they are quite enthusiastic about submission. If I would have been alone I would simply have done it just to fulfil the requirement. But other colleagues, they were quite enthusiastic. So the contribution came from most of them rather than me. […] I just use it [WhatsApp] as recipient rather than contributing much to it. Sometimes what happens as I said those students, although they are working, they don't have a family. They find it quite interesting to communicate and give their inputs. Maybe others said I might be a bit lazy about it or a bit passive about it. As I said I will not do it. (Sandeep, p. 5)

> I didn’t participate [on the forums] with time constraint, mainly time. In the beginning last year, I had much more time than this year. So if I see any contribution from some of the students I will share but not very often. Usually I open and see if I have time, then yes. But I prioritise my own work. Either go for assignment or if I feel if it's something that will not benefit for me I will not contribute. (Khalila, p. 11)

Category 2: Processes of learning with peers as unproductive interactions

While accounts of students which align with this category describe some higher levels of interaction with their peers than the previous category, critical engagement is still low. The interactions here, which can occur across all situations, are unsatisfactory for a number of reasons and are described in negative terms. Interactions with peers can cause confusion or more stress due to differing ideas or different ways of approaching study. Team assignments where interaction is not voluntary can generate unsatisfactory interactions with peers if the team does not actually work together (e.g. superficially divides up work) or team members feel they are contributing at different levels of effort or quality. Finally, interactions with peers are also unsatisfactory where peers are seen as not studying as hard or are not as motivated. Accounts in this category usually describe a preference for working alone.

> I used to ask of them. And they are explaining for me or for the group what to do, guiding us, they are sharing their comments. I get a lot of ideas from them. That's why I get bad marks. […] And you know by listening to them sometimes I get lost and disappointed because maybe the way of thinking that they are is different than mine. Then I said oh come on who's right, me or they? And usually some of them they are fighting with others, no this is wrong. You get lost. (Khalid, p. 6)

> But then I felt to stressed out and then I preferred not to discuss what I did. Not to rely on their opinion, not to rely on others. […] And then I discovered that so many people just don’t read. They don’t read. So....yeah, you can’t...they are not

> the type of people, some, they are not the type of people who will add to me. I didn't want to be confused. (Fatemah, p. 10)

> I don't like to go and ask others because I will not get any answers. Each one as you said has his own way of thinking. I always, maybe it's wrong, trust myself more than what others has. I ask someone who has more than me but not someone at the same level of me. And to tell you the truth some of the students when I met with them they just say that oh I wrote only this much amount and I don't know what to write more. And I say my god why I am struggling and they are just not paying attention. So I felt it's useless to ask the colleagues. (Khalila, p. 6)

Category 3: Processes of learning with peers as supportive, conforming interactions

Accounts of students which align with this category describe higher levels of interaction with their peers and these interactions are seen as positive and supportive. Interactions generally occur out-of-class preparing for assignments and are often facilitated by technology (e.g. WhatsApp, Skype, FaceTime) although meetings in person also happen. Peers clarify assignment requirements, share resources and ideas and reassure each other. They are seen as supporters in the learning process and perhaps even friends. While the level of interaction with peers is often high a differentiation between this category and others is the level of critical engagement. It is higher than Categories 1 and 2 which is demonstrated in the descriptions of sharing ideas and resources. However, critical engagement is not as high as will be seen in Categories 4 and 5. This is demonstrated in the way interactions with peers are used to provide comfort that they are going in the right direction and have a focus on conformity and reassurance rather than more fully interrogating and critiquing each other's ideas.

> So I always called them [when I was stuck]. And the problem is you get three opinions. And I have my own. So now I have four. And if they convince me that that's the way to do it then that's fine. I try to listen to this person and that person and figure something out myself. But what are you guys doing? Whatever you guys are doing I'm doing. (Aisha, p. 4)

> Sometimes I ask my colleagues how they did, their point of view. I feel like I'm satisfied with what I have done when I listen to their feedback about the assignment and how they did it. I feel like more comfortable to what I am doing. (Khalila, p. 4)

> Now we have this approach, after each module we have a *huge* group meeting. People coming from different groups and we start to talk about the module and how we are going to tackle the assignment. […] And then we mention that, let's say for example, we know we understand the 3 divisions, but we say ok this is an example of how I'm going to give it, do you think it's right? [...] And someone else says ok this reference is really good and I think the professor has emphasised on this so I think we really need to use it. Which makes things a lot more easier. I get to understand. […]. And we even get sweets. It's very social and fun. (Niesha, p. 6)

Category 4: Processes of learning with peers as supportive, independent interactions

This category of description is similar to the last category in that the accounts describe peer interactions as supportive and helpful for learning. However, a difference was found in these accounts in that they were not seeking reassurance from others. Here students appreciated sharing ideas but then rely on their own research and thinking to come to a final conclusion. Thus the level of critical engagement with their peers is seen as slightly higher.

> Actually there were two forces when we are doing an assignment in our group because we have this WhatsApp. So we have influence of some ideas from the WhatsApp. This will influence us to some degree. But sometimes it is different than our way. But we will feel comfortable when we are all on the same track. This was maybe good and not good. But most of the time I will just stick to my way and I felt that the point that I understand it as they want it. (Layla, p. 3)

> I like discussions in the teams because for me I'm the type of person who likes to learn something from you, learn something from her, learn something from her, and do some research. And then see what works best. Because I might think of this or I might approach this from another way but you totally...I would have *never* have thought about this. And then you start thinking of it and you go like I have this question and let me check the literature, let me check whatever evidence is there. It works out well. (Niesha, p. 8)

Category 5: Processes of learning with peers as teaching and learning interactions

Accounts which align with this final category describe processes of learning with peers as interactions where students teach each other and learn from each other due to the different clinical and administrative backgrounds, different levels of work and academic experience, and different cultural backgrounds in the group. These interactions mostly take place in lecturer facilitated unassessed group work which is primarily in the classroom although some limited group work takes place on Moodle. Sharing different ideas and experiences with each other is seen to broaden thinking and deepen analytical skills. As the students are mostly working professionals they also teach and learn from each other through sharing practical workplace examples which enables deeper links to be made between theory and practice. Descriptions in this category put a strong emphasis on learning from each other in these ways. With English as a second language for many students, group work in the classroom is also an opportunity to ensure that all understand the core concepts and, if not, peers clarify and teach each other. It should be noted that in-class group work is not always positive. As seen in Category 2 some accounts describe the dominance of group members or confusion within groups. However, in this category there is a focus on the positive aspects of learning from each other when facilitated well by the lecturer. Accounts in this category also describe some examples of teaching and learning from each other in the other two situations (non-voluntary team assignments, voluntary interactions), again through the sharing of ideas. In working together on assignments out-of-class students also learn academic skills from each other such as citation, referencing, and writing. Overall in this category there is a focus on learning from the differences available within the peer group.

> Sometimes the activities in between the lectures was more informative than the lecture itself. Because the lecture was about slides that some will understand and others no. But the activities it will really ensure everyone will give the idea. They were asking us to divide into groups and do specific tasks and with talking to others and explaining what's required it was really informative. […]. I feel that 70% of my gains from this course is from sitting to others who work in the same field and just explaining, 'oh we have done this'. (Nahla, p. 3)

> I depend on my colleagues to understand what's going on. They give me brilliant ideas. If I worked on my own I don't have that. I actually have some kind of narrow angles to work from but I like when they put their own thoughts they make it more clear for me, they expand the view, they make me see it. (Fatemah, p. 6)

> I always look at things from one angle. And when people start saying things I think how did they come up with this? It makes you think. And sometimes I look at something and I'll just try to think of something else in that. Yeah, I like group work and because you get to see your group work and the other group work as well. And it's fascinating how different they can be or how similar they can be as well. (Aisha, p. 9)

> And we have a really mixed multicultural group with lots of different experiences and different professions. And so it brings a lot to the group when you have...and that's what really comes out in the forums and the classroom. People interacting all the time and you know I might have a view about something and you'll hear three or four other views and it kind of gives you a really nice discussion, way to discuss things and it gives you lots of different ideas. So, you know...from that point of view it's been really helpful. Honestly you learn a lot from your other colleagues, not just the person facilitating it. (Emma, p. 6)

Relationships between the categories

As seen in the outcome space (Figure 5.4) categories are seen to increase in complexity from 1 to 5. However, there is a hierarchy of inclusivity between Categories 3, 4 and 5 only. Categories 1 and 2 are not included in the higher level accounts as they do not describe critical engagement in their interactions with peers. This is seen more explicitly in Table 5.4 where the structural and referential aspects of each category are cross-

referenced. As in previous outcome spaces for this research question a distinction is made in the referential aspects between engaging and not engaging in the act of learning with peers. Accounts in Categories 1 and 2 are either unwilling or unable to engage in the act of learning with their peers. Once the act of learning is engaged in from Category 3 onwards, inclusiveness is seen. Again this is noted as the key qualitative difference between categories for this outcome space.

In Table 5.4 a theme of increasing complexity can be seen along the structural aspects in the move from self being foregrounded only, to peers only, to a combination of self and peers. The referential aspect, once the act of learning with peers begins, shows a theme of increasing complexity in an expanding focus of the role of peers from those who can support assessment to those who can teach us.

Before we leave the outcome space for processes of learning with peers it should be noted what was *not* found. In the previous outcome space for lecturers it was noted that no critical dialogue was found. In these accounts while there is evidence of dialogues and inquiries between peers there was not strong evidence for high levels of critical dialogue. This point will be returned to in the Discussion chapter.

Category	Structural Aspects *What's in the foreground? Features?*	Referential Aspects *Processes of learning with peers are (about)….*	
		Unwilling/Unable to engage in act of learning with peers	*Engaging in act of learning with peers*
1. Processes of learning with peers as insignificant interactions	• Self • Minimal interaction	Insignificant *(unwilling)*	
2. Processes of learning with peers as unproductive interactions	• Self • Some interaction, mostly negative	Confusing *(unable)*	
3. Processes of learning with peers as supportive, conforming interactions	• Peers • Higher levels of positive interactions • Helping with assignments • Sharing ideas • Seeking reassurance, agreement		Assessment and conforming
4. Processes of learning with peers as supportive, independent interactions	**As in Category 3 <u>and</u>:** • Self • Depending on own opinion		Assessment and independence
5. Processes of learning with peers as teaching and learning interactions	**As in Category 4 <u>and</u>:** • Learning from and teaching each other • Learning from differences between peers (work, culture, academic)		Teaching and learning

Table 5.4: Structural and referential aspects of processes of learning through interactions with peers

5.3.5 Key qualitative difference across outcome spaces: Engaging and not engaging

The key qualitative difference across all outcome spaces for this research question is found in the analysis of the referential aspects of the categories and is between the more complex categories which engage with the act of networked learning and the less complex ones which describe being unable or unwilling to do so (Tables 5.2, 5.3 and 5.4). This level of difference is so profound it led to non-inclusive outcome spaces as described earlier (Figures 5.2, 5.3 and 5.4).

Engaging

Looking first at the categories of description which demonstrated engagement in the act of networked learning with resources, peers and lecturers, there are some commonalities in the themes of increasing complexity seen in the analysis of their structural and referential aspects (Tables 5.2, 5.3, 5.4). In general, there is an expanding view of each element where more parts are held in focus and categories become more complex and inclusive. Once the act of networked learning is engaged in, interactions with resources expand from a focus on core concepts to the wider literature, interactions with lecturers expand from a focus on assessment and instruction to facilitating learning and development, and interactions with peers expand from a focus on assessment and support to teaching and learning. The expanding focus in the outcome spaces can certainly be seen as linked to an expansion from surface to deeper approaches to learning. There is also evidence of a strategic approach to learning seen particularly in the outcome space for resources with the category of description ‘consciously minimal interactions’ where accounts describe being focused on covering core concepts only for

assessment requirements. Strategic approaches can also be seen in the outcome spaces for lecturers and peers where there is a strong focus on assessment in the lower level categories.

So overall there is evidence of surface, deeper and strategic interactions in the processes of networked learning in these accounts, which is not an unexpected finding. A concern of using the ATL framework highlighted previously in the literature is the risk of over simplification, reproducing what you expect to find, and ignoring that which does not neatly fit into the framework (Howie & Bagnall, 2013; Webb, 1997b) . So while this is an interesting finding what is perhaps more interesting is that which is *not* found in the ATL framework, the categories at the lowest level of complexity in the hierarchies where interactions were labelled as 'unproductive' or 'insignificant' for processes of learning.

Not engaging

In all three outcome spaces a category labelled 'unproductive interactions' emerged resulting in confusion, which reveals an *inability* to engage fully in learning with resources, peers and lecturers (Figures 5.2, 5.3 and 5.4). In these interactions resources are confusing and students are unclear how various parts of the subject fit together. Interactions with lecturers are also confusing from either lack of a clear 'right answer' or confusion about feedback. Interactions with peers are confusing from either a sense of too many opinions or not 'rating' others' opinions. Phenomenography does not look for causes, only descriptions, but the emergence of this common category prompts questions as to why this is the case. One way to view this is to consider confusion as a

natural stage in developing thinking and that as students continue to study things become clearer and they can then begin to more critically engage. However, it should be noted these categories of description are not developmental. Students at different stages in their programmes provide accounts of confusion (Year 1, 2, graduates) and the same student may describe, for example, confusion from interactions with peers but critical engagement with resources. So while confusion may be expected in postgraduate programmes the concern lies when this is a consistent experience in all situations and continues over time.

The second category which did not engage in the act of networked learning is seen in categories labelled 'insignificant interactions' and was seen in an *unwillingness* to engage with the two human elements of the network: peers and lecturers (Figures 5.3 and 5.4). In these accounts interactions with peers and lecturers are seen as unimportant for learning, students do not seek anything from others, preferring to learn on their own with resources. So while they engage in learning they do not engage in *networked* learning. This perhaps can be seen as a 'strategic approach' to learning. Perhaps these accounts reflect a decision to not engage with others as they do not perceive it benefitting their individual goals. These goals may be to achieve the minimum (the stated goal in some accounts) or to achieve the maximum (also a stated goal in some accounts). For either goal these categories describe interacting with others as 'insignificant' to reach that goal.

These key qualitative differences in addition to other findings noted for this research question (increasing self-direction, lower levels of critical dialogue than expected in interactions with lecturers and peers) will be discussed further in the next chapter.

5.4 Findings related to the third research question: Accounts of influences from the transnational context

We move now to the findings for the final research question.

- In what ways do these students describe the transnational context influencing their processes of learning?

As outlined in Chapter 3 a thematic analysis of the transcripts exploring the transnational context was conducted using the following sub-questions:

a) In what ways do these students describe the transnational context as influencing their understandings of Master's level learning?
b) In what ways do these students describe the transnational context as influencing their processes of learning (interactions, connections, and critical dialogue) with resources, peers and lectures?

Three themes emerged across these two sub-questions. English as a second language (ESL) influences both their ability to engage with Master's level learning and their interactions with resources and lecturers. Previous educational experience also influences their ability to engage with Master's level learning. Finally, the tensions between global ideas and local context influence their interactions with resources and lecturers.

5.4.1 English as a second language

ESL was the strongest theme which emerged, described as impacting reading, writing, listening and speaking. It particularly influences the first category of description of Master's level learning (Master's level learning as a broad set of academic skills), where reading and writing in English is a requirement to do well but was often a challenge. Some students described this improving over time. ESL also influenced interactions with lecturers if there were difficulties listening and understanding them or needing to speak in English in class. Again this was described as improving over time.

> If you know how to write fluently and straight to the point you will gain much more marks than people who is trying to but they don't know how. And I had this problem in the first two, three modules. I want to write this idea but...Especially with people with language barriers. Like we use Arabic, we don't need to use English most of our people living in Saudi are Arabic speaker. So you don't need to talk English. But here no, you need to write a report in English and clear English that you and the other person will understand and agree, you will not confuse them. (Nahla, p. 9)

> Like in the beginning my reading in English was not that fast. So it wasn't, like not as now, I can read lots of things in the same day. But previously and especially in the first module it was hard for me to read everything. (Fatemah, p. 4)

> Actually at the beginning I felt I can't [complete the programme]. I felt even I couldn't sometimes understand the accent of some of the lecturers. But later on I was really happy because I felt from the two, three modules it changed me. Because I was searching and reading and reading a lot and I've seen also the practices of some of the colleagues. There is no shame, you can just talk even if it's wrong way or it's the grammar mistake it's ok because this is not my mother language. And the good thing is that I can understand the core idea. It's not about the language, it's how I benefit from the information I got from this course. It was better. I think this is only in the three first modules. Then it subsided. (Layla, p. 2)

5.4.2 Previous educational system

A student's previous educational system was seen to influence their readiness to engage with Master's level learning, particularly with critical thinking. This was found at two levels. Firstly, directly related to the transnational context, whether a student had previous experience of a Western educational system was described as being relevant. Several students had been through British or American systems in high school or at undergraduate level and were comfortable with the grading system and the overall approach. However, several students who had no (or limited) experience in Western education systems described critical thinking in particular as new and challenging.

> My high school was American system. My university itself, the Egyptian one they used the British system, even the gradings and all. So I didn't have a problem with that. (Jamila, p. 6)

> Because of my past experience in Canada in my undergrad we did a lot, there was a huge focus on online research, using journals. So I was really familiar with that coming into it I found as opposed to other people who have struggled with it. (Zahra, p. 2)

> I really used to think like one direction. Then after the programme like always think of the positive and negative sides of things, if it's true and what debate can you do, how can you critique things, how can things change. So that was a very different thing. Like our course, my academy throughout school and high school (Bahrain) it was a one-way answers, you can't think outside of the box, this is our culture. (Mariam, p. 2)

> [My biggest struggle is] critique, like how to critique something. That's the thing. To me it's a bit hard because based on the education background where I was from the country I was from (Malaysia). Actually the education system is different from the West I would say. In school I remember, ok you memorise everything and then when you go to the exam you just...it's like you eat everything and when you go to the exam you just vomit it up (laughs). (Lisa, p. 5)

The second level at which a student's previous educational system was seen to influence their ability to engage with Master's level learning is related to disciplinary background. This is not directly related to the transnational context but is noted here as many students mentioned their medical or scientific education and training had not prepared them for the researching, essay writing and critical thinking required in management subjects.

5.4.3 Global versus local

Two aspects emerged under this theme which perhaps seem contradictory. One aspect was a preference for global ideas and exposure to the international experience of the lecturers. This was seen as an advantage of learning on a transnational programme. The other was a preference for more examples from and understanding of the local context which would be helpful for deeper engagement with the concepts. Within this, the applicability of some global concepts to the local context was sometimes questioned.

> But with the international studies you get to know this is applicable here but is as well applicable there. This is what other people think in that country, so yeah it's more global. Yes, I think it has a better...quality. But when it's limited to only UAE people it just would just give you from a closed angle, you wouldn't understand much. (Niesha, p. 12)

> The other thing I think sometimes the gap in development from country to country. You're learning things which is very higher level than the practice - maybe, not in everything - for example in leadership it is very difficult to practice it. It is good to know it. That we have these things and just you will take the information as information. But maybe some will use it in another country they can use, but in our culture you can't use it, because nobody will bother whether you will use this way or this way. (Layla, p. 10)

> We had a speaker, from the [local] hospital here. You come out with so many things from her. Because she came and she talked to us about things that's happening here, things that we relate to, you know something from the culture.

> Because sometimes when people talk, like even managing resistance, you can't. You know like textbook says that's the way to manage this type of resistance but according to the culture you can never go for that. So the way she was explaining things was really good because she has that on ground experience. I learned from that speaker. (Aisha, p.9)

These three themes represent commonalities in the student accounts of 'issues' related to the transnational context which are described as influencing their processes of learning on the programmes. As such they cannot be viewed in isolation. They will be discussed in the next chapter by linking them to transnational literature presented earlier in Chapter 2 but more importantly they will be woven into the discussion of the previously presented outcome spaces.

It should be noted also that each of them reflect previous findings within the transnational literature presented in Chapter 2. Other studies have also found ESL to be an underlying, pervasive theme for offshore students (Burnapp & Zhao, 2009; Wilkins et al., 2012) which impacts their experiences of learning. Previous educational experience (whether or not a student is familiar with a Western education system) influencing experiences on a transnational programme reflects findings from previous studies in the UAE (Wilkins et al., 2012), Malaysia (Ahmad, 2015) and China (Burnapp & Zhao, 2009). Finally, the tensions between global ideas and local context, and the translation from one to the other, is seen in Wilkins et al. (2012) where they discuss the challenges of adapting global content for local context and the tension this can cause when trying to maintain a standard programme across all campuses, while Ho (2010) strongly recommends adapting US content for the Chinese context in his study.

5.5 Summary

Findings from the three research questions of this study were presented in this chapter. The first two questions presented phenomenographical outcome spaces. For the first question (understandings of Master's level learning) three inclusive categories of description were presented (Figure 5.1). The key qualitative difference between these categories was noted between Category 1 which has a focus on academic skills and Categories 2 and 3 which have a focus on ideas. In addition, increasing independence in study and thought was noted as one of the themes of increasing complexity. The accounts also described how challenging this increasing independence was for students.

For the second research question on processes of learning in a networked learning environment three outcome spaces were presented, one each for interactions and connections with resources, lecturers and peers (Figures 5.2, 5.3 and 5.4). The structural and referential aspects of each space were analysed (Tables 5.2, 5.3, 5.4). A profound difference was seen in the referential aspects of each of these spaces which led to the least complex categories not being part of a hierarchy of inclusivity with the more complex categories. The key qualitative difference noted between categories in all three outcomes spaces for this question therefore was between the least complex categories which did not engage in the act of networked learning and the more complex categories which did engage. For those categories which did not engage in the act of networked learning there were similarities found across the outcome spaces, categories found as *unable* to engage or *unwilling* to engage. In all three spaces a category labelled 'unproductive' emerged resulting in confusion, which reveals an inability to engage fully in the act of networked learning with resources, peers and lecturers (Figures 5.2,

5.3 and 5.4). A second common category was ‘insignificant’ which was seen in the two human elements of the network, peers and lecturers, where interactions with peers and lecturers are seen as unimportant for learning and students preferring to learn on their own with resources (Figures 5.3 and 5.4). For these categories there was an unwillingness to engage in the act of networked learning with others. Once engagement occurs similarities can again be seen across the outcome spaces where categories are arranged in inclusive hierarchies of less complex to more complex levels of critical engagement with resources, peers and lecturers. Themes of increasing complexity also noted are an increasing independence in the use of resources, an expansion of focus in interactions with lecturers to foreground both self and lecturer, and an expansion of focus in interaction with peers to foreground both self and peers. A comment was made on what was not found in two outcome spaces. For interactions with lecturers, two-way critical dialogue was not described. For interactions with peers, while some was described, there was not strong evidence of high level of critical dialogue.

For the final research question on the influences of the transnational context three themes were presented. English as a second language and previous educational experience (if it was not in a Western system) was described as impacting processes of learning on the programmes. The tensions between global ideas and adapting them (or not) for the local context emerged as the final theme.

These findings will now be discussed in the next chapter and final conclusions from the study will be drawn.

Chapter 6: Discussion and Conclusions

6.1 Introduction

The aim of this study is to explore the qualitative differences in accounts of postgraduate students of their processes of learning in a transnational, networked learning environment. This chapter discusses the findings from the three research questions used and draws conclusions for theory, methodology, policy and practice. The chapter begins by discussing the empirical findings presented in the last chapter and, where appropriate, making links with the literature presented in Chapter 2 and other relevant literature. From this discussion, conclusions are drawn for the two theoretical frameworks used in this study, the approaches to learning (ATL) framework, and the networked learning (NL) framework, and an amended definition of NL is suggested. Next, there is a discussion of phenomenography, the main methodology used in this study, and conclusions are drawn based on the particular distinctions made when analysing and presenting the data for this study. It is suggested other phenomenographical studies examining the processes of learning may find it appropriate to consider differentiating between complexity and inclusivity. Following this, implications for educational policy and practice are outlined, in particular for institutions engaged in delivering transnational programmes, for those designing NL programmes and for lecturers involved in delivering such programmes. Areas for further research are then suggested and a final statement is made highlighting the contributions of this study.

6.2 Discussion

In the final section of the previous chapter a summary was presented of the findings for the three research questions in this study. The phenomenographical outcome space for understandings of Master's level learning demonstrated a key qualitative difference between a category of low complexity which has a focus on academic skills and those of higher complexity which focus on ideas. Increasing independence of thought and study and the challenge of engaging with Master's level learning was also noted. Three phenomenographical outcome spaces were presented for the processes of networked learning, one each for interactions with resources, lecturers and peers. The key qualitative difference between categories in these outcome spaces was found to be similar across all three spaces, between those categories which engaged in the act of networked learning and those which did not. Those which did not engage were categories at the lowest level of complexity in all spaces and were labelled as either 'unproductive' interactions (*unable* to engage) or 'insignificant' interactions (*unwilling* to engage). These categories were found to be profoundly different in their referential aspect and were not part of a hierarchy of inclusivity in any of their outcome spaces. Other findings noted across the three outcome spaces for this research question were increasing self-direction, an expanding sense of the role of others in the network, and unexpectedly low levels of critical dialogue with lecturers and peers. For the final research question three themes were presented for the described influences of the transnational context on the students' processes of learning: English as a second language (ESL); previous educational system if it has been a non-Western one; and the tensions between global ideas and adapting them (or not) for the local context. To discuss these findings two questions are explored in relation to each of the two theoretical frameworks adopted in this study. Firstly, which aspects of these findings

are explained by each framework? Secondly therefore, which aspects are not explained by these frameworks and how else might these findings be explained? From these discussions conclusions will be drawn about both frameworks.

6.2.1 Explanatory power of the theoretical frameworks

Starting with the ATL framework, it suggests conceptions of learning, perceptions of learning task and perceptions of the learning environment all influence which approach to learning an individual student adopts, which in turn is linked to the outcomes of learning (Figure 2.1). As was noted in the last chapter, examples of surface, deep and strategic approaches to learning were indeed found in the phenomenographic outcome spaces for the first two research questions. In the outcome space for understandings of Master's level learning Categories 2 and 3 focus on engaging with ideas (Figure 5.1) and reflect simpler and more complex understandings of learning which are analogous to surface and deeper conceptions of learning (Van Rossum & Schenk, 1984). For processes of learning in a NL environment, again within the more complex categories which engaged with the act of networked learning, surface and deeper approaches can be seen in the increasing complexity within the categories (Figures 5.2, 5.3 and 5.4) and strategic approaches are seen when individual goals or assessment is focused on. See Chapter 5, sections 5.2.4 and 5.3.5 for more detail here. A further aspect of the ATL framework seen in these findings is the idea that it is not developmental. In other words, students do not begin their education journey with surface approaches and build to deeper ones. Rather students are seen to adopt multiple approaches depending on the learning context. Although phenomenography looks at the collective rather than the individual, as was noted in the last Chapter a brief analysis of individual student

accounts found that indeed there is no match between complexity of category of description and stage of educational journey. A student in Year 1 may describe more complex understandings and interactions while a graduate may describe less complex ones, and indeed the same student may describe different types of interactions depending on the situation. So evidence of all three approaches to learning are seen here as is evidence of adopting different approaches in different situations.

Moving to the model of NL, it suggests that learners, tutors and resources are connected to each other in a network, facilitated by ICT, and that learning emerges from critical dialogues in the interactions and connections within this network (Figure 2.2). The findings for the second research question indicate that indeed connections and interactions are taking place across the network between individual students and resources, lecturers and their peers, and particularly in the more complex categories of description, some levels of critical dialogue are observed (Figures 5.2, 5.3, 5.4). What is also noted in the themes of increasing complexity in the three outcome spaces is an expanding sense of self, others and tutors (Tables 5.3, 5.4). This expanding sense of self and the understanding that students and lecturers can be perceived in more or less holistic ways reflects other recent phenomenographic NL research (Cutajar, 2014).

A further finding across all four outcome spaces is an increasing sense of self-direction in terms of both thought and study in the more complex categories. This is an expectation for Master's level learning as described in the European Framework of Qualifications (Table 1.1). However, the level of challenge described by students to achieve this independence and self-direction was not expected.

So while both the ATL and NL frameworks explain some of the ways learning is described in these accounts from an individual and more social perspective, there are several aspects which are not accounted for well within either lens and need further exploration. While both frameworks offer a view on the more complex categories of description in the outcome spaces, neither capture well the categories of lowest complexity. Specifically, these are the focus on academic skills within the outcome space for understandings of Master's level learning (Figure 5.1), and the non-inclusive categories within the outcome spaces for processes of networked learning, those where interactions with other parts of the network reveal students as *unable* or *unwilling* to engage in the act of networked learning (Figures 5.2, 5.3, 5.4). Also, for research question two there were lower than expected levels of critical dialogue with peers and lecturers. Finally, for research question one (understandings of Master's level learning) the challenges described in developing the skills and thinking required for Master's level learning was noted.

It is suggested here the reason these types of findings are not accommodated within the ATL or NL framework is that neither one accounts well for the multiple contexts within which these learning processes are taking place. Context can be theorised in different ways. One way to view context is from the social theory perspective of structure and agency. Ashwin (2008) discusses the overall lack of attention to agency and structure within 'close-up' research in teaching, learning and assessment in higher education and contends focus is needed "on both individual's intentions and on the ways in which these intentions are structured by institutions and wider social structures" to improve the explanatory power of much educational research (p. 152). His position sees the social world as dynamic and emergent so structure and agency are processes, in fact

they can be seen as the same process viewed under a different lens. Thus he uses the term 'structural-agentic processes', as in "structural-agentic descriptions of social processes attempt to give a sense of both the intentional projects of individual and collective agents, and the ways in which these projects are enabled or constrained" (Ashwin, 2009, p. 21). Another view of context is seen in complexity and dynamic systems theory, explored by Haggis in her longitudinal research following 12 students in higher education over 5 years (Haggis, 2007, 2008, 2011). In Haggis (2007) she explains that "in anything conceptualised as a complex, dynamic system, the interactions are *multiple*, and *multiply connected*, and it is the multiplicity of the interactions through *time* which produces effects" (p. 39, her emphases). Within this view, learning or outcomes are effects which emerge from a complex, adaptive system and therefore an acknowledgement of specific and localised context is of utmost importance. In a later article she explores further and suggests this notion of emergence is quite radical as it means reconceptualising structure. "From a complexity perspective, things 'emerge' at certain points in the history of a set of multiple interactions, rather than as the result of 'deep' generative causal structures" (Haggis, 2008, p. 174). In presenting the empirical findings from her study (2011) she identified three types of context which cross the multiple and simultaneously interacting systems and levels:

- The dynamic system which is the focus of the analysis (in her study this is each individual student who themselves was conceptualised as being a complex adaptive system);
- The group (s) or institution (s) within which the focus system is embedded;
- Larger group (s) or culture (s) which contain the previous two systems.

Each of these different views on context acknowledges the need to look more closely at the context of the individual student and what is at play for them, as well as the context of the broader institutional and societal settings of the programmes under study.

Both Ashwin and Haggis (and others, as seen in Chapter 2) have directly criticised the ATL framework for its lack of attention to the situatedness of the learning process and its associated lack of attention to structure and agency. Therefore, it is no surprise that in this study the same critique is being made. However, it is also suggested here the NL framework would benefit from more explicitly acknowledging the importance of context for explaining learning within networked learning environments. To reach that final conclusion the findings identified above as not well accounted for in either framework are discussed under four themes, and under each theme other ways of explaining the findings are explored. Individual context and the broader context (primarily the transnational setting) will be highlighted throughout as some of the possible ways of providing a deeper explanation of these findings. For the transnational context, the three transnational themes described in Chapter 5 will be referred to throughout this section: English as a second language (ESL); previous educational system if it has been a non-Western one; and the tensions between global ideas and adapting them (or not) for the local context.

6.2.2 The challenge of developing skills and thinking for Master's level

Although it was not directly the focus of this study, the challenge of reaching Master's level expectations emerged strongly in these accounts and was described as coming from building the required academic skills and developing the critical thinking and self-

direction needed to be successful on the programmes. The focus on academic skills was so strong it emerged as the category of lowest complexity in the outcome space for the first research question. This raises questions as to whether these challenges and this strong focus on academic skills are similar for other Masters students. Is it a common experience when moving from undergraduate to Master's level or is it a particularly strong feature within this transnational cohort? As was found for the third research question, ESL and previous educational experience are seen within these accounts as influencing the students' processes of learning. ESL certainly affects the ability to engage with the core academic skills of reading and writing and previous educational experience can affect readiness for creative thinking and independence of study. So it can be speculated that the transnational context does indeed make it more challenging for these students to achieve Master's level expectations of academic skills in reading, writing, critical thinking and self-direction. The transnational context can also be seen influencing interactions within the network as will be discussed below. As was noted in the last chapter though, some of this challenge in building the expected skills for Master's level also comes from crossing disciplines, from a medical/scientific background into the field of management so further research would be needed to more fully tease out the possible contributing factors.

6.2.3 Unable to engage in the act of networked learning

As noted in Chapter 5, in all three outcome spaces for the second research question a category labelled 'unproductive interactions' emerged resulting in confusion, which reveals an inability to engage fully in networked learning with resources, peers and lecturers (Figures 5.2, 5.3 and 5.4). While confusion may be an expected stage in

learning as students develop their understanding of subjects there are other factors that need to be considered, in particular the broader transnational context. It should be asked whether confusion is particularly present in these descriptions because this is a transnational programme. ESL emerged as a strong theme described in this study by the participants as influencing their processes of learning. Certainly struggling with English could lead to confusion, particularly in interactions such as reading resources or communicating with lecturers (listening, speaking, writing). In that direct aspect the transnational context can be seen as impacting these 'unproductive' interactions.

A less direct aspect to consider is that of 'culture shock'. Pyvis and Chapman (2005) in their case study of a Masters programme in Singapore delivered by an Australian university suggest students on transnational programmes, even though they are in their home country, can experience culture shock. They define this as situations which require role adjustment and new identities and where previous learning does not apply. In their study they propose it can result in feelings of helplessness and confusion for the offshore student. Confusion is certainly being described in this study as is the challenge of reaching Master's level expectations. Unlike the Singaporean case study, the students in this study are not all from a single population which is 'native' to the offshore country. They are a widely diverse international group as reflects the high levels of ex-patriate populations in the Gulf region (Table 3.2). This adds its own challenges. Bell, Smith, and Vrazalic (2008) studied intercultural group work in undergraduate transnational programmes in the UAE and highlighted complex issues which affect the extent to which they are successful, such as "minority/majority cultural groupings, language differences, critical discussion and stereotypical views of 'the other'" (p. 157). So it is reasonable to consider culture shock at play here, both between the offshore

student and the adjustments to being on a transnational programme as well as the adjustments to working with other students from different backgrounds. Here again both the context of the individual student and their own cultural background as well as the broader context of the transnational programme can be seen within these findings.

6.2.4 Unwilling to engage in the act of networked learning

As noted in Chapter 5, the second category which did not engage in the act of networked learning is seen in categories labelled 'insignificant interactions' and was seen in the two human elements of the network: peers and lecturers (Figures 5.3 and 5.4). In these accounts interactions with peers and lecturers are seen as unimportant for learning, students do not seek anything from others, preferring to learn on their own with resources. So while they engage in learning they are not willing to engage in *networked* learning. Again this can be explored by considering the two levels of context identified above, the individual student and their own goals and motivations and secondly the broader transnational context.

As was suggested in the last chapter, unwillingness to engage with others can perhaps be seen as an individual 'strategic approach' to learning reflecting a perception of engagement with others as not benefitting individual goals. For interactions with peers this resonates with the findings of Cutajar (2014) in her phenomenographical study of post-compulsory pre-university undergraduate students' experiences of networked learning where one category for the perception of peers in networked learning was 'inconsequential' (p. 111). A further possible contributing factor to seeing others as 'insignificant' is to suggest it is a feature of a programme where students are working

full-time and studying part-time. Other studies have found part-time transnational students trading off their aspirations for deeper approaches and collaborative work with a more individualistic, pragmatic approach (Chapman & Pyvis, 2006). Indeed, as seen in the quotes from participants in the last chapter, being busy with work and having limited time was cited as a factor when choosing not to engage with others. This links to other NL research which cites time and work-life balance as impacting the level of individual willingness to work with others (Ferreday & Hodgson, 2008; McConnell, 2005).

This category of 'insignificant' also raise questions as to how the solitary or independent learner fits into the networked learning model. As stated above these students are engaging in learning, they are merely choosing not to engage in 'networked learning' with others. While strategic choices over time and goals may influence willingness to engage in critical dialogue with others there may also be a more fundamental preference for working alone. Networked learning and other social models of learning promote community and dialogue for learning, with varying positions as to the level of collaboration needed (Ryberg et al., 2012; Zenios, 2011). As was outlined in Chapter 2 there has been some discussion within the NL literature of the balance between the individual and the community with some questioning the privileging of collaboration and close ties (Hodgson & Reynolds, 2005; Jones et al., 2008). Certainly this study reveals individuals who consciously choose not to engage closely with others. Rather than seeing this pejoratively as 'social loafing' which is seen in some research into online learning (e.g. Shiue, Chiu, & Chang, 2010), a more balanced approach would be to study this further and to consider how valuing both weak and strong ties within a network could be more explicitly designed into educational programmes.

In addition to the individual student's goals, motivations and preferences for engaging in networked learning, particularly with other students, it is suggested that the transnational context influences student's willingness to engage with lecturers. That outcome space has a category which sees lecturers as insignificant for learning (Figure 5.3). In this category attendance at class is described as not necessary to achieve success and students rely on resources instead. In a previous study of student satisfaction with international branch campuses in the UAE, students were very satisfied overall but rated their programmes lower on relevance of course content to the UAE and on intellectual stimulation from the programme (Wilkins et al., 2012). The authors discussed the tension between students purposefully wanting an 'international' curriculum and access to global ideas and at the same time wanting application to the local context. And indeed in this study a transnational theme emerged with the same contradiction (global versus local). A question raised in this study therefore is, if lecturers do not adapt their content for local context, do they reduce the intellectual engagement of students and contribute to interactions with them being seen as insignificant for learning? Add this to ESL being seen earlier as contributing to students being unable to interact with lecturers and the transnational context is again highly likely at play in these findings.

6.2.5 Critical dialogue within the network

Although the outcome space for understandings of Master's level learning indicated in its most complex and inclusive category an understanding of critical thinking and even theory building (Figure 5.1), the accounts of processes of learning did not indicate high levels of critical dialogue with lecturers or peers. The networked learning model relies on critical dialogues and inquires for knowledge construction. While interactions with

resources are recognised as part of that process, the human-human interactions are of particular interest (Goodyear, Banks, Hodgson, & McConnell, 2004; Jones & Dirckinck-Holmfeld, 2009) so the described low levels of critical dialogue with others in the network should be explored.

Lecturers

As noted in the analysis of accounts of interactions with lecturers (Table 5.3) high levels of critical dialogue were not found. The most complex category still described the lecturer in a one-directional (lecturer to student) developmental role. Dialogue, a two-way process, was not described here. There are many possible explanations for this. One is that lecturers themselves may not see dialogue with students as part of their role other than in a teacher-centric way, where they lead the student through the disciplinary learning. Indeed previous NL literature has explored the changed roles for lecturers and how complex this can be (Boon & Sinclair, 2012; de Laat et al., 2007b). Another explanation is the programme design perhaps does not create spaces for high levels of critical dialogue with lecturers, and indeed previous NL studies point to design as a way to improve dialogue (Sorensen & Kjærgaard, 2016). The particular design of this programme to teach an entire subject in one four-day block of teaching might have an impact here. Both of these explanations focus on the interactions between lecturer and student only and ignore wider processes at play such as the power differential between both parties and the transnational context.

Perhaps it is not reasonable to expect students to engage in critical dialogue with academics when they are novices in the field, but when lecturers have power over

assessment will students ever truly engage in critical dialogue with them? In addition, this finding could be influenced by the transnational context. Perhaps this particular cohort of students has a wider sense of 'power-distance' because of their cultural background? Other studies have noted the deference paid to lecturers in some cultures such as India or Malaysia (Ahmad, 2015; Wilkins et al., 2012). Certainly as was noted in the findings here, in some accounts interactions were labelled as 'distant' where students seemed reluctant to approach lecturers and would prefer to go to peers first if they had a question. ESL could also play a part here with less fluent students reluctant to talk to or write to lecturers. Previous educational experience could also influence student's readiness to engage in critical dialogue with others.

Peers

In interactions with peers (Table 5.4) it was noted while there is evidence of dialogue and inquiries between peers there was not strong evidence of high levels of critical dialogue. The most complex category of description in that outcome space saw processes of learning with peers as 'teaching and learning' interactions. The highest level of critical engagement was described in these interactions and, particularly in facilitated in-class group work, there is evidence of some knowledge construction between peers through engagement with core concepts and trying to analyse from different perspectives. However, collaborative critical knowledge construction as discussed in the literature (Blake & Scanlon, 2012; Zenios, 2011) is not strongly evident here. The team assignments which are often intended as a vehicle to facilitate collaborative knowledge construction also do not fulfil this task. In these accounts team assignments are mostly in Category 2 (unsatisfactory interactions). In fact, the learning

students describe from team assignments are not focused on critical engagement with course content, rather the learning described is mostly about the processes of team working (e.g. I learned how to work with different people, I learned we all work differently, I learned to be more assertive with my colleagues).

There are several aspects to highlight here. First is an issue mentioned in the last section discussing the impact of the transnational context on critical dialogue. Based on previous educational experience the readiness of students to engage in critical dialogue with peers might be lower than those more familiar with Western models of education. Secondly, the role of the lecturer seems important for facilitating critical dialogue. In these accounts when the lecturer was facilitating group work with that goal, it seems more likely to occur. When students were self-facilitating in teams, focused on an assessment task, it does not seem to readily occur. This could be seen as a design issue in terms of how and when critical dialogue and collaborative knowledge construction are designed into the programme. It could also again be related to how lecturers perceive their role and whether they view facilitating critical dialogue amongst students as part of that. It could also be seen as a student issue in terms of their ability and readiness to participate in collaborative group work which could be due to a multiplicity of factors (see previous discussion on 'not engaging' in Section 6.2.4). Indeed there has been research into online collaborative group work that shows both the importance of the role of the tutor (McConnell, 2006; Oliveira, Tinoca, & Pereira, 2011) as well as the need for students to be prepared for working together (de Laat & Lally, 2004; Nam & Zellner, 2011).

Positioning this as a deficit in programme design, lecturer awareness and skills, or student skills has an unquestioning stance about the positive benefits of peer collaborative work and its importance for learning and is perhaps not taking into account the inherent difficulties of that process. As discussed in the literature review chapter, some writers caution against the 'tyranny of participation and collaboration' in the NL model (Ferreday & Hodgson, 2008) while others highlight the challenges in the process (Perriton & Reynolds, 2014). Intercultural groups, which were mentioned earlier as a feature of programmes in the Gulf region due to the high levels of ex-patriate populations, add their own challenges (Bell et al., 2008). So even with the best of intentions and supports the complex collaborative process may not yield the hoped for levels of critical dialogue.

6.2.6 Summary

While the two theoretical frameworks used in this study were able to explain some of the more complex categories of description found in these outcome spaces, there were a series of findings which were not easily accounted for and it is suggested this is due to the lack of attention paid to context in both frameworks. Context can be conceptualised in different ways and structure and agency from social theory (Ashwin, 2009) and context from complexity theory (Haggis, 2011) were presented as examples. The unexpected findings were discussed under four themes and alternative explanations considered from the perspectives of both the individual's context and the broader context. If context is taken into consideration, there is a richer explanation for these findings. The transnational context (which can be seen as part of both the individual's context and the broader context) was suggested as an explanation for these accounts of experiences of learning in a multitude of ways including: the challenges of developing

the academic skills and thinking required for Master's level learning, particularly due to ESL and previous educational experience; the inability to engage in the act of networked learning as ESL may cause confusion in interactions with resources and lecturers; the possible culture shock of being on a transnational programme and working in multicultural groups; unwillingness to engage with lecturers if content is not seen as stimulating as it has not been adapted for the local context; lower levels of critical dialogue with lecturers and peers due to previous educational experience or having a higher sense of power-distance with lecturers. The individual student's goals and preferences are also suggested as an explanation for their unwillingness to engage with others in networked learning in these accounts, as does the fact that students are working full-time and studying part-time. How lecturers perceive their role may influence critical dialogue within the network in terms of whether they see it as part of their role to build questioning dialogues between themselves and students or to facilitate critical dialogue amongst students. Programme design was also considered as a factor in the low levels of critical dialogue seen.

6.3 Conclusions for theoretical frameworks

6.3.1 The approaches to learning framework

Over a decade ago Haggis (2003), in critiquing the deep/surface model, stated it was "fairly clear about its desired goals and ways of working [but] is much less clear about the nature of the 'failure' or 'low-quality learning' end of the spectrum" (p. 99). This study certainly highlights this deficit. While the accounts here described instances of all three approaches adopted in different situations, the full complexity of the student experiences are not captured in any way, particularly those categories of description at the lowest level of complexity in the outcome spaces. The extremely limited ATL view

of learning focusing on the individual learner in isolation of others and the broader context has little explanatory power for this study. And worryingly, the literature also questions the framework's empirical validity (Campbell & Cabrera, 2014; Ertl et al., 2008; Tormey, 2014). The metaphor of deep and surface is appealing and it has a use in conceptualising the levels of thinking we hope to develop in our students, particularly at the postgraduate level. But the simplistic cause/effect model that is ATL is a disservice to the complexity of the processes of learning for students in higher education and the influence of multiple levels of context on these processes, from individual, to group, to programme and institution, to wider societal structures. The lack of attention to structure and agency has been a critique of the framework for many years (Ashwin, 2008; Boshier & Huang, 2008; Malcolm & Zukas, 2001) and the evidence from this study supports that critique. However, suggesting the addition of another 'input' to this model is not considered a solution. Overall the ATL basic conceptualisation of learning as an inputs/outcomes model is extremely problematic, ignoring other developments in theories of learning, and as stated above is also not proving empirically valid. Its continuing dominance in both education research and academic development is a strong concern. The majority of ATL research is now quantitative with limited questioning of the underlying framework. This small scale qualitative study certainly highlights the frameworks' limitations and more qualitative and questioning research is needed to build a stronger case against its dominance in higher education.

6.3.2 The model of networked learning

The NL framework is not a simplistic cause/effect conceptualisation of individual learning. Its social view of learning allows for connections and interactions with others

and with resources, and considers critical dialogue within these interactions as affording construction of knowledge. As a theoretical lens for this study it provided a deeper explanation of what was described in these accounts and there is evidence of learning taking place in this fashion. This study also echoes findings and discussions in other NL research regarding the role of the lecturer, designing for critical dialogue, and the balance between the individual learner and the community. However, as with the ATL model, the NL framework does not fully capture the complexity of the described experiences. Once again the categories of lowest levels of complexity, specifically those which describe not engaging with the act of networked learning, have aspects which are not so easily explained. While some of the reasons for non-engagement are possible to explain through familiar NL themes of lecturer role, programme design and student engagement, without considering the transnational context, findings such as inability to engage due to confusion or the challenge of developing the required skills for Master's level learning are more difficult to address. As was demonstrated in the discussion above when context is taken more directly into consideration a deeper explanation of these findings is possible.

The often cited definition of networked learning is that provided by Goodyear et al. (2004) where it is seen as:

> learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners; between learners and tutors; between a learning community and its learning resources. (p. 1)

Jones (2015) claims this core definition, which was established at one of the early NL conferences, "has provided a degree of stability for researchers, allowing for the

development of a coherent body of work with a common focus" (p. 5). While this is undoubtedly true it is worth considering amending this definition to allow more fully for the multiple levels of context at play which impact the processes of learning within this network of connections. Dohn (2014a) suggested an amendment to the NL definition coming from a social practice perspective. She proposed adding one more set of connections "between the diverse contexts in which the learners participate" (p. 30). Her concern is that activities in NL are seen as stand-alone and do not take account of the 'primary contexts' of individuals. As with this study she is arguing for a consideration of context, although her perspective focuses on a particular conceptualisation of the individuals' contexts rather than acknowledging the broader contexts within which such activities are situated. It is proposed here that multiple levels of context are included in the NL definition acknowledging their fundamental importance in learning, from the individual up to broader societal levels, but that this inclusion allows individual researchers to decide in which way they want to define context depending on the focus of their study. The suggested amended definition therefore is one which defines the learning in networked learning as:

> learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners; between learners and tutors; between a learning community and its learning resources; *and is situated in multiple contexts*.

This amendment directly acknowledges the situatedness of any networked learning activity and therefore context must be considered. Using 'multiple contexts' acknowledges the macro, meso and micro levels at which context can be conceptualised and the use of quite generic language allows researchers to define these in whichever

way they choose. For example, with a definition such as this, researchers could define context using structure and agency (after Ashwin, 2009) or be informed by complexity theory (after Haggis, 2011) or use social practice theory (after Dohn, 2014). This inclusion of learning situated in multiple contexts could lead to a more powerful NL framework and richer explanations of networked learning.

A final comment about the NL model is that, as with the ATL model, it is in danger of describing the ideal learner and inadvertently leaving in the shadows that which does not meet this ideal. The ideal NL learner is ready, willing and able to engage in co-operative work with others and if not they are ignored[8], are problematic or have to be 'designed' in to ensure they participate in the desired way. At the heart of this is the tension which has been discussed in the literature review (Chapter 2) between the historical privileging of community, collaboration and strong ties in NL over the individual and connections with weaker ties. Much NL research seems focused on the former and it would be welcomed if there was, as in a study such as this, a deeper exploration of weaker ties and more specific inclusion of connections and interactions with resources rather than human-human interactions only.

[8] An example of ignoring that which is not ideal can be seen in Veldhuis-Diermanse et al. (2006) . A coding scheme is proposed to code the quality of knowledge construction in NL. To do this they use a SOLO taxonomy of understanding which has five levels. However, they only transfer over four levels to their coding scheme leaving out the first level (prestructural, no understanding). No explanation is given for this but not providing a code for 'no understanding' in NL assumes understanding has been achieved and ignores that which does not meet this ideal.

6.4 Reflections on phenomenography

Phenomenography as a methodology proved a rich approach to answering the research questions in this study and provided an interesting collective picture of postgraduate transnational students' accounts of their experiences, resulting in both expected and unexpected findings. As with all phenomenographical research, this collective picture is acknowledged as a partial one of the phenomenon under study and represents one researcher's construction of the students' constructions of their experiences of learning (see Chapter 3). Within these limitations the findings and analysis provide a useful and unique contribution to our understandings of processes of learning in networked learning environments and experiences of transnational students. As an approach this methodology allows for a broad view of the phenomenon and its focus on difference allowed for the emergence in this study of often ignored challenges in learning, which is very useful. Its focus on the collective however removes the individual voice and for some of the more unexpected findings further study, using a different type of analysis focused on the individual, would be helpful.

Within the methodology itself this study developed an approach to presenting phenomenographical findings not seen in other work, in particular in its separation of the hierarchy of complexity and hierarchy of inclusivity within the outcome space. Reaching the point of developing a unique approach was the result of having concerns with structuring outcome spaces before analysis began (Chapter 3), reviewing other approaches in the literature (Chapter 4), and then moving between the data in this study and the literature in an iterative way to formulate an approach which made sense for these research questions (Chapters 4, 5).

In Chapter 3 (Section 3.2.2), before data analysis began, attention was drawn to the concept of 'value judgements' being made in determining which were the most and least complete categories of description in outcome spaces and it was suggested at that stage that value judgements for higher and lower categories could be argued for in studies of the 'what' of learning (content) but would be questionable for studies of the 'how' of learning (processes). In Chapter 4, a review of 15 phenomenographical studies was conducted to compare the ways they presented their findings, and in particular how they structured their outcome spaces. The review revealed a multiplicity of ways to present phenomenographical findings, including many studies that do not address the structure of the outcome space at all. For those that do there are wide differences in the use of terminology, in the ways to analyse relationships between the categories, and in the way to present the final outcome space. Comparing across such different studies is problematic with the result that as an approach phenomenography can seem opaque and confusing. Questions are also raised about the breadth of difference in approach seen and the minimum expectations for depth of analysis in phenomenographical studies. For this particular study the implication drawn from the review was there is no standard approach which 'must' be used but any approach must be in-depth, with clarity for how particular phenomenographical terms are being used. The resultant approach developed for this study differentiates between outcome spaces focusing on the 'what' and 'how' of learning with the suggestion that fully inclusive outcome spaces are to be expected for the 'what' of learning (the first research question) but non-inclusive outcome spaces may be appropriate for the 'how' of learning (the second research question). See Chapter 5, Section 5.3.1 for the full rationale. One of the critiques of phenomenography is its reproduction of what is expected (Webb, 1997b) and therefore its ignoring of that

which does not neatly fit. By separating out inclusivity where appropriate, some of the shadows may be thrown into the light within this methodology.

6.5 Implications for educational policy and practice

The findings of this study have implications at institutional, programme and lecturer level for transnational programmes as well as networked learning and Masters programmes. They are outlined here under two sub-headings but they also overlap.

6.5.1 Transnational programmes

While a stated goal of many transnational programmes is that students can achieve the same academic qualification with the same level of quality assurance of teaching, learning and assessment onshore and offshore, the reality seems to be the offshore student experience has particular features. As discussed in-depth here English as a second language, previous educational experience and the lack of locally contextualised content impacts students' willingness and ability to engage more fully in the act of networked learning and adds a level of challenge to their development of the skills and thinking expected at Master's level. An immediate obvious response is for institutions to consider adapting the policy of support for such students and to include more contextualised content, and indeed these should be considered. However, a purely deficit view would limit the possibilities inherent in this new and interesting model of education. A wider approach would be to consider how a transnational programme might be shaped which more fully embraces the specifics of the offshore context and the richness of the intercultural mix of students in the classroom. This would be beyond skills support and college created 'localised' content. Practical examples include: more

direct acknowledgment in the teaching environment of the context by using student groups to generate local case studies; seeing the intercultural mix in the classroom as a resource and creating spaces for students to present more of their own experiences to the group; or adjusting assessment to directly look for an exploration of the challenges of adapting global ideas to local contexts.

For lecturers, it is suggested an awareness of the influence of the transnational context is needed. From this study the findings specifically suggest this means being more aware of the challenges this brings for students. Students may be experiencing 'culture shock' being on a transnational programme and working in such multicultural groups. Also to intellectually engage transnational students more reference to the local context may be needed. These issues are not simple to address. Lecturers teaching offshore require professional development to build their capacity to teach, assess and facilitate learning in these environments.

6.5.2 Networked learning and Masters programmes

This study reveals accounts of engaging in networked learning and evidence of collaborative knowledge construction, but also accounts of those unable or unwilling to do so, as well as accounts of lower levels of critical dialogue than expected. While the transnational context is certainly influencing this there are also some factors to be considered which relate more directly to how critical dialogue within networked learning is being addressed (or not) on these programmes.

As mentioned in the discussion some of the reasons for lower levels of critical dialogue are likely the student's previous educational experience, the lecturer's perception of their role in facilitating this both between themselves and students and between groups of students, and the programme design which could more consciously create spaces for building critical dialogue. Obvious implications for practice here are again to consider lecturer's professional development and to improve programme design. A broader issue to also consider is whether there is an expectation that students entering Masters programmes should already be at a particular academic level and therefore paying such close attention to supporting their development of critical dialogue might be considered 'spoon feeding'. One solution using this logic is to examine entry requirements to the programme. Another however is to have a deeper appreciation for the realities of the student experience. Haggis (2006, 2011) claims students in the Humanities and Social Sciences are being assessed on their ability to make arguments on the basis of evidence but are never actually taught how to do this. She argues not for generic study skills support but for discipline-specific and subject-specific teaching:

> not 'learning how to learn' but learning how to *do* the learning in *that* subject—how to think, question, search for evidence, accept evidence, and put evidence together to make an argument that is acceptable in that discipline… The kind of exploration which is being argued for here is also not 'spoon feeding'. Exploration of high-level processes cannot, by definition, be spoon feeding; only content information can be delivered by the spoonful. Process cannot be 'delivered', it can only be described, discussed, compared, modelled and practised. (Haggis, 2006, p. 532 , original emphases)

For networked learning programmes, for Masters programmes and for transnational programmes, developing how students learn how to *do* the learning expected for *that* subject should be an area of attention. Again this has implications for programme design (where in the programme and in what ways might you directly try to build these

capacities) as well as lecturer professional development (how to model the expected type of learning for the discipline or subject, how to coach and develop students for this).

6.6 Areas for further research

Several areas for further research have been suggested throughout this chapter. In terms of the theoretical frameworks used it has been suggested the ATL framework would benefit from more qualitative rather than quantitative research although this would mainly be in an effort to build stronger evidence of its limitations to contest its worrying dominance in educational research and academic development. The NL framework would benefit from more research which focuses on weak ties in the network as well the interactions with resources to counterbalance the wide prevalence of collaborative processes and human-human interactions in current NL empirical work. In terms of methodology, the use of phenomenography in this study meant a focus on the collective. Further research on the individual transnational postgraduate student experience would be welcome particularly in the categories of description which were not seen to engage with the act of networked learning. Understanding more about the individual experiences here using a methodology which takes fuller account of agency and structure would be helpful.

In terms of the specific findings themselves, the challenge of crossing disciplines from clinical and scientific backgrounds into management was highlighted and is worthy of further study. A comparison with students based in Ireland who are more familiar with this approach to education and for whom English a first language would help tease out

to what extent these accounts reflect the transnational context or if they are common for other Masters students, onshore as well as offshore. Finally, as the lecturer role has been highlighted here as so important for the experiences of processes of networked learning a comparison with their accounts would also be welcome.

6.7 Contributions of this research

In conducting this small scale qualitative study unique and valuable contributions are made to theory, methodology, policy and practice. These add to our understanding of the transnational student experience, the part-time postgraduate student experience, and the networked learning student experience and also contribute to ongoing debates about the nature of networked learning and conducting phenomenographical research. Specifically these contributions are: providing evidence of the impact of the transnational context on students' accounts of their processes of learning and therefore the need for institutions, programme designers and educators to directly take account of this in their policies and practices; highlighting the lack of attention to context in the definition of networked learning and suggesting an amended definition which allows for learning taking place situated in multiple contexts which could lead to more powerful explanations of findings in networked learning research; and making a distinction within phenomenographical outcome spaces between a hierarchy of complexity and a hierarchy of inclusivity which has been argued as appropriate when studying processes of learning.

6.8 Final reflections

By exploring processes of networked learning in a transnational setting this study has highlighted the limits of theoretical frameworks when context is not directly acknowledged. The findings raise strong concerns about the dominance in the educational and academic development literature of the approaches to learning framework as the primary way to frame processes of student learning. The over-use of this limited framework is a disservice to the complexity of students' experiences and to the ability of educators to appreciate these complexities. The networked learning model, while providing a richer view of learning, would also benefit from more direct acknowledgment of both the individual's and the wider context. Rather than seeking one 'grand theory' for learning in higher education, we need to build an appreciation of the situatedness of learning and the multiple contexts within which it takes place. This study began by noting that transnational programmes are marketed as offering the same degree at the same quality standards as that delivered onshore and often the specific context or place of learning is not considered. The findings here challenge notions of 'context-free' programmes and learning. Rather, the particular features of the transnational student experience need to be acknowledged in policy, programme design, teaching and assessment. Perhaps in doing so, as one of the participants in this study has suggested, the students "will gain more from the course. And will suffer less. Suffer less and gain more" (Nahla, p. 10).

References

Ahmad, S. Z. (2015). Evaluating student satisfaction of quality at international branch campuses. *Assessment & Evaluation in Higher Education, 40*(4), 488-507.

Åkerlind, G. S. (2005a). Learning about phenomenography: Intervewing, data analysis and the qualitative research paradigm. In J. Bowden & P. Green (Eds.), *Doing Developmental Phenomenography* (pp. 63-73). Melbourne: RMIT University Press.

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

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

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

Amundsen, C., & Wilson, M. (2012). Are we asking the right questions?: A conceptual review of the educational development literature in higher education. *Review of Educational Research, 82*(1), 90-126.

Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education, 5*(2), 131-154.

Ashwin, P. (2006). Variation in academics' accounts of tutorials. *Studies in Higher Education, 31*(6), 651-665.

Ashwin, P. (2008). Accounting for structure and agency in 'close-up' research on teaching, learning and assessment in higher education. *International Journal of Educational Research, 47*(3), 151-158.

Ashwin, P. (2009). *Analysing teaching-learning interactions in higher education: Accounting for structure and agency*. London: Continuum International Publishing Group.

Ashwin, P. (2012). *Analysing teaching-learning interactions in higher education : Accounting for structure and agency* (2nd ed.). London: Continuum International Publishing Group.

Ashwin, P., Abbas, A., & McLean, M. (2014). How do students' accounts of sociology change over the course of their undergraduate degrees? *Higher Education, 67*(2), 219-234.

Ashworth, P., & 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), 295-308.

Baughan, P. (2013). The missing meso: Variation in staff experiences of an academic practice initiative and lessons for educational change. *International Journal for Educational Integrity, 9*(1), 89-100.

Bell, M., Smith, L., & Vrazalic, L. (2008). International outcomes through groupwork in transnational higher education. In M. Wallace & L. Dunn (Eds.), *Teaching in transnational higher education: Enhancing learning for offshore international students*. Abingdon, Oxon: Taylor & Francis.

Biggs, J. (1987). *Student approaches to learning and studying*. Sydney: Australian Council for Educational Research.

Biggs, J. (1999). *Teaching for quality learning at university: What the student does*. Berkshire: Society for Research into Higher Education & Open University Press.

Blake, C., & Scanlon, E. (2012). Analysing collaborative processes and interaction patterns in online discussions. In V. Hodgson, C. Jones, M. de Laat, D. McConnell, T. Ryberg & P. Sloep (Eds.), *Proceedings of the 8th International Conference on Networked Learning* (pp. 10-17).

Bliuc, A.-M., Ellis, R., Goodyear, P., & Piggott, L. (2011). A blended learning approach to teaching foreign policy: Student experiences of learning through face-to-face and online discussion and their relationship to academic performance. *Computers & Education, 56*(3), 856-864.

Bodycott, P., & Walker, A. (2000). Teaching abroad: Lessons learned about inter-cultural understanding for teachers in higher education. *Teaching in Higher Education, 5*(1), 79-94.

Bologna Working Group On Qualifications Frameworks. (2005). *A framework for qualifications of the European Higher Education Area*. Denmark: Ministry of Science, Technology and Innovation.

Boon, S., & Sinclair, C. (2012). Life behind the screen: Taking the academic online. In L. Dirckinck-Holmfeld, V. E. Hodgson & D. McConnell (Eds.), *Exploring the theory, pedagogy and practice of networked learning* (pp. 273-287). New York, NY: Springer.

Boshier, R., & Huang, Y. (2008). In the house of Scholarship of Teaching and Learning (SoTL), teaching lives upstairs and learning in the basement. *Teaching in Higher Education, 13*(6), 645-656.

Bowden, J. (2000). The nature of phenomenographic research. In J. Bowden & E. Walsh (Eds.), *Phenomenography* (pp. 1-18). Melbourne: RMIT University Press.

Bowden, J. (2005). Reflections on the phenomenographic team research process. In J. Bowden & P. Green (Eds.), *Doing developmental phenomenography* (pp. 11-31). Melbourne: RMIT University Press.

Bowden, J., & Green, P. (Eds.). (2005). *Doing developmental phenomenography*. Melbourne: RMIT University Press.

Bowden, J., Green, P., Barnacle, R., Cherry, N., & Usher, R. (2005). Academic's ways of understanding success in research activities. In J. Bowden & P. Green (Eds.), *Doing Developmental Phenomenography* (pp. 103-127). Melbourne: RMIT University Press.

Bradley, S. A., & McConnell, D. (2008). *Virtual groups in learning environments: Collaboration, cooperation or (self) centred individualism?* Paper presented at the 6th International Conference on Networked Learning, Greece.

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Bruce, C., & Stoodley, I. (2013). Experiencing higher degree research supervision as teaching. *Studies in Higher Education, 38*(2), 226-241.

Burnapp, D., & Zhao, W. (2009). Voices from the chat rooms: Research into the experiences of Chinese students participating in transnational education programmes as reported on internet social networks. *Enhancing the Learner Experience in Higher Education, 1*(1), 30.

Campbell, C., & Cabrera, A. (2014). Making the mark: Are grades and deep learning related? *Journal of the Association for Institutional Research, 55*(5), 494-507.

Case, J. (2007). Alienation and engagement: Exploring students' experiences of studying engineering. *Teaching in Higher Education, 12*(1), 119-133.

Case, J. (2008). Alienation and engagement: Development of an alternative theoretical framework for understanding student learning. *Higher Education, 55*(3), 321-332.

Case, J. (2014). *Researching student learning in higher education: A social realist approach*. Abingdon, Oxon.: Routledge.

Case, J. (2015). Emergent interactions: Rethinking the relationship between teaching and learning. *Teaching in Higher Education, 20*(6), 625-635.

Case, J., & Gunstone, R. (2002). Metacognitive development as a shift in approach to learning: An in-depth study. *Studies in Higher Education, 27*(4), 459-470.

Case, J., & Gunstone, R. (2003). Going deeper than deep and surface approaches: A study of students' perceptions of time. *Teaching in Higher Education, 8*(1), 55-69.

Case, J., & Gunstone, R. (2006). Metacognitive development: A view beyond cognition. *Research in Science Education, 36*(1-2), 51-67.

Case, J., & Marshall, D. (2004). Between deep and surface: Procedural approaches to learning in engineering education contexts. *Studies in Higher Education, 29*(5), 605-615.

Case, J., & Marshall, D. (2008). The "no problem" discourse model: Exploring an alternative way of researching student learning. *International Journal of Educational Research, 47*(3), 200-207.

Chapman, A., & Pyvis, D. (2005). Identity and social practice in higher education: Student experiences of postgraduate courses delivered "offshore" in Singapore and Hong Kong by an Australian university. *International Journal of Educational Development, 25*(1), 39-52.

Chapman, A., & Pyvis, D. (2006). Dilemmas in the formation of student identity in offshore higher education: A case study in Hong Kong. *Educational Review, 58*(3), 291-302.

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

Creswell, J. W. (2013). *Qualitative inquiry & research design : Choosing among five approaches* (3rd ed.): London : Sage Publications.

Creswell, J. W. (2014). *Educational research : Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.): Upper Saddle River, N.J. : Prentice Hall.

Cutajar, M. (2014). *Qualitative differences in post-compulsory pre-university Maltese students' accounts of their networked learning experiences.* (PhD), Lancaster University, UK. Retrieved from http://eprints.lancs.ac.uk/72904/

Dahlgren, L. (1984). Learning conceptions and outcomes. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 23-38). Edinburgh: Scottish Academic Press.

de Laat, M., & Lally, V. (2004). It's not so easy: Researching the complexity of emergent participant roles and awareness in asynchronous networked learning discussions. *Journal of Computer Assisted Learning, 20*(3), 165-171.

de Laat, M., Lally, V., Lipponen, L., & Simons, R. (2007a). Investigating patterns of interaction in networked learning and computer-supported collaborative learning: A role for social network analysis. *International Journal of Computer-Supported Collaborative Learning, 2*(1), 87-103.

de Laat, M., Lally, V., Lipponen, L., & Simons, R. (2007b). Online teaching in networked learning communities: A multi-method approach to studying the role of the teacher. *Instructional Science, 35*(3), 257-286.

de Laat, M., Lally, V., Simons, R., & Wenger, E. (2006). A selective analysis of empirical findings in networked learning research in higher education: Questing for coherence. *Educational Research Review, 1*(2), 99-111.

Dohn, N. (2014a). Implications for networked learning of the 'practice' side of social practice theories: A tacit-knowledge perspective. In V. Hodgson, M. De Laat, D. McConnell & T. Ryberg (Eds.), *The design, experience and practice of networked learning* (pp. 29-49). Heidelberg: Springer.

Dohn, N. (2014b). A practice-grounded approach to 'engagement' and 'motivation' in networked learning. In S. Bayne, C. Jones, M. de Laat, T. Ryberg & C. Sinclair (Eds.), *Proceedings of the 9th International Conference on Networked Learning* (pp. 103-110).

Ekeblad, E. (1997). On the surface of phenomenography: A response to Graham Webb. *The International Journal of Higher Education and Educational Planning, 33*(2), 219-224.

Entwistle, N. (1984). Contrasting perspectives on learning. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 3-22). Edinburgh: Scottish Academic Press.

Entwistle, N. (1997). Reconstituting approaches to learning: A response to Webb. *Higher Education, 33*(2), 213-218.

Entwistle, N., & Entwistle, A. (1984). Revision and the experience of understanding. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 145-155). Edinburgh: Scottish Academic Press.

Entwistle, N., & Ramsden, P. (1982). *Understanding student learning*. London: Croom Helm.

Ertl, H., Hayward, G., Wright, S., Edwards, A., Lunt, I., Mills, D., & Yu, K. (2008). The student learning experience in higher education: Literature review report for the Higher Education Academy. United Kingdom: The Higher Education Academy.

Fang, W., & Wang, S. (2014). Chinese students' choice of transnational higher education in a globalized higher education market. *Journal of Studies in International Education, 18*(5), 475-494.

Fenwick, T., & Edwards, R. (2011). Introduction: Reclaiming and renewing actor network theory for educational research. *Educational Philosophy and Theory, 43*, 1-14.

Ferreday, D., & Hodgson, V. (2008). *The tyranny of participation and collaboration in networked learning.* Paper presented at the 6th International Conference on Networked Learning.

Gibbs, G. (1992). *Improving the quality of student learning*. Bristol: Technical & Educational Services.

González, C. (2011). Extending research on 'conceptions of teaching': Commonalities and differences in recent investigations. *Teaching in Higher Education, 16*(1), 65-80.

Goodyear, P., Banks, S., Hodgson, V., & McConnell, D. (2004). Research on networked learning: An overview. In P. Goodyear, S. Banks, V. Hodgson & D. McConnell (Eds.),

Advances in research on networked learning (pp. 1-10). Boston, MA: Kluwer Academic.

Goodyear, P., & Zenios, M. (2007). Discussion, collaborative knowledge work and epistemic fluency. *British Journal of Educational Studies, 55*(4), 351-368.

Gurwitsch, A. (1964). *The field of consciousness*: Pittsburgh, PA : Duquesne University Press.

Haggis, T. (2003). Constructing images of ourselves? A critical investigation into "approaches to learning" research in higher education. *British Educational Research Journal, 29*(1), 89-104.

Haggis, T. (2004a). Constructions of learning in higher education: Metaphor, epistemology, and complexity. In J. Satterthwaite & E. Atkinson (Eds.), *The disciplining of education: New languages of power and resistance* (pp. 181-197). Stoke on Trent: Trentham Books.

Haggis, T. (2004b). Meaning, identity and "motivation": Expanding what matters in understanding learning in higher education? *Studies in Higher Education, 29*(3), 335-352.

Haggis, T. (2006). Pedagogies for diversity: Retaining critical challenge amidst fears of 'dumbing down'. *Studies in Higher Education, 31*(5), 521-535.

Haggis, T. (2007). Conceptualising the case in adult and higher education research: A dynamic systems view. In J. Bogg & R. Geyer (Eds.), *Complexity, science and society* (pp. 38-43). Oxford: Radcliffe Publishing.

Haggis, T. (2008). "Knowledge must be contextual": Some possible implications of complexity and dynamic systems theories for educational research. *Educational Philosophy and Theory, 40*(1), 158-176.

Haggis, T. (2009). What have we been thinking of? A critical overview of 40 years of student learning research in higher education. *Studies in Higher Education, 34*(4), 377-390.

Haggis, T. (2011). Where now? Questions about assessment from a five-year longitudinal study into learning in higher education. *Journal of the Academy of Social Sciences, 6*(2), 191-205.

Hall, E. (1976). *Beyond culture*. New York, NY: Anchor Books.

Hallett, F. (2010). The postgraduate student experience of study support: A phenomenographic analysis. *Studies in Higher Education, 35*(2), 225-238.

Hallett, F. (2013). Study support and the development of academic literacy in higher education: A phenomenographic analysis. *Teaching in Higher Education, 18*(5), 518-530.

Hammond, M. (2016). In praise of community: The case for consensus seeking within online networks. In S. Cranmer, N. Dohn, M. de Laat, T. Ryberg & J. A. Sime (Eds.), *Proceedings of the 10th International Conference on Networked Learning 2016* (pp. 181-188). Lancaster, UK.

Heffernan, T., Morrison, M., Basu, P., & Sweeney, A. (2010). Cultural differences, learning styles and transnational education. *Journal of Higher Education Policy and Management, 32*(1), 27-39.

Ho, R. (2010). Assessment of Chinese students' experience with foreign faculty: A case study from a Chinese university. *Journal of Teaching in International Business, 21*(3), 156-177.

Hoare, L. (2012). Transnational student voices: Reflections on a second chance. *Journal of Studies in International Education, 16*(3), 271-286.

Hodgson, V., & Reynolds, M. (2005). Consensus, difference and 'multiple communities' in networked learning. *Studies in Higher Education, 30*(1), 11-24.

Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations, 10*(3), 301-320.

Hounsell, D. (1984). Contrasting conceptions of essay writing. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 106-125). Edinburgh: Scottish Academic Press.

Howie, P., & Bagnall, R. (2013). A critique of the deep and surface approaches to learning model. *Teaching in Higher Education, 18*(4), 389-400.

Howie, P., & Bagnall, R. (2015). A critical comparison of transformation and deep approach theories of learning. *International Journal of Lifelong Education*, 1-18.

Jandrić, P., & Boras, D. (Eds.). (2015). *Critical learning in digital networks*. Switzerland: Springer International Publishing.

Jones, C. (2015). *Networked learning: An educational paradigm for the age of digital networks*. Switzerland: Springer International Publishing.

Jones, C. (2016). Experience and networked learning. In S. Cranmer, N. Dohn, M. de Laat, T. Ryberg & J. A. Sime (Eds.), *Proceedings of the 10th International Conference on Networked Learning 2016* (pp. 481-488). Lancaster, UK.

Jones, C., & Dirckinck-Holmfeld, L. (2009). Analysing networked learning practices: An introduction. In L. Dirckinck-Holmfeld, C. Jones & B. Lindström (Eds.), *Analysing networked learning practices in higher education and continuing professional development* (pp. 1-27). Rotterdam: Sense Publishers.

Jones, C., Ferreday, D., & Hodgson, V. (2008). Networked learning a relational approach: Weak and strong ties. *Journal of Computer Assisted Learning, 24*(2), 90-102.

Kadiwal, L., & Rind, I. A. (2013). 'Selective cosmopolitans': Tutors' and students' experience of offshore higher education in Dubai. *Compare, 43*(5), 689-711.

Kandlbinder, P. (2013). Signature concepts of key researchers in higher education teaching and learning. *Teaching in Higher Education, 18*(1), 1-12.

Knight, J. (2016). Transnational education remodeled: Toward a common TNE framework and definitions. *Journal of Studies in International Education, 20*(1), 34-47.

Kosmützky, A., & Putty, R. (2016). Transcending borders and traversing boundaries: A systematic review of the literature on transnational, offshore, cross-border, and borderless higher education. *Journal of Studies in International Education, 20*(1), 8-33.

Laurillard, D. (1984). Styles and approaches in problem-solving. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 126-144). Edinburgh: Scottish Academic Press.

Leung, M., & Waters, J. (2013). British degrees made in Hong Kong: An enquiry into the role of space and place in transnational education. *Asia Pacific Education Review, 14*(1), 43-53.

Liff, R., & Rovio-Johansson, A. (2014). Students' understanding of theory in undergraduate education. *Teaching in Higher Education, 19*(4), 419-431.

Light, G., & Calkins, S. (2015). The experience of academic learning: Uneven conceptions of learning across research and teaching. *The International Journal of Higher Education Research, 69*(3), 345-359.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

Ly, C. T. M., Vickers, M. H., & Fernandez, S. (2015). Master of Business Administration (MBA) student outcomes in Vietnam: Graduate student insights from a qualitative study. *Education & Training, 57*(1), 88-107.

Macfarlane, B. (2015). Dualisms in higher education: A critique of their influence and effect. *Higher Education Quarterly, 69*(1), 101-118.

Macmillan, M. (2014). Student connections with academic texts: A phenomenographic study of reading. *Teaching in Higher Education, 19*(8), 943-954.

Malcolm, J., & Zukas, M. (2001). Bridging pedagogic gaps: Conceptual discontinuities in higher education. *Teaching in Higher Education, 6*(1), 33-42.

Mann, S. J. (2001). Alternative perspectives on the student experience: Alienation and engagement. *Studies in Higher Education, 26*(1), 7-19.

Marshall, D., & Case, J. (2005). 'Approaches to learning' research in higher education: A response to Haggis. *British Educational Research Journal, 31*(2), 257-267.

Marshall, D., & Case, J. (2010). d/Discourse in the learning of physics: the design of an introductory physics curriculum. *African Journal of Research in Mathematics, Science and Technology Education, 14*(2), 15-27.

Marton, F. (1981). Phenomenography: Describing conceptions of the world around us. *Instructional Science, 10*(2), 177-200.

Marton, F. (1986). Phenomenography: A research approach to investigating different understandings of reality. *Journal of Thought, 21*(3), 28-49.

Marton, F., & Booth, S. (1997). *Learning and awareness*. Mahwah, NJ: L. Erlbaum Associates.

Marton, F., Dall'Alba, G., & Beaty, E. (1993). Conceptions of learning. *International Journal of Educational Research, 19*(3), 277-300.

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

Marton, F., & Säljö, R. (1976a). On qualitative differences in learning: I—outcome and process. *British Journal of Educational Psychology, 46*(1), 4–11.

Marton, F., & Säljö, R. (1976b). On qualitative differences in learning: II—outcome as a function of the learner's conception of the task. *British Journal of Educational Psychology, 46*(2), 115-127.

Marton, F., & Säljö, R. (1984). Approaches to learning. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 39-58). Edinburgh: Scottish Academic Press.

Mason, R. (1998). *Globalising education: Trends and applications*. London: Routledge.

McBurnie, G., & Ziguras, C. (2007). *Transnational education: Issues and trends in offshore higher education*. Abingdon, UK: Routledge.

McConnell, D. (2005). Examining the dynamics of networked e-learning groups and communities. *Studies in Higher Education, 30*(1), 25-42.

McConnell, D. (2006). *E-learning groups and communities*. Berkshire: Open University Press.

McConnell, D., Hodgson, V., & Dirckinck-Holmfeld, L. (2012). Networked learning: A brief history and new trends. In L. Dirckinck-Holmfeld, V. E. Hodgson & D. McConnell (Eds.), *Exploring the theory, pedagogy and practice of networked learning* (pp. 3-24). New York: Springer.

Miller-Idriss, C., & Hanauer, E. (2011). Transnational higher education: Offshore campuses in the Middle East. *Comparative Education, 47*(2), 181-207.

Naidoo, R. (2011). Rethinking development: Higher education and the new imperialism. In R. King, S. Marginson & R. Naidoo (Eds.), *Handbook on globalization and higher education* (pp. 40-58). Northampton, MA: Edward Elgar Publishing.

Naidoo, V. (2009). Transnational higher education: A stock take of current activity. *Journal of Studies in International Education, 13*(3), 310-330.

Nair, C. S., Murdoch, N., & Mertova, P. (2011). Benchmarking the student experience: The offshore campus experience. *The TQM Journal, 23*(6), 585-597.

Nam, C. W., & Zellner, R. D. (2011). The relative effects of positive interdependence and group processing on student achievement and attitude in online cooperative learning. *Computers & Education, 56*(3), 680-688.

Oliveira, I., Tinoca, L., & Pereira, A. (2011). Online group work patterns: How to promote a successful collaboration. *Computers & Education, 57*(1), 1348-1357.

Pang, M. F. (2003). Two faces of variation: On continuity in the phenomenographic movement. *Scandinavian Journal of Educational Research, 47*(2), 145-156.

Parchoma, G. (2011). Toward diversity in researching teaching and technology philosophies-in-practice in e-learning communities. In B. K. Daniel (Ed.), *Handbook of research on methods and techniques for studying virtual communities: Paradigms and phenomena* (Vol. 1, pp. 61-86). Hershey, PA: IGI Global.

Parchoma, G. (2016). Reclaiming distributed cognition in networked learning: An inter-subjective, socio-material perspective. In S. Cranmer, N. Dohn, M. de Laat, T. Ryberg & J. A. Sime (Eds.), *Proceedings of the 10th International Conference on Networked Learning 2016* (pp. 113-119). Lancaster, UK.

Perriton, L., & Reynolds, M. (2012). Wise words and dread warnings: making sense of (virtual) groups. In V. Hodgson, C. Jones, M. de Laat, D. McConnell, T. Ryberg & P. Sloep (Eds.), *Proceedings of the 8th International Conference on Networked Learning* (pp. 220-227).

Perriton, L., & Reynolds, M. (2014). 'Here be dragons': Approaching difficult group issues in networked learning. In V. Hodgson, M. De Laat, D. McConnell & T. Ryberg (Eds.), *The design, experience and practice of networked learning*. Heidelberg: Springer.

Peshkin, A. (1988). In search of subjectivity. One's own. *Educational Researcher, 17*(7), 17-21.

Pherali, T. J. (2011). Academic mobility, language, and cultural capital: The experience of transnational academics in British higher education institutions. *Journal of Studies in International Education, 16*(4), 313-333.

Pilkington, R. M., & Walker, S. A. (2003). Facilitating debate in networked learning: Reflecting on online synchronous discussion in higher education. *Instructional Science, 31*(1/2), 41-63.

Prinsloo, P., Slade, S., & Galpin, F. (2011). A phenomenographic analysis of student reflections in online learning diaries. *Open Learning, 26*(1), 27-38.

Prosser, M., & Trigwell, K. (1999). *Understanding learning and teaching: The experience in higher education*. Buckingham, UK: Society for Research into Higher Education & Open University Press.

Pyvis, D. (2011). The need for context-sensitive measures of educational quality in transnational higher education. *Teaching in Higher Education, 16*(6), 733-744.

Pyvis, D., & Chapman, A. (2005). Culture shock and the international student 'offshore'. *Journal of Research in International Education, 4*(1), 23-42.

Pyvis, D., & Chapman, A. (2007). Why university students choose an international education: A case study in Malaysia. *International Journal of Educational Development, 27*(2), 235-246.

Ramsden, P. (1979). Student learning and perceptions of the academic environment. *The International Journal of Higher Education and Educational Planning, 8*(4), 411-427.

Ramsden, P. (1984). The context of learning in academic departments. In F. Marton, D. Hounsell & N. J. Entwistle (Eds.), *The experience of learning* (pp. 198-216). Edinburgh: Scottish Academic Press.

Ramsden, P. (1992). *Learning to teach in higher education*. London: RoutledgeFalmer.

Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). London: RoutledgeFalmer.

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

Ryberg, T. (2008). *The metaphor of patchworking as a viable concept in developing networked learning?* Paper presented at the 6th International Conference on Networked Learning, Greece.

Ryberg, T., Buus, L., & Georgsen, M. (2012). Differences in understandings of networked learning theory: Connectivity or collaboration? In L. Dirckinck-Holmfeld, V. E.

Hodgson & D. McConnell (Eds.), *Exploring the theory, pedagogy and practice of networked learning* (pp. 43-58). New York: Springer.

Ryberg, T., & Larsen, M. C. (2008). Networked identities: Understanding relationships between strong and weak ties in networked environments. *Journal of Computer Assisted Learning, 24*(2), 103-115.

Säljö, R. (1979). *Learning in the learner's perspective. I: Some common-sense conceptions (Report no. 76)*. Göteborg: University of Göteborg, Institute of Education.

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), 173-190.

Sanderson, G. (2004). Existentialism, globalisation and the cultural other. *International Education Journal, 4*(4), 1-20.

Sayer, A. (2010). *Method in social science: A realist approach* (Rev. 2nd ed.). New York, NY: Routledge.

Seah, W. T., & Edwards, J. (2006). Flying in, flying out: Offshore teaching in higher education. *Australian Journal of Education, 50*(3), 297-311.

Shah, M., Roth, K., & Nair, S. (2010). *Improving the quality of offshore student experience: Findings of a decade in three Australian universities.* Paper presented at the Australian International Education (AIEC) Conference.

Sherry, M., Thomas, P., & Chui, W. H. (2010). International students: A vulnerable student population. *Higher Education, 60*(1), 33-46.

Shiue, Y.-C., Chiu, C.-M., & Chang, C.-C. (2010). Exploring and mitigating social loafing in online communities. *Computers in Human Behavior, 26*(4), 768-777.

Sin, S. (2010). Considerations of quality in phenomenographic research. *International Journal of Qualitative Methods, 9*(4), 305-319.

Smith, K. (2009). Transnational teaching experiences: An under-explored territory for transformative professional development. *International Journal for Academic Development, 14*(2), 111-122.

Sorensen, E. K. (2005). Networked e-learning and collaborative knowledge building: Design and facilitation. *Contemporary Issues in Technology and Teacher Education, 4*(4), 446-455.

Sorensen, E. K., & Kjærgaard, T. (2016). Designing for dialogue and digitality in higher and continuing education. In S. Cranmer, N. Dohn, M. de Laat, T. Ryberg & J. A. Sime (Eds.), *Proceedings of the 10th International Conference on Networked Learning 2016* (pp. 103-112). Lancaster, UK.

Sorva, J., Lönnberg, J., & Malmi, L. (2013). Students' ways of experiencing visual program simulation. *Computer Science Education, 23*(3), 207-238.

Tight, M. (2012). *Researching higher education* (2nd ed.). Berkshire, UK: Open University Press.

Tight, M. (2014). Discipline and theory in higher education research. *Research Papers in Education, 29*(1), 93-110.

Tight, M. (2015). Phenomenography: The development and application of an innovative research design in higher education research. *International Journal of Social Research Methodology*, 1-20.

Tormey, R. (2014). The centre cannot hold: Untangling two different trajectories of the 'approaches to learning' framework. *Teaching in Higher Education, 19*(1), 1-12.

Trigwell, K. (2000). A phenomenographic interview on phenomenography. In J. Bowden & E. Walsh (Eds.), (pp. 62-82). Melbourne: RMIT University Press.

Uzuner, S. (2009). Questions of culture in distance learning: A research review. *The International Review of Research in Open and Distance Learning, 10*(3).

Van Rossum, E. J., Deijkers, R., & Hamer, R. (1985). Students' learning conceptions and their interpretation of significant educational concepts. *Higher Education, 14*(6), 617-641.

Van Rossum, E. J., & Schenk, S. M. (1984). The relationship between learning conception, study strategy and learning outcome. *British Journal of Educational Psychology, 54*(1), 73 -83.

Veldhuis-Diermanse, A. E., Biemans, H. J. A., Mulder, M., & Mahdizadeh, H. (2006). Analysing learning processes and quality of knowledge construction in networked learning. *The Journal of Agricultural Education and Extension, 12*(1), 41-57.

Wakimoto, D. K., & Bruce, C. S. (2014). Academic librarians' varying experiences of archives: A phenomenographic study. *The Journal of Academic Librarianship, 40*(5), 452-459.

Waters, J., & Leung, M. (2013). Immobile transnationalisms? Young people and their in situ experiences of 'international' education in Hong Kong. *Urban Studies, 50*(3), 606-620.

Webb, G. (1997a). Contesting learning theory: A response to Entwistle and Ekeblad. *Higher Education, 33*(2), 225-230.

Webb, G. (1997b). Deconstructing deep and surface: Towards a critique of phenomenography. *Higher Education, 33*(2), 195-212.

Wenger, E. (1998). *Communites of practice: Learning, meaning and identity*. New York, NY: Cambridge University Press.

Wilkins, S., & Balakrishnan, M. S. (2013). Assessing student satisfaction in transnational higher education. *International Journal of Educational Management, 27*(2), 143-156.

Wilkins, S., Balakrishnan, M. S., & Huisman, J. (2011). Student choice in higher education: Motivations for choosing to study at an international branch campus. *Journal of Studies in International Education, 16*(5), 413-433.

Wilkins, S., Balakrishnan, M. S., & Huisman, J. (2012). Student satisfaction and student perceptions of quality at international branch campuses in the United Arab Emirates. *Journal of Higher Education Policy and Management, 34*(5), 543-556.

Woollacott, L., Booth, S., & Cameron, A. (2014). Knowing your students in large diverse classes: A phenomenographic case study. *The International Journal of Higher Education Research, 67*(6), 747-760.

Yoshimi, J., & Vinson, D. W. (2015). Extending Gurwitsch's field theory of consciousness. *Consciousness and Cognition, 34*, 104-123.

Zenios, M. (2011). Epistemic activities and collaborative learning: Towards an analytical model for studying knowledge construction in networked learning settings. *Journal of Computer Assisted Learning, 27*(3), 259-268.

Zhou, Y., & Todman, J. (2009). Patterns of adaptation of Chinese postgraduate students in the United Kingdom. *Journal of Studies in International Education, 13*(4), 467-486.

Appendix A: Interview Schedule

	Question	Purpose / Comment
1	Tell me about your previous education, where you went to high school and undergrad. What did you study in undergrad? Have you done any postgrad study before this programme?	Contextual questions, brief, help settle them in
2	The modules are designed as pre-class (perhaps some reading and prep), in-class (4 days in the classroom) and post-class (working on your assignment). Can you talk to me about how you approach your study in each of these phases? Probes for interactions with peers, lecturers, online resources	Gets a general description going. If they do not respond to this question break it down questions for each phase.
3.	Can you describe for me the process you go through to prepare an assignment? From the time you receive the assignment to the time you hand it in what steps do you follow? Probes for interactions with peers, lecturers, online resources	Everyone can answer this question easily. Sometimes there is no need to ask the next few questions as they cover them anyway in their descriptions, if not I prompt with the next few. **From here on the question order varied with each participant.**
4.	As you are handing in your assignment (before it is graded) how do you judge that you have done a good piece of work? What makes you happy that this is a good assignment?	See what criteria they are using, to see what their understanding is of Master's requirements.
5	Comparing your grades, what do you think affected the differences? What do you think you do differently when you score higher or lower on some assignments?	Expand on their descriptions of how they study and how they evaluate their own work.
6	Has your approach to study changed over time on the programme? If yes, how and why?	Exploring if they perceive development.
7	Have you had any academic struggles/challenges so far? If yes, how have you dealt with them?	What they do to get help, how they clarify their own thinking.
8	People learn in different ways. On this programme what kinds of things do you do or do we arrange that help you learn best?	Talk more about experiences and conceptions of learning.
9	What do you think we mean by "Master's level learning" on this programme? What do you think we expect of you? Probe: What do you think is required of you on this programme that is different from your undergrad degree?	RQ1
10	What do you understand is meant by "learning"? How do you know when you have learnt something?	RQ1
11	This is an international programme. It's an Irish college with an Irish curriculum and standards, delivering here in the Gulf region, with lecturers flying in and out. In what ways do you think this being on an international programme is impacting your experiences as a learner?	Not a good question, some interesting answers.

12	What advice would you give to the next batch of students starting in September to help them get the most learning from the programme?	This is not directly related but students want to give feedback. This and the next question summarised for a report for the college.
13	What advice would you give the Institute to help improve the learning for the students on the programme?	

Appendix B: Examples of mind maps developed in data analysis

Photo 1 Example of mind map of entire transcript

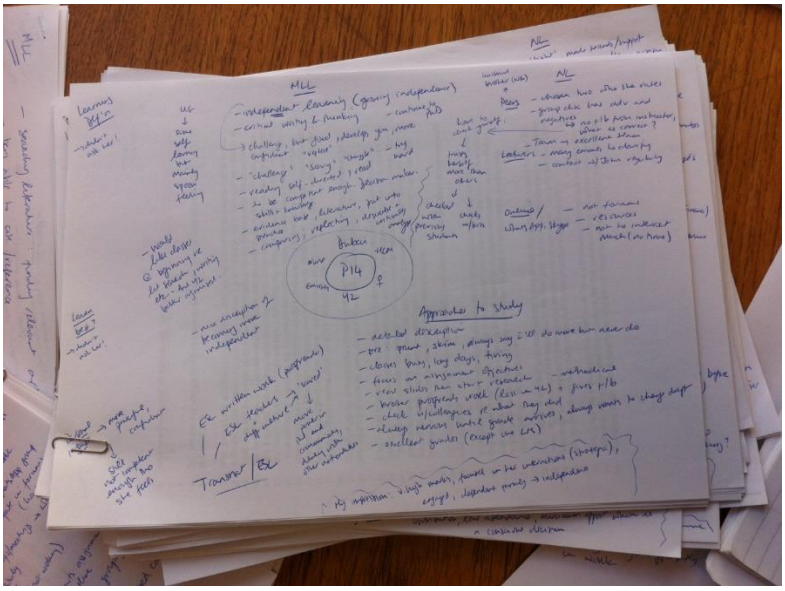
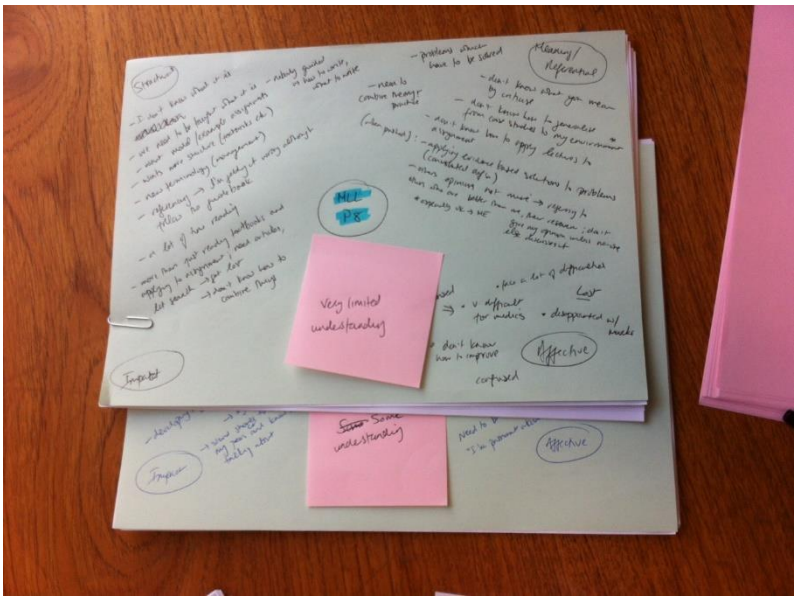


Photo 2 Example of mind map of 'Master's Level Learning'



Appendix C: Examples of data analysis: Iterations of categories of description

Table A: Master's Level Learning (MLL) - Second Iteration

Category	Description	Transcript No (Year in Programme)
A Post it: Very limited understanding	Understand MLL as a lot of reading and academic writing (technical skills), meeting learning outcomes. Know I need lots of citations and references (evidence base). No mention of critical thinking. No frustrations mentioned.	13 (Y1), 17 (G)
B Post it: Limited understanding	Understand MLL as a lot of reading and academic writing (technical skills), meeting learning outcomes. You are looking for more advanced/sophisticated thinking. In addition to reading about others' experiences (article/research/evidence) I'm allowed have my own opinion, my own perspective (which can be intimidating). I know I need to tie those together (others & me) but I'm not sure how. You talk about critical thinking but I'm not quite sure what you mean. I know you want us to be independent but I want more guidance. I would like model answers.	1 (G), 7 (Y2), 8 (Y1), 16 (G)
C Post it: Some understanding	Understand MLL as a lot of reading and academic writing (technical skills), meeting learning outcomes. You are looking for more advanced/sophisticated, deeper thinking. Good writing skills are required, it should "flow", connected ideas. It's more than just having lots of references. You are looking for critical thinking which is more than description. Analysing things (looking at all angles, see many perspectives, compare and contrast). You need to have your own opinion, your own view (freedom of expression) and tie this in with the literature. You need to be able to apply the ideas to the clinical setting. You need to be self-directed in your study. I struggle with this and would like more guidance (not all of them, some like the freedom).	2 (G), 6 (Y1), 9 (Y2), 11 (Y1), 12 (Y1), 15 (Y1), 18 (Y1)
D Post it: Good/strong understanding	Understanding MLL as students are investigators, problem solvers, really inspect things, analyse what's between the lines. Critical thinking is more than listing positives and negatives, advantages and disadvantages. Lots of reading. Getting smarter & faster in reading. Linking, combining different ideas, flexible enough to hold multiple paradigms. Bringing something unique, being clever. Adapting/changing models and frameworks, building theory, innovating. Methodical search of the lit. Questioning the lit - is it valid, is it reliable. Being guided by what you find in the lit. You are trying to develop us, challenge us, get us to think differently You have to depend on yourself.	3 (G), 4 (G), 5 (G), 10 (Y1), 14 (Y2)

Table B: Master's Level Learning (MLL) - Fifth Iteration

A	MLL is a set of academic skills. It involves a lot of reading and a lot of essay writing, a lot more than undergrad (UG). You need good academic writing, knowing how to cite and reference, having a (sufficient?) evidence base in your essays. Reading skills may improve over time, you learn how to read strategically, skim. Writing skills may improve over time. You need to be aware of assignment requirements and meeting learning outcomes. You need to know how to search for literature.	3 (3, 7), 4 (2), 6 (6, 7) 7 (1, 2), 9 (5, 6), 10 (5) 11 (4, 8), 12 (3), 13 (2) 14 (4, 9), 15 (1, 3, 11, 13), 16 (3, 4, 5, 8), 18 (4)
B	MLL is a deeper way to think (particularly compared to UG). It means critical reading, thinking and writing: evaluating literature (is it valid, reliable), applying theories & frameworks to the clinical setting/workplace, analysing (breaking things down, different perspectives), synthesising (making relationships, linking things together). Investigating, solving problems/looking for solutions. MLL is theory & practice, focus on application, need to apply, sometimes can't apply now but will learn when we apply later.	2 (2), 3 (2, 17), 4 (1, 7) 5 (8, 9), 6 (2), 9 (2, 5) 10 (4, 9), 11 (5), 12 (5) 14 (9), 15 (1, 10), 18 (9), 3 (2, 3), 8 (10), 6 (7), 9 (2), 18…
C	MLL is creativity and innovation. It means having your own opinion on what you read, freedom of expression. It means adapting theories and frameworks, coming up with your own ideas, building theories, perhaps adapting for the local culture, being clever. It gets you higher marks?	3 (16), 4 (2, 7), 5 (3, 8) 10 (4), 11 (5), 12 (5)
D	MLL is independence in study (especially compared to UG). Depending on yourself to sort out challenges, to have confidence in doing the work (finding lit, understanding requirements, not needing lecturers or peers' guidance so much) and in submitting your work (not needing others opinions, not needing so much proof-reading). Need to be motivated, self-directed.	1 (1), 2 (1, 5, 9), 6 (2) 7 (10), 9 (3), 10 (5), 14 (4, **7**, 10)
E	MLL is personally transformational. Changing the way you think, the way you approach the workplace, your colleagues (seeing different perspectives), your family, your confidence. Bringing critical thinking from the academic sphere to the work/life sphere. Pride and confidence in ability to meet challenges, solve problems. Self-discovery.	3 (17), 4 (8, 11), 9 (12) 11 (5), 12 (4), 14 (7), 15 (2, 10, 14), 16 (1)
F	MLL is emotional (?) and challenging. It is hard work, more demanding than UG. It can be a struggle to understand what's required, both the basic skills of searching, reading and writing, new terminology (or is that ESL?) as well as 'critical thinking', 'to critique'. The first assignment in particular is confusing and daunting. Over time knowing how to improve grades can be frustrating (even with the given feedback). It can be a struggle to figure things out on your own (we suffer). You can feel lost and confused and nervous/anxious/scared. Confused about what you are looking for, anxious handing in work, confused about grades. We don't get enough guidance – lost, frustrated. Lack of confidence about writing especially in English. On the other hand, the challenge can be good, you stretch yourself. The freedom (of expression and ability to take assignments in directions which interest you) can be enjoyable and fulfilling.	1 (2, 7), 2 (1), 5 (1, 7) 7 (2, 3, 7, 8), 8 (1, 2, 3, 4, 5, 6, 7), 9 (3 6), 10 (4, 5, 7), 11 (1, 3, 9), 12 (3, 6), 14 (4, 7, 10) 15 (8), 16 (4, 7, 10)

Table C: Master's Level Learning (MLL) - Sixth Iteration

Understandings of Master's Level Learning (research question)

1	MLL is a set of academic skills. It involves a lot of reading (a lot more than undergraduate) and a lot of long essay writing (a lot more than undergrad). You need good academic writing, knowing how to cite and reference, how to focus on the topic asked, how to summarise information and structure an essay. Reading skills may improve over time as you learn how to read faster in English and read strategically, skim articles. Writing skills may improve over time such as writing better introductions and conclusions, and better use of English. You need to know how to search for relevant literature. You need to be aware of the assignment requirements and meeting learning outcomes.
2	MLL is a deeper way to think, particularly compared to undergraduate level. In such accounts learning involved critical reading, thinking and writing. It means looking at the research, at other people's experiences, at the evidence, and learning from that. When asked to define critical thinking in more detail the following elements were highlighted: being able to evaluate literature (is it valid, reliable), to practically apply theories & frameworks to the clinical setting/workplace, to analyse (break things down, see them from different perspectives), and synthesise (make relationships, linking ideas together). Students see themselves as investigators, researchers and problem solvers.
3	MLL is innovative thinking. It means having your own opinion on what you read, freedom of expression. It means adapting theories and frameworks, coming up with your own ideas, building theories, perhaps adapting for the local culture.

The impact/process of Master's Level Learning (not related to research question)

	MLL is independence in study (especially compared to undergrad). Depending on yourself to sort out challenges, to have confidence in doing the work (finding lit, understanding requirements, not needing lecturers or peers' guidance so much) and in submitting your work (not needing others opinions, not needing so much proof-reading). More relaxed, less disciplined. Need to be motivated, self-directed. Less direction.
	MLL is personally transformational. Changing the way you think, the way you approach the workplace, your colleagues (seeing different perspectives), your family, your confidence. Bringing critical thinking from the academic sphere to the work/life sphere. Pride and confidence in ability to meet challenges, solve problems. Self-discovery
	MLL is emotional (?) and challenging. It is hard work, more demanding than UG. It can be a struggle to understand what's required [See other table]

Appendix D: Comparison of ten phenomenographical papers

Article	Relationships between categories shown through…	Terminology used in table for Structural Aspects	Terminology used in table for Referential Aspects	Dimensions of Variation used?	Other terminology used in tables	Hierarchy shown in…
1. Gonzalez (2011) *Both types of tables*	Variation Table	None	None	Yes, in table (4)	No	
	S/R Table In methodology section, structural = the approach, how people go about something; referential = meaning assigned	Structural (how)	Referential (what)	N/A	No	S/R table *"inclusiveness of higher level conceptions"*
2. Sorva, Lonnburg and Malmi (2013)	Variation Table	Internal horizon External horizon	Referential aspect	No	No	Branching diagram *Highest category "most inclusive and describes the richest way of understanding we found"*
3. Bruce and Stoodley (2013)	Variation Table	Theme Margin	None	Yes, in table (2)	No	Variation Table *"expanding awareness"*
4. Wakimoto and Bruce (2014)	Variation Table	Focus Thematic Field	Meaning	Yes, in table (3)	No	Branching diagram *Highest category "the most complex way of experiencing"*

Article	Relationships between categories shown through…	Terminology used in table for Structural Aspects	Terminology used in table for Referential Aspects	Dimensions of Variation used?	Other terminology used in tables	Hierarchy shown in…
5. Woolacott, Booth and Cameron (2014)	Variation Table	None	None	No (other terminology)	'Aspects of variation' 'Distinguishing features'	Variation Table *"progression in the sophistication and complexity of the practice"*
6. Light & Calkins (2015)	Variation Table	None	None	No (other terminology)	'Features' 'Aspects of variation'	Mentioned in methodology but not specifically described in findings.
7. Ashwin (2006)	S/R Table In methodology section, structural = what is in the foreground and background of each category, referential = meaning	Structural aspects	Referential aspects	Yes, in text, not in table	No	S/R Table *Forms "an inclusive and expanding hierarchy"*
8. Hallett (2010)	S/R Table In methodology section: structural = internal and external horizons, referential = meaning	Structural	Referential	No	No	In the listing of categories (increasing complexity) S/R Table is a "further organisation of the outcome space" and shows a "referential hierarchy" (not a structural one)2

Article	Relationships between categories shown through…	Terminology used in table for Structural Aspects	Terminology used in table for Referential Aspects	Dimensions of Variation used?	Other terminology used in tables	Hierarchy shown in…
9. Ashwin, Abbas and McClean (2013)	S/R Table In methodology section, structural = what changes in the foreground and background of each category, referential = meaning	Structural aspects	Referential aspects	No	No	S/R Table *Does not specifically describe it as a hierarchy although it can be implied.*
10. Cutajar (2014) First research question only	S/R table (uses text instead of numbers within the table, easier to read)	Structural aspects	Referential aspects	No	No	S/R Table