‘Holding On While Letting Go’

A Gadamerian Hermeneutic Study of Postgraduate Professional Healthcare Teaching Students Experiences as Enquiry Based Learners

by

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“The only freedom that is of enduring importance is freedom of intelligence, that is to say, freedom of observation and of judgement exercised in behalf of purposes that are intrinsically worthwhile”

(Dewey, 1938. p61)

Abstract

This small-scale Gadamerian-informed hermeneutic study explores the experiences of eleven United Kingdom (UK) postgraduate professional healthcare teaching students' who engaged with enquiry based learning (EBL) as learners in the final module of their professional teacher preparation course.

EBL also known as IBL (inquiry based learning) has gained increasing popularity in contemporary higher education within the UK and further afield for its capacity to give learners' agency. It does this through individual and collective empowerment enabling learners to become independent self-directed critical thinkers. EBL is predicated on shifting the ontology of learning to one of discovery which opens up unexpected detours and unpredictable paths of exploration. Significantly this shift unties the familiar relationship between learner and teacher which for the learner can involve a dramatic and potentially transformative existential incline accompanied by attendant losses and gains.

While others have explored the transformative powers of learning none has explored the transformative powers of EBL using the bricolage of conceptual frameworks employed within this study. The unique assemblage of eminent educationalists and continental philosophers has enabled a more sophisticated level of interpretation to emerge through the synthesis of a diverse range of knowledge culminating in a fusion of horizons.

At the heart of the study is the philosophy of Hans Georg Gadamer whose thinking has revealed EBL to be inseparable from its context. However, it is the thinking of French philosopher Catherine Malabou that brings originality to the study. Drawing on Malabou's ontological concepts of plasticity and metamorphosis has revealed how EBL has potentially transformative powers; powers that are capable of moulding and sculpting individual behaviour. These powers are not visible but are held in some sort of ontological reserve without the status of being there but they have the potential to be unleashed by EBL's ontology.

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Nick, ‘back in the day’ you once said in the words of Bob Dylan “*Just keep on keepin’ on”* and I did. Your mighty influence prevails and I owe my capacity to contemplate my position within the world entirely to you.

To my husband and son, the two most important people in my life I owe you the most. The result of this journey belongs as much if not more to you. Thank you for believing in me, pushing me and for tolerating my ramblings, frustrations and epiphanies.

My closing thoughts turn to my dearest friend whose untimely and prematurely final words “*get the job done*” have accompanied me to this milestone and I dedicate this project to her.

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Glossary of Terms & Abbreviations

EBL	Enquiry based learning
IBL	Inquiry based learning
NMC	Nursing and Midwifery Council
PBL	Problem based learning
PGCE	Postgraduate Certificate in Education
QAA	Quality Assurance Agency

Preface

I am a nurse and a principal lecturer for education enhancement within a large UK metropolitan university. For over ten years I led a postgraduate certificate in education (PGCE) for professional healthcare practitioners wishing to become lecturers in UK higher education.

Throughout the PGCE I employed a range of learning and teaching approaches intended to foster the knowledge and skills commensurate with the academic and professional requirements of the contemporary healthcare lecturer. However, it was during the use of one particular approach, EBL that I observed changes in individual learner behaviours. It is my interest in these observed changes that gave rise to this study. I believe the thinking within this thesis represents new and original thinking about EBL which I have shared at national and local conferences and more recently in a published book chapter concerning EBL and adult learners (Stevenson, 2018).

Chapter 1 Introduction and Background to the Study

1.1 Introduction

"Come to the edge" he said

"We can't we're afraid" they replied

"Come to the edge" he said

"We can't we will fall!"

"Come to edge" he beckoned

And they came, he pushed them and they flew

Christopher Logue (1926-2011)

This is a story of how my curiosity in the potential power of 'letting collective minds loose to learn' (Jones, 2011) led to my interest in researching Enquiry Based Learning (EBL) and its impact on the postgraduate professional healthcare teaching students who were asked to engage with it as learners.

For more than ten years I employed EBL in the final module of a Postgraduate Certificate in Education (PGCE) for Health and Allied Health Professionals during which time I anecdotally observed changes in learners' personal behaviours as they engaged with the EBL process. Those who were less confident became more self-assured and exhibited a greater sense of independence. I believe these changes are associated with the environment that EBL creates; one that is reflected in the poem *Come to the Edge*.

Come to the Edge is a poem of thresholds, transitions and a fear of flying and falling. I believe it is symbolic of EBLs environment and my aspirations as a lecturer wanting to nurture, instil confidence, encourage resourcefulness, foster independence and promote self-sufficiency (Stevenson, 2018).

Spelled ‘Inquiry’ Based Learning (IBL) in the USA EBL is a student-centred approach described as one pole of teaching whose opposite is didactic instructionism (Hutchings, 2007). Learners aren’t taught they learn for themselves through research, peer group activities and discussion rather than receiving knowledge from a teacher (Levy et al, 2010). EBL is intended to foster curiosity by moving the learner away from the classical dominant legacy of ‘know this’ to ‘know how’ (Jones, 2011). EBL is grounded in Dewey’s (1938) work on experiential learning which recognised the value of an educational community that nurtures individual development through the exploration of the everyday world.

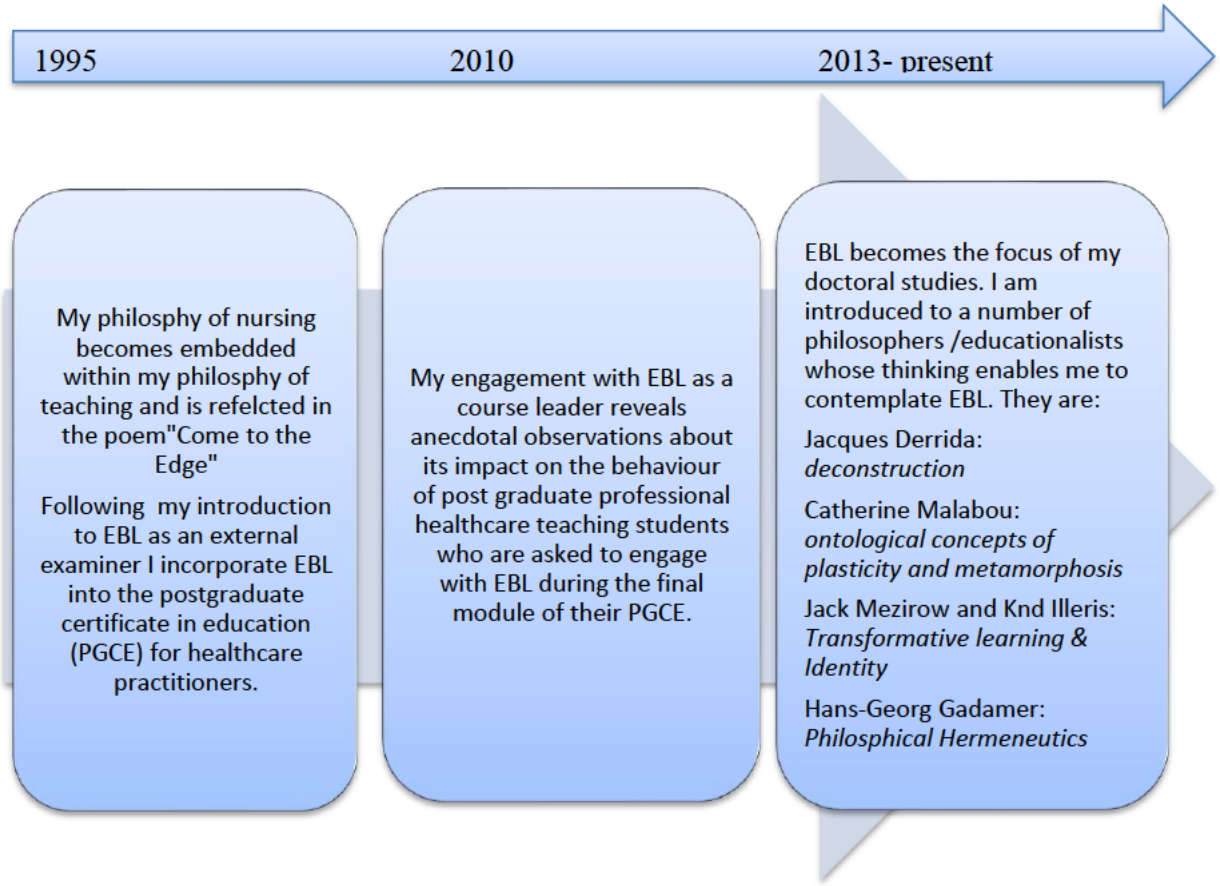
EBL has been reported to promote skills aligned with academic level 7 (QAA, 2020) by fostering greater levels of autonomy, empowerment, interaction and freedom of discussion (Wood and Levy, 2015; Pearce, 2013) while stimulating intellectual curiosity through research (Fung, 2017; Cleaver et al, 2014; Aditomo et al, 2013; Spronken-Smith et al, 2012; Levy et al, 2010; Deignan, 2009; Goldring and Wood, 2009; Khan and O’Rourke, 2004). These findings are significant professional healthcare teaching students on two levels; firstly in relation to their professional practice as nurses, midwives and allied health practitioners and secondly in relation to their development as healthcare lecturers. As nurses, midwives and allied health professionals they must exercise autonomy and empowerment in sourcing and assessing knowledge for its validity and relevance to professional practice (NMC, 2019). As developing healthcare lecturers they must undertake a PGCE at academic level 7 (QAA, 2020) and demonstrate their capacity for independent study and the development of in-depth knowledge and understanding that is informed by research.

However, in warranting less teacher dependence Levy et al (2010) and Pearce (2013) identify how EBL imposes an ontological shift by untying familiar relationships between learner and teacher. This challenges both to rethink the conventions of their relationships. This finding corresponds with my observations concerning the professional healthcare teaching students with whom I have employed EBL over many years. They often regard EBL with trepidation. It poses a new and unfamiliar way of learning that removes them from their comfort zone which they find destabilising and challenging. However as the EBL process unfolds they not only become more independent in their search for knowledge but they become more confident in sharing and debating knowledge. These observations correspond with Dewey’s (1938, p35) view that “every experience enacted and undergone modifies the one who acts and undergoes it”. It is therefore my epistemic duty to further understand how EBL is experienced by

professional healthcare teaching students. Heidegger (1927) might describe this as *Besorgen;* my natural angst or heedfulness in wanting to exercise socio-cultural concern probably originating from my career as a nurse.

To place this concern into some kind of historical context a timeline of my developing interest in professional healthcare teaching students' experiences of EBL is presented below in Figure 1.1

Figure 1. 1 Timeline of My Developing Interest



In the following chapters I draw from each phase of this timeline in conveying how I came to research the experiences of eleven professional healthcare teaching students as they engaged with EBL as learners in the final module of their PGCE.

It is important here to acknowledge the unique characteristics of the sample in order to place them, their PGCE and the study into greater context. An overview of the sample therefore follows.

Nine nurses, one midwife and one podiatrist participants embarked upon the PGCE. Their characteristics are depicted in Table 1.1 below.

Table 1. 1 Characteristics of the Sample

Number in Sample	11
P (participant) number and professional role at time of the study	P1 Practice Nurse (Registered Nurse working in general practice) P2 Nurse educator in local NHS Trust (Registered nurse and unqualified teacher) P3 Nurse educator in local NHS Trust (Registered nurse and unqualified teacher) P4 Nurse educator in local NHS Trust (Registered nurse and unqualified teacher) P5 Specialist Community Nurse (Registered nurse additional recordable qualification) P6 Health Visitor (Registered nurse additional recordable qualification) P7 Newly appointed university lecturer in midwifery (Registered midwife no PGCE) P8 Nurse educator in local NHS Trust (Registered Nurse and unqualified teacher) P9 Specialist Community Nurse (Registered nurse additional recordable qualification) P10 Nurse educator in local NHS Trust (Registered nurse and unqualified teacher) P11 Registered Podiatrist and unqualified teacher in Further Education setting
Sample Characteristics	Female Senior practitioners with clinical experience ranging from 8-20 years Well established within their current role except P7 Prior learning at academic level 6
Destination beyond PGCE	P1,7,9,10&11 Higher Education P2,3,4,5,6 & 8 Education Centres within NHS Trusts

The sample embarked upon their PGCE with wide ranging and extensive clinical experience. However, a considerable period of time had elapsed for many of them between engaging in any kind of formal academic study and commencing the PGCE. They were therefore anxious about its postgraduate status and lacked confidence about their perceived academic ability which culminated in low self-esteem. Furthermore, their prior learning experiences were predominantly instructionist. They therefore regarded the PGCE with some degree of scepticism and trepidation given its student-centred philosophy within which student-directed learning was a central approach; scepticism and trepidation that is perhaps reflected in the poem Come to the Edge.

I now return to *Come to the Edge* and elaborate on its significance to the study. I begin by explaining the impact of finding the poem as a new nurse academic.

1.2 Come to the Edge A Serendipitous but Influential Encounter

It was during my formative years as a newly appointed nursing lecturer that I happened across *Come to the Edge.* Its impact was profound; it captured all I had aspired to achieve as a nurse in six short lines. Daloz (1999) might observe that my aspirations reflect the mentor in me, the guide whose goal is to lead others on a journey of transformation. One might say that through my early encounter with *Come to the Edge* I had unwittingly adopted the principles of EBL. I recall vividly my first teaching encounter with a group of student nurses. They were little different to my former patients; anxious, vulnerable and I sensed they wanted me to tell them everything. While my instinct was to care I was mindful of the skills required of their profession; skills of independence, resourcefulness and self-sufficiency reflected in *Come to the Edge*.

Come to the Edge became a personal metaphor for my identity as a teacher. Hunt (2006, p315) describes how "metaphor can provide a vital link between the private and often idiosyncratic world of felt reality and the propositional world of theories and constructs in which most academic and professional discourses are conducted". Such was the impact of *Come to the Edge* I have since shared it with numerous learners as a source of inspiration and encouragement.

It wasn't until I became an external examiner to a similar professional healthcare teacher preparation course that I discovered EBL where it was the sole pedagogy employed. Learning was entirely student-centred comprising group discussions facilitated by the course lead. Discussions focussed on learner-determined lines of enquiry enabling intellectual development rather than knowledge transmission. In their role as facilitator the course lead intervened minimally by 'easing' or helping learners to get in touch with their internal capacities and to make sense of their experiences in the way that Gregory (2002) cited by Tosey (2006, p1) describes. The sense of learner enthusiasm was palpable.

I observed how EBL fostered discovery learning as described by Bruner (1961) where learners construct their own knowledge through a process of self-organisation rather than being taught. Through a language of social action learners were able to develop academically and socially as

Jones (2011) describes within a supportive environment. Jones (2011) observations of student-centred learning and my observations as external examiner are perhaps best captured in his reference to psychologist Edwin Hutchins (1995). Hutchins described how despite its size, a big ship could be steered into a modest birth with the collaborative efforts of the crew on the bridge and in the engine room. Their combined actions were far greater than the Captain's orders. There were parallels here with my observations of EBL; it was not the teacher who steered the group's enquiry but the combined efforts of the group with occasional scaffolding from the teacher who knew instinctively when to provide support. Their skill was aligned with Wood, Bruner and Ross's (1976) concept of scaffolding and Vygotsky's (1978) zone of proximal development and is reflected in *Come to the Edge.*

As course leader I elected to incorporate EBL into the PGCE an overview of which is presented below in Table 1.2.

Table 1. 2 Overview of the PGCE

PGCE	Postgraduate Certificate in Education for Health and Allied Health Professionals
Duration Structure	One academic year. X1 40 Credit Module X2 20 Credit Modules
Validation	2011 Conjoint Validation Nursing and Midwifery Council and University
Aim	To provide health and allied healthcare practitioners with a sound foundation from which to develop their knowledge and skills in supporting learning and teaching within the practice and academic environment.
Student Type	Nurses, Midwives, Allied Health Professionals wishing to become professional teachers in practice or university lectures in higher education.
Intake	10-20 per iteration

EBL was employed as the main pedagogy the final 20 credit module of the PGCE. An overview of this module is presented in Table 1.3 below.

Table 1. 3 Overview of Final Module

Module Title	Facilitating the Learning Journey
Credits	20 at Academic level 7
Aim	To explore current ideas about learning and teaching within the context of professional health and allied healthcare practice development.
Assessment	Enquiry Based Learning: Exploration of a trigger question.

The module sought to stimulate discussion and debate concerning a range of ideas about learning and teaching within the context of professional health and allied healthcare practice development. In so doing students were asked to consider and critically assess the complex learning needs of health and allied healthcare students in order to plan and justify suitable educational frameworks germane to their developing professional practice. EBL was employed to facilitate critical discussion and debate concerning these issues using an enquiry trigger or stimulus. In this instance the trigger question was *"Does constructive alignment foster deeper learning?".*

Hutchings (2007) describes how the trigger leads to the search for sources of knowledge and an appraisal of that knowledge for its validity and relevance. The enquiry used in this case concerned constructive alignment and its perceived impact on meaningful learning which did not present as an a priori truth as Hutchings (2007) observes. To that end students could deduce logical consequences but were prompted to undertake a sequence of critical examinations. The module was of five months duration and was situated in Semester two of the University academic calendar.

In 2013 I began my doctoral journey where EBL became the focus of my studies. I explored EBL through a number of different lenses some philosophical some educational. For example, in trying to understand the concept of EBL I engaged with French philosopher Jacques Derrida (1978) and the concept of *deconstruction.* I undertook an analysis of EBL and the language associated with it (Stevenson, 2015) which revealed its instability making it difficult to define. I discuss this further in chapter three: section 3.7, p49.

On the advice of my doctoral supervisor I engaged with French philosopher Catherine Malabou, a former student of Derrida. I read *Ontology of the Accident* (Malabou, 2012) which explores the ontological concepts of plasticity as an environment where individuals evolve through change or metamorphosis. I undertook an analysis of the learning environment created by EBL and identified some parallels between Malabou's thinking and the changes I had anecdotally observed in learner behaviour (Stevenson, 2015). I discuss this further in chapter three: section 3.8, p51.

I engaged with American educationalist Jack Mezirow. Mezirow's (1978) concept of transformative learning has more recently been extended by Danish educationalist Knud Illeris

(2014) whose focus is the development of learner identity. I discuss their mutual relevance to this study in chapter three: section 3.9, p52.

Exploring EBL through these lenses enriched my understanding of it and enabled me to explore its significance to professional healthcare teacher development which I now discuss.

1.3 The Relevance of EBL to Professional Healthcare Teacher Development and Higher Education

Irrespective of professional background UK healthcare practitioners must successfully complete a PGCE to become lecturers in higher education. Their approach to learning and teaching should support the development of healthcare practitioners who must demonstrate skills of critical enquiry in leading complex care management (NMC, 2018). The challenges of contemporary healthcare also require practitioners to demonstrate a range of independent and collaborative skills in assessing planning delivering and evaluating care (NMC 2018). The professional healthcare teaching students in this study were therefore asked to engage in EBL on two levels; firstly as learners to foster their own skills of independent and collaborative critical enquiry; skills associated with EBL (Wood and Levy, 2015; Stacey, Oxley and Aubeeluck, 2015) and secondly, as developing teachers learning how to facilitate EBL.

In the last twenty years the goals of higher education have been much debated. For example in 1997 the UK government commissioned the *Dearing Report* which associated deeper learning with active participation. Section 8.4, p114 of the report suggested students should not learn through the articulation of knowledge but through linking theory with practice and expressing their own understanding. Chapter one, p7 of the report drew specific attention to the purpose of education as a life-changing process of scholarship and research.

A year later in America the Boyer Commission (1998) echoed many Dearing (1997) recommendations advising that higher education should introduce students to inquiry-based learning. Universities were accused of short-changing students for lack of opportunity to engage and develop critical thinking skills (Wilson et al, 2017). The report called for learning based on discovery rather on the transmission of information (Boyer, 1998 p15). Healey, Flint and Harrington (2014) accentuated the significance of student engagement in a UK report *Engagement through partnership: students as partners in learning and teaching in higher education*. In the foreword Levy (2014, p4) reiterates that "student engagement correlates with a positive learning experience and outcomes for students. We sell students short if we treat

learning and teaching as a one way transmission of knowledge and skills". The report affirmed that learning should be linked with subject based research and enquiry. The UK White Paper *Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice* (Department for Business Innovation & Skills, 2016 p12, para 23) echoed this stating that "for too long, teaching has been the poor cousin of research" and reiterated the need for higher education institutions to develop learners' skills of critical thinking, analysis and teamwork.

However Kador, Chatterjee and Hannan (2017) note that higher education practice is predicated on structures where the academic remains the expert; a view previously shared by Jones (2011) and Spronken-Smith (2010). Fung (2017) observes how these concerns have instigated a changing global higher education landscape where students should learn predominantly through research and critical enquiry rather than passively accepting knowledge that is transmitted by a teacher. Latterly Matthews, McLinden and Greenway (2021, p4) reiterate this in exploring the relationship between research and teaching and the role of research-led teaching in fostering "critical thinking and epistemological criticality which when habituated can result in a constant search for enquiry and analysis of knowledge". The culmination of these messages highlights the significance of EBL as an approach aligned with creating a research-oriented learning environment which as Matthews, McLinden and Greenway (2021) observe remains a prominent ambition in higher education.

Against this backdrop I now discuss the purpose of my research

1.4 The Purpose of my Research: Prima Facie Questions

Silverman (2001, p83) observes how research topics "never arise out of the blue rather they arrive, whether we are aware of it or not, from particular models of looking at the world or from certain social problems currently to the fore in society" and this reflects the origins and purpose of this study. The anecdotal observations concerning postgraduate professional healthcare teaching students' changed behaviours during EBL had stimulated my curiosity. I developed three prima facie questions which are presented overleaf.

Thomas (2013) describes how prima facie questions provide a starting point but are likely to be refined and sharpened as the study progresses to reflect the iterative and recursive nature of the researcher's thinking. As Thomas (2013) predicted the prima facie questions presented overleaf were later acknowledged to be too broad and subsequently revised. However despite

their limitations the questions offered a useful departure point from which to develop the study. The revised questions are presented in chapter two: section 2.8, p41.

The prima facie questions presented on p10 were:

1. What are the experiences of postgraduate professional healthcare teaching students who learn through EBL?
2. Do these experiences indicate that EBL is transformative?
3. Do the concepts of plasticity and metamorphosis help us to understand these experiences?

Hansen (2006) advises on the importance of clarifying research questions. I therefore now explain the construct of the prima facie questions and the context in which they were developed along with a brief explanation of how they were later modified. A more detailed explanation of their modification is provided in chapter two: section 2.8, p40-41.

The prima facie questions were constructed to reflect my interpretivist stance and interest in gaining human insight. They were felt to "illuminate what is going on" as Thomas (2013, p11) describes.

Question 1 was constructed to reflect this stance. The word *how* implies an intent to explore participants' experiences. This was later changed to reflect the *type* of experience being sought.

Question 2 was constructed to reflect my interest in EBL's potential to invoke behavioural changes or transformations. This question was later revised to make more specific my interest in these changes to participants' behaviours as learners *and* developing professional healthcare teachers.

Question 3 was constructed to reflect my interest in identifying whether Malabou's (2012) philosophical concepts of plasticity and metamorphosis were helpful in understanding participants' experiences. This question was later revised to make more specific my interest in understanding whether these concepts enabled participants' experiences to be understood *differently*.

In order to provide further context to these questions I now present the model of EBL employed.

1.5 The Model of EBL Employed

EBL was the sole pedagogy employed during the final module of the PGCE over a period of four months. The model employed originates from Price (2003) and was developed within the healthcare context. The model is presented below in Figure 1.2.

Figure 1. 2 The EBL Process (Price, 2003)



The model comprises five stages however participants typically moved back and forth between stages to reflect the iterative and recursive approach to their enquiry. In so doing they were able gather and analyse information and engage in discussion and debate within an environment of facilitator support while working towards a greater understanding rather than a problem solution (Price, 2003). In this sense EBL did not present an *a priori* truth from which logical consequences were deduced; rather it provoked a catalytic sequence of analyses prompted by questions generated within the enquiry process as Hutchings (2007) describes. As such EBL enabled participants' implicit reasoning and tacit knowledge to be brought into the open; a necessary process in *refining their understanding* as Price (2003) observes.

In facilitating the EBL process I followed Pearce's (2013) example which aligns with Price's (2003) description of assisting participants to retain and regain focus through intermittent scaffolding. Some participants undertook additional roles as chair, scribe and timekeeper on a rotational basis. The chair oversaw discussion meetings paying particular attention to discussion conduct while the scribe recorded an outline of discussion content. The timekeeper regulated discussion agendas.

In the first stage *creating the enquiry* a trigger question was used to generate the group's interest in exploring an aspect of professional healthcare teaching practice in more depth. The trigger was a stimulus in *shaping the enquiry* by prompting questions often previously unaddressed in the PGCE. In *gathering and evaluating information* the group organised their time as individuals and subgroups searching for missing evidence and sources of knowledge. The outcomes of their individual and collective activities were discussed critically during weekly

group meetings. Participants were assessed for their intellectual contributions to EBL discussions and as the group felt they were *reaching closure* they communicated their findings via a group presentation.

I employed EBL in this way with several groups of professional healthcare teaching students and over many years. With every group I observed initial states of anxiety when EBL was launched. Students felt uneasy about taking responsibility for leading the enquiry and worried about finding direction and relevant information. It was clear that as I perceived the freedom of discovery afforded by EBL exciting they regarded it as overwhelming.

However, as the EBL process unfolded I noted subconscious transformations in student behaviours; they became more independent manifested in the way they took ownership of the enquiry and began to shape it. They were less preoccupied with gaining sanctions from me in determining its direction. They became more confident and this was particularly noticeable during EBL discussion groups where they were eager to share findings from their personal research. Even the less loquacious students developed stronger voices and engaged in critical debate. Moreover, because the range of information shared was wide and varied and communicated enthusiastically it was received with interest and perhaps reflected the sense of ownership arising from leading the enquiry rather than being led through it.

It is my interest in these observations that gave rise to this study. In the following chapters I illustrate how I was able to explore them further using Gadamer's hermeneutic philosophy within a bricolage of conceptual frameworks. I explain how using the language within their self-generated texts I was able to interpret the behaviours of one group of professional healthcare teaching students by inviting them to self-report on their experiences of EBL during the final module of their PGCE.

I now provide an orientation to my thesis.

1.6 Orientation to the Thesis

In chapter one I draw from Figure 1.1, p3 to discuss how my interest in EBL and the experiences of professional healthcare teaching students' who engaged with it as learners emerged over several years. I explain the purpose and relevance of the study to professional healthcare teacher preparation and postgraduate higher education.

In chapter two I discuss EBL's genesis and evolution within UK higher and professional healthcare education. I present the literature review underpinning the development of the study and explain the systematic approach used in generating the review literature. I outline the search terms and data bases employed and discuss the inclusion and exclusion criteria imposed. I explain how I gauged the quality of the literature using a critical appraisal tool from which resultant exclusions to the review were made. The review is presented as a critical discussion of learners' experiences of engaging with EBL.

In chapter three I present the bricolage of conceptual frameworks supporting the study. I discuss how bricolage was anticipated to enable its Gadamerian hermeneutic design. I explain how the conceptual frameworks within the bricolage informed my understanding of EBL and moreover, the development of the study.

In chapter four I present a series of critical discussions concerning the historical and philosophical evolution of hermeneutics and illustrate the relevance of Gadamer's philosophy to this study. I present a self-developed Gadamerian-informed model of understanding and explain my engagement with the model. I outline the participant-generated sources of text and describe the search for meaning. I address issues related to bias, rigour, trustworthiness, sampling and ethical approval and conduct.

In chapter five I present a Gadamerian-informed interpretation of participants' experiences as enquiry based learners using series of themes and subthemes that emerged from participants' descriptions.

In chapter six I discuss the relevance of my preunderstandings as a researcher. I return to the research questions posed to discuss them in relation to the sources of text, the literature review and the bricolage of conceptual frameworks. My interpretations are presented as possibilities of knowing through bricolage as a shared horizon of understanding.

In chapter seven I conclude my thesis. I reflect on how the concept of bricolage and inherent conceptual frameworks enabled the complexity of participants' experiences as enquiry based learners to emerge. I illustrate my future intentions by revisiting the timeline of my developing interested presented in figure 1.1, p3.

1.7 Summary

In this chapter I gave an account of how *Come to the Edge* was pivotal to my developing interest in postgraduate professional healthcare teaching students' experiences of EBL and how this interest evolved over several years. I explained the relevance of EBL to professional healthcare teacher preparation, the reasons for wanting to undertake the study and the prima facie questions developed. To provide further context I presented the model of EBL employed before providing an orientation to the thesis.

I now progress to chapter two and the literature review that shaped the study.

Chapter 2 Review of the Literature

2.1. Introduction

In this chapter I present the literature review and explain its purpose in shaping the study. I discuss EBL's genesis and evolution within UK higher and healthcare education and explore its predications and physiognomies. I explain the systematic approach used to generate the review literature, outline the databases and search terms employed and the inclusion and exclusion criteria imposed. I discuss how using a critical appraisal tool enabled me to gauge the quality of the literature retrieved from which resultant exclusions were made and outline the type of literature finally selected for the review. I present the review as a critical analysis of learners' EBL experiences and conclude by explaining how the analysis helped me to refine the prima facie research questions posed on p10. I begin by outlining the purpose of the review.

2.2 The purpose of the review

According to Thomas (2013, p58) reviewing the literature enables us to "find out what other people have accomplished in researching the topic". As such the review serves two purposes in shaping the study as explained by Aveyard (2010); firstly to learn about the literature, and secondly to establish its role in the thesis.

Munhall (2012) describes how in existential investigation it is the experiential descriptions that reveal the meaning of experience and deepen our understanding. Munhall's observation was therefore reflected in the search criteria outlined in chapter 2: section 2.5.2 to generate literature pertaining to leaners' experiences of EBL. However, it was also important to acknowledge the origins of EBL within UK higher and healthcare education in order to contextualise these experiences therefore an account of EBL's genesis and evolution within that context is now presented.

2.3 EBL: Genesis and Evolution into UK Higher and Healthcare Education

EBL's discourse originates from several countries including the UK, USA, New Zealand and Australia but little is written of its genesis and evolution into UK higher and healthcare education. Moreover, EBL's origins and evolution are vague.

Hutchings (2007) suggests EBL can be traced back to the Enlightenment while Pearce (2013) identifies Socrates 400BC as the earliest originator. Pearce (2013) also locates EBL's origins in ancient Indian philosophical texts produced by the Upanishads over 1000 years ago.

While its origins are vague EBL's discourse suggests it has undergone a hybrid development from the concept of PBL an idea born of research undertaken at McMaster University, Canada by Barrows and Tamblyn (1980) concerning the education of medical students and the difficulties they encountered in relating knowledge to problems presented by patients. Barrows and Tamblyn (1980) claimed that PBL addressed two important factors; firstly that learning through problem-solving was more effective than memory-based learning and secondly that problem solving was more important in learning to care for patients. It is therefore easy to conceive why PBL was adopted by other healthcare professions such as nursing and midwifery given their focus on solving the problems associated with patient care. I discuss this further in section 2.4.

Dickson (2010) argued however, that problem solving alone did not acknowledge the complexity of this care; a concern previously expressed by Cleverly (2003, p5) who noted that although nurse educators initially enthused about PBL they found themselves "at odds with the label problem". Mantzoukas (2007, p246) endorses both views in observing how during the 1990s healthcare professionals expanded the concept of PBL by changing its name to EBL to "indicate the more sensitive nature of healthcare practice" beyond that of problem solving. To that end EBL's discourse suggests both approaches have been incorporated into healthcare education programmes since both drive for knowledge synthesis rather than memorisation (Dickson, 2010).

Cleaver, Lintern and McLinden (2014, p7) note how contemporary higher education has also been influenced by the need for "greater emphasis on enhancing the quality of the learning experience with students increasingly viewed as active participants in the learning process"; an influence I alluded to in chapter one which continues to the present day (Matthew, McLinden and Greenway, 2021). It is therefore perplexing to note that despite its compatibility with the aspirations of contemporary university learning and professional healthcare teacher preparation that EBL is a concept that defies precise definition. This is now explored.

2.4 EBL: Predications and Physiognomies

Within UK higher education academics from University College London (Fung, 2017) the Universities of Birmingham (Cleaver, Lintern and McLinden, 2014), Sheffield (Levy et al, 2010) and Manchester (Hutchings, 2007; Khan and O'Rourke, 2004) have made substantial contributions to EBL's literature. However, all concede that EBL is not a straightforward concept.

Some authors from the USA employ the word 'inquiry' instead of 'enquiry' and while the majority of UK literature uses the latter, the former has been adopted by some UK researchers such as Levy and Petrulis (2012); Bebb and Pittam (2004) and Cleverly (2003). Hutchings (2007, p9) suggests this adoption is purely a consequence of linguistic history and the reformation of the word 'enquiry' to its original Latin root whose stem vowel was an 'I'. Moreover, EBL is often used interchangeably with the concept of PBL (Stevenson, 2015; Aldridge, 2013; McLinden and Edwards, 2011; Levy et al, 2010; Dickson, 2010; Mantzoukas, 2007; Ashby et al 2006; Glasper, 2001). Some would argue that distinctions are purely a matter of semantics (Mantzoukas, 2007) however, as Glendinning (2011) observes, it is important to recognise that everything has an identity and this identity is what makes everything different.

The notion that EBL is similar to PBL was explored by Feletti (1993) in one of the earliest references to IBL; an analysis of IBL and PBL and their similarities in nursing and medical education. Feletti (1993) concluded that whilst PBL afforded a powerful *instructional* method through its tutorial system, that over time it had been modified by several institutions resulting in the emergence of newer models like IBL. The 'newer' label reflected IBL's more flexible features which were thought to better suit the needs of nurses and other healthcare professionals (Feletti, 1993).

Levy and Petrulis (2012) note it is the conceptualisation of EBL that is perhaps most challenging since to date there is no general agreement about what EBL 'is' or rather what it 'isn't' and how it differs from PBL. This is supported by Aldridge (2013); Spronken-Smith et al (2012); Levy et al (2010); Spronken-Smith (2008); Sharpe and Savin-Baden (2007); Mantzoukas (2007) and Kahn and O'Rourke (2004) who all discuss the *purpose* of EBL but provide no singularly agreed definition. As Howie and Bagnall (2013) suggest, failing to define EBL arguably makes it vulnerable to conceptual slippage. Brookfield (1995, p7) notes that "one of the consequences of a concept's popularity is an increased malleability in its meaning"

and this may account for EBL's perception as an umbrella term encompassing activities like PBL noted by Deignan (2009); Spronken-Smith et al (2012); Spronken-Smith (2008) and Kahn and O'Rourke (2004).

However, it is possible to distinguish EBL from PBL in acknowledging the designation 'enquiry' which Hutchings (2007) describes as the action of seeking not solely the act of problem-solving. To explore this further I returned to the original concept of PBL by Tamblyn (1980, p.xiii) who describes it as "a very specific approach born of difficulties inherent within the North American medical education system at the time". Barrows and Tamblyn (1980) observed how through memory based learning, medical students struggled to assimilate abstract theory with their developing practice as patient diagnosticians and that memory skills were *not* therefore the most important skill for a physician, but problem-solving skills were. Perceived as a more effective way of creating a more practical body of knowledge for medical students by using a tutorial system to diagnose or manage a patient's condition, the emphasis on problem solving implies a resolution or an answer is possible through the process of deduction (Deignan, 2009; Hutchings, 2007). As Dickson (2010) observes it is the focus on 'a problem' that places PBL firmly within the medical domain. In EBL there is no resolution; single right answers do not exist, rather learning is stimulated by an enquiry rather than a specific problem (Rush and Barker, 2006; Kahn and O'Rourke, 2004).

To put this into context Dickson (2010) explains how EBL is therefore situated within a more holistic paradigm by enabling the consideration of the whole person rather than solely focusing on the problems arising from their disease; a paradigm that is more aligned to nursing and the allied healthcare professions.

Although EBL and PBL share similar physiognomies, EBL is not shaped by topics or traditional divisions of knowledge but through an ethos of discovery and analysis, a view supported by Spronken-Smith (2008) Hutchings (2007) and Price (2003). It is this shift in conceptualisation from a *problem* towards the notion of a *question* or *issue* that perhaps offers the most tangible distinction. It is of little surprise therefore to note that EBL has been described as an emerging pedagogy but it has a well-established reputation according to UK researchers Stacey, Oxley and Aubeeluck (2015); Cleaver, Lintern and McLinden (2014) and McLinden and Edwards (2011).

EBL's prominence in higher education is also endorsed further afield for example by Australian philosopher Jones (2011) who argues that higher education should deviate from the traditions of the classical legacy of 'representation' or 'know this' towards phronesis or 'know how through approaches like EBL. Jones (2011) describes EBL as 'an environment' capable of 'letting collective minds loose to learn' rather than one where students are treated like 'coconuts with cerebellums'. In so doing Jones (2011) suggests EBL is a vehicle for greater learner independence; a view that is supported by several other researchers who typify EBL as an approach that positions the learner in a more active self-directed role engaging in discovery, collaboration, and creativity (Cleaver, Lintern and McLinden, 2014; Spronken-Smith et al, 2012; Levy et al, 2010; *former* Higher Education Academy, 2008; Hutchings, 2007; Khan and O'Rourke, 2004 and Cleverly, 2003). Hutchings (2007) notes how given its departure from the traditions of instructionism EBL offers an approach that is philosophically aligned with induction. Hutchings notes how this departure reflects Dewey's (1938) ideas about stimulating learner curiosity and engagement by making learning meaningful, Rogers (1969) ideas about wanting to learn, grow and moreover, taking responsibility for self and others, and Freire's (1984) ideas about learning as something with immediate relevance.

While these observations are useful in informing the study they mostly originate outside of literature concerning professional healthcare teacher preparation. It is therefore important to discuss how literature was generated in relation to the prima facia questions presented on p8 in establishing what others have accomplished through their research. This is now explored.

2.5 Generating Literature Relevant to the Research Questions

In order to generate literature relevant to the prima facie research questions a decision was made to undertake a systematic approach to the review. Robson (2011, p103) describes a systematic approach as "a specific way of identifying and synthesizing research evidence" and observes how this type of review is different to traditional reviews in providing a comprehensive coverage of available literature. The approach also enables the detailed rigorous approach taken in generating the literature to become transparent. What follows is an account of the approach, why this type of review was considered relevant and how it was achieved.

2.5.1 A Systematic Approach to the Literature Review

I deliberately use the term 'systematic approach' to reflect Robson's (2011) description of how the literature was identified, located and analysed systematically. The review was not a

systematic review in the conventional healthcare sense. Taking a systematic approach has added advantages as Siddaway, Wood and Hedges (2019) note; it is methodical, comprehensive, transparent, and replicable utilising clearly stated inclusion and exclusion criteria that are consistently implemented to minimise subjectivity and bias. To illustrate, what follows is an account of the databases and search terms utilised in instigating the search. This is followed by the inclusion and exclusion criteria imposed and their rationale.

2.5.2 Databases and Search Terms

Table 2.1 below denotes the databases I used to conduct the search, the rationale for their selection and the key search terms used. I imposed these criteria to reflect the most likely databases from which to generate literature pertaining to the prima facie research questions since they contain literature concerning the healthcare professions and higher education. The key search terms EBL and IBL reflect their synonymous use within the literature as previously noted. The terms postgraduate professional healthcare teacher preparation reflect the nature of the subject area of interest and the course undertaken by the participants in the study. The terms experiences, perceptions and personal transformations reflect my intention to source literature of a deliberately qualitative and existential nature in gaining human insight about learners' experiences of EBL.

Table 2. 1 Databases Rationale for Selection and Key Search Terms

Database	Rationale for using this Database	Key Search Terms Used
Cumulative Index to Nursing and Allied Health Literature (CIHAHL)	A nursing and allied health resource.	Enquiry / Inquiry based learning / Inquiry learning /inquiry guided learning. AND postgraduate professional healthcare teacher preparation AND experience or perceptions or personal transformations
EBSCOhost	Enables access to a broad range of full text and bibliographic databases across disciplines	
The Education Resource Information Centre (ERIC)	Provides access to educational literature and resources.	
Education Research Complete	An online resource for education research at all levels up to higher education.	

The search was undertaken between 1980 to December 2017 using criteria in Table 2.1, p19. Search alerts were set up via ZETOC to enable the identification of new literature. Additional

literature was generated by references within the literature retrieved. Inclusion and exclusion criteria were applied to further enhance the efficacy of the search. These are now discussed.

2. 5. 3 Inclusion and Exclusion Criteria

Thomas (2013, p59) observes; "only studies of a predetermined type and / or quality are included in the ultimate review". Table 2.2 below therefore illustrates the inclusion and exclusion criteria imposed and accompanying rationale. The criteria were designed to include or exclude particular studies and to make this clear to the reader and other researchers as Siddaway, Wood and Hedges (2019) advocate.

Table 2. 2 Inclusion and Exclusion Criteria

	Inclusion Criteria	Exclusion Criteria	Rationale
Date Range	1980 to December 2017	Literature beyond data collection period	To acknowledge the origins of EBL/IBL to the point the review was exhausted
Subject	Enquiry /Inquiry based Learning / Inquiry learning	Literature pertaining to problem based learning	To acknowledge previous analysis of EBL's discourse and model of EBL employed
Specific Foci	Healthcare professionals experiences of EBL. Plasticity and metamorphosis as defined by Malabou (2008, 2012) in relation to learning through EBL	Literature pertaining to none healthcare professionals' experiences of engaging with EBL	To reflect unique characteristics of healthcare professionals.
Academic Level	Post compulsory undergraduate and postgraduate students	Compulsory education	To acknowledge higher education adult learning context of study.
Country of Origin	UK, Ireland and USA and countries whose higher education systems are similar to UK.	Countries whose adult learning systems differ greatly from the UK	To reflect experiences of students similar to those in the UK higher education sector.
Language	English		

2.5.4 Inclusion Criteria

The inclusion period is from 1980, when research concerning PBL, from which it is thought EBL originated, was first published, to 2017 the time at which the search was felt to be

exhausted. The remaining inclusions represent the subject and focus of my investigations within parameters that reflect as closely as possible the professional healthcare teaching students in the study.

2.5.5 Exclusion Criteria

Literature pertaining to non-healthcare professionals' experiences of EBL was excluded from the review to ensure relevance to the professional characteristics of the postgraduate professional healthcare teaching students in the study. However, given its value in gaining greater understanding of higher education learners' experiences of EBL within the UK and further afield some of this literature has been incorporated into broader thesis discussions.

A decision was also taken to exclude literature pertaining to PBL based on the analysis presented earlier in this chapter where I identified how EBL is distinct in its purpose and designation; that of 'enquiry' or 'inquiry' or as Hutchings (2007) describes 'the action of seeking' and not solely problem-solving. In EBL there is no 'resolution' sought and single answers do not exist, rather learning is stimulated by an open ended enquiry not an intention to solve a specific problem as Rush and Barker (2006) and Kahn and O'Rourke (2004) observe. EBL is not therefore shaped by topics or traditional divisions of knowledge but through an ethos of discovery and analysis (Spronken-Smith, 2008 Hutchings, 2007 and Price, 2003). And it is this shift in conceptualisation from a *problem* towards the notion of a *question* or *issue* that helps to clarify this distinction. However, my quest is not to resolve differing academic opinion, rather it is to move beyond and explore the experiences of professional healthcare teaching students who engaged with a process of EBL in the final module of their course.

The decision was also informed by an analysis I undertook prior to the study (Stevenson, 2015) in which I employed the concept of *deconstruction* (Derrida, 1978) to analyse the language within EBL's discourse. Derrida's (1978, p282) observation that "language bears within itself the necessity of its own critique" was borne out during this analysis when it became apparent that EBL's language was 'unstable' and subject to 'freeplay' as Derrida described making fixed meanings about EBL largely unattainable. This ambiguity may account for the interchangeable use of the terms EBL and PBL previously noted and perhaps explains why EBL has no singularly agreed definition to date.

Alongside the inclusion and exclusion criteria it was necessary to assess the quality of the literature before selecting it for review and what follows is an account of how this was achieved.

2.5.6 Gauging the Quality of the Literature

Thomas (2013, p58) reminds us that care must be taken when gauging the quality of all sources particularly written materials and one must not assume they are of impeachable quality. However, it can be difficult to critique qualitative studies in relation to their strengths and weakness due to the subjective interpretation of themes as Aveyard (2010) observes.

The process of gauging the quality of the literature began by becoming familiar with its main features. Details of each piece were annotated to provide an at-a-glance record comprising the author(s), date of publication, type (research, theoretical, other), methodologies employed, main findings and arguments. This was followed by a structured process of examining and critically appraising each piece using a critical appraisal tool (CAT) developed by the Critical Appraisal Skills Programme (CASP) (2013).

The CAT (Appendix 1, p172) was designed by the CASP team at the University of Oxford in order to gauge the quality of qualitative research. Its purpose is to enable a systematic assessment of the trustworthiness, relevance and results of published papers. It was therefore appropriate in gauging the quality of the literature selected for this review.

The CAT comprises three sections and ten questions for systematically making sense of qualitative research. Using the CAT enabled literature to be scrutinised thoroughly resulting in the decision to exclude three pieces from the final review despite their initial perceived relevance. These are now discussed.

2.5.7 Exclusions made using the CAT (CASP, 2013)

A study by Glasper (2001) initially perceived as relevant to research question one given its focus on student children's nurses' reflections about their engagement with EBL was excluded because no methods of data collection or analysis were presented making it difficult to gauge the quality of the study.

A study by Deignan (2009) thought relevant to prima facie question one in which the perceptions of staff and students involved in EBL were explored was also excluded. Despite

its quality only one of fifty participants was a healthcare professional. The remainder comprised participants from subjects outside of healthcare.

A paper by Freidman et al (2010) initially included for its relevance to prima facie question one by describing faculty and student experiences of enquiry learning was excluded given the absence of methodology and data analysis. It was difficult to gauge the quality of claims made about the benefits of enquiry learning.

Despite their exclusions from the final review these studies provided valuable insight about EBL in a more general context.

What follows is an explanation of the literature selected for final review.

2.5.8 The Nature of the Literature Selected for Review

The final review was underpinned by 16 UK primary qualitative research studies dated between 2004 and 2016, and two key texts whose focus is on EBL within nursing/ healthcare professional education comprising:

- **Fourteen evaluation studies** defined according to author description and Robson's (2011) definition of studies whose purpose is to assess the effects of something.
- **One case study** defined according to author description and Thomas' (2013) definition of studies that seek in-depth explorations in a real-life context.
- **One hermeneutic study** defined according to author description and Ritchie et al's (2014) definition of studies that explore the conditions in which a human product e.g. text was produced in order to interpret its meanings.

All research studies were selected for their significance to the prima facie research questions posed on p8. Their quality was assessed using the CAT. The key texts included in the review were selected for their relevance to the professional healthcare context in which EBL was employed in this study.

The literature underpinning the review is presented in Table 2.3 overleaf. This is followed by an account of how I approached the literature in order to make sense of it.

Table 2. 3 Literature Underpinning the Review

Literature Source	Author(s) Date		Type
Theses	Midwifery Nallen (2016) Healthcare Professional Healthcare Teaching Students Pearce (2013)		Evaluation Study Case study
Peer Reviewed Journal Publications	Nursing Stacey et al (2015) Rigby et all (2011) Horne et al (2007) Ashby et al (2006) Rush and Barker (2006) Bebb & Pittam (2004) Morris & Turnbull (2004) Gouldsborough & Sheader (2006) Kirwin & Adams (2008)	Midwifery Snow & Torney (2015) Hamilton et al (2012) Tullly (2010) Brown et al (2008) Fisher & Moore (2005)	Evaluation Studies Hermeneutic Study
Key Texts	Nursing Price (2003) Cleverly (2003)		Professional Guides to EBL/IBL

To make sense of the literature, I analysed each piece several times. I made observations about the nature of learners EBL experiences from which categories emerged (Appendix 2, p173). Further examination of these categories revealed two themes; experiences perceived as beneficial and those perceived as challenging (Appendix 3). I utilised these themes for the purpose of review discussion.

2.6 A Critical Review of the Literature

The review is now presented as a critical discussion of two themes that emerged from the process described above. The themes are:

- Theme 1 Experiences of EBL perceived as beneficial
- Theme 2 Experiences of EBL perceived as challenging

I begin by positioning findings within the context of current healthcare literature where EBL is less prominently featured than it was between 2003 and 2015. This is curious given the language of professional healthcare practice and higher education which continues to signify a drive to foster skills of enquiry and critical thinking (Matthew, McLinden and Greenway, 2021; Fung, 2017).

The NMC (2018, p3) advocate practitioners should have the skills to empower people, communities and populations to exercise choice and take control of their health, their decision-making and associated behaviours. In order to advise patients safely and appropriately healthcare practitioners must understand what constitutes evidence and how to source it and interpret its trustworthiness. It is therefore imperative that the professional healthcare teacher is able how to facilitate the development of these skills in developing other healthcare practitioners.

However, only one primary research study was found to have direct bearing on the impact of EBL within the context of professional teacher preparation in England. This was a thesis comprising a single case study by Pearce (2013) in which the EBL experiences of postgraduate professional healthcare student teachers' were investigated within the context of leadership development. No other studies pertaining to postgraduate professional healthcare student teachers' experiences of EBL were found.

While a more recent thesis Nallen (2016) explores Higher Diploma midwifery graduates perceptions of EBL, the focus is the impact of EBL on clinical practice not professional healthcare teacher preparation.

The remaining studies in the review were therefore included for their relevance to the professional characteristics of the participants in this study. Nine investigate undergraduate nursing student's experiences of EBL and six investigate undergraduate midwifery students' experiences of EBL.

2.6.1 Experiences of EBL Perceived as Beneficial

Among the experiences perceived as beneficial, feeling motivated through EBL's freedom and wanting to develop educative practice are reported by Pearce (2013, p93, p182, p186). Pearce (2013, p10) describes the thesis as a single case study because it "explores the phenomenon arising from the students' experiences of EBL". EBL is reported as helpful in relating theory

to practice whilst enabling professional healthcare teachers to gain broader perspectives in their learning. The sample size of 59 and the extent that EBL was employed mean that generalisations cannot be made in relation to this study, however, participants were from multiple cohorts and engaged with EBL throughout the entirety of their course. In contrast participants from my study are from one cohort and engaged with EBL in the final module of their course. However, because there are many similarities between model of EBL employed and the characteristics of participants' in both studies, Pearce's (2013) findings are pertinent since they provide some insight into professional healthcare teaching students' self-reported experiences of EBL.

Using semi-structured group interviews Pearce's study sought to investigate whether group engagement in the EBL process brought about potential leadership skills. While the development of leadership skills is not the focus of my thesis, Pearce's (2013) study provides valuable insight into the broader self-reported experiences of students who engaged with the EBL process.

The research design was appropriate to the study aim which Pearce (2013) describes as a "hermeneutic endeavour" (p104). The methodology reflects one philosophical assumption underpinning hermeneutics described by Koch (1999) as gaining shared understandings and constructing knowledge through dialogue. However, a further significant philosophical assumption is the metaphor of the hermeneutic circle to which Pearce (2013) does not allude. Koch (1999) observes how through the hermeneutic circle the researcher is able to demonstrate repeated movements between interpretations of the text, in this case interview transcripts, thus giving rise to ongoing emergent and richer understandings.

Many experiences reported by Pearce (2013) are reported across the review literature. For example, Gouldsborough and Sheader (2006) from the UK's University of Manchester Centre of Excellence in EBL (CEEBL) undertook an evaluation of 106 first-year learners' experiences of an EBL component in a combined PBL/EBL undergraduate nursing degree course undertaken by 112 learners. The purpose of the evaluation was to explore learners' perceptions of EBL before engagement and then to establish learner views on their actual experience of EBL through questionnaire and focus group discussion. No ethical approval was sought for the project since it was considered an evaluation of teaching. While the project does not constitute primary research, findings have some relevance to prima facie question one in this study.

Learners reported increased levels of motivation as a perceived and actual benefit of EBL. Self-study and sharing of information and ideas through discussion were identified as key motivators enabling clarification of queries and enhanced understanding. 77% of learners had previously engaged in group discussion, a key feature of the EBL process, but were unable to explain what EBL was despite perceiving it as a way of learning that would increase their levels of motivation. It is therefore difficult to gauge whether perceptions were based on prior experience of group discussion or EBL. Furthermore of 14 learners randomly selected only nine attended the focus groups. This is a very small proportion of the population who engaged with the evaluation overall and it is difficult to ascertain if participants were typically representative of the cohort as a whole. Further, although focus groups afford opportunities to gain views and attitudes quickly and economically, Thomas (2013) notes how people can behave differently in focus groups with some being more talkative than others.

Increased motivation is also reported by Rigby et al (2011) in a UK qualitative evaluation of 24 mental health nursing students' experiences of a blended learning programme. Although the study sought to evaluate the implementation of a blended learning model, students' experiences of EBL (as a programme element) were discussed during three focus group interviews. The groups comprised seven to ten students. The authors acknowledge the small sample size and make no claims about generalisations with other nursing fields. Moreover, they acknowledge students were self-selecting and recognise the risk of response bias. Like Gouldsborough and Sheader (2006) the authors observe how learners regarded EBL as motivational because it enabled self-directed learning and greater levels of enjoyment which they attributed to ongoing discussions, exchanging ideas and gaining different and previously unconsidered perspectives while focussing on self-selected issues perceived as far more interesting.

The theme of motivation is also reflected in a small-scale qualitative UK study by Kirwan and Adams (2008) who through semi-structured individual interviews explored whether qualified nurses' believed their practice had been influenced by EBL during a professional development module. Like Pearce's (2013) case study, this is of particular relevance to my research since it is informed by Gadamerian hermeneutic phenomenology. The authors offer some explanation about the philosophical assumptions informing hermeneutics but provide no specific methodology. As with Pearce's (2013) study it is therefore difficult to establish if the authors engaged with the hermeneutic circle which may have further enriched their understanding. Moreover, much of the study is underpinned by PBL literature though the authors acknowledge

the interchangeable use of the terms EBL and PBL in nursing. Although small-scale with only eight participants the study offers valuable insight into qualified nurses' experiences of EBL which is reported as energising and motivating in imposing self-direction. This was perceived as beneficial in making learning meaningful, clarified by those who indicated a preference for self-direction as opposed to being 'given' information.

That EBL is regarded as valuable and motivational is also reflected in a small-scale UK evaluation of 26 mental health pre-registration diploma students' experiences of EBL by Rush and Barker (2006). However, the evaluation, in which participants provided written descriptions of their experiences, explored views about the integration of service users into the EBL process. As such the terms valuable and motivational were used to reflect the value placed on service user engagement within the EBL process, not the solely the EBL process itself. This illustrates the significance of *how* qualitative research findings are presented and moreover, interpreted as Robson (2011) notes albeit the authors conclude there is scope for a further project to explore students' perceptions of the value of EBL with and without service users. Like Kirwan and Adams (2008) considerable lengths are taken to distinguish EBL from PBL yet the evaluation is largely underpinned by PBL literature emphasising the previously identified risk of conceptual slippage by Howie and Bagnall (2013).

The interchangeable use of EBL and PBL is also noted in a UK qualitative evaluation by Ashby et al (2006) involving five focus groups comprising one group of post-registration nurses, three groups of pre-registration nurses and one group of teachers. Moreover, the evaluation is underpinned largely by PBL literature. However, findings reiterate EBL's motivational impact in enabling learners to take responsibility for their own learning giving rise to the sense that something important was being learned. This echoes findings from Rigby et al (2011), Gouldsborough and Sheader (2006) and Rush and Barker (2006). Indeed learners associate EBL with increased motivation across the literature. In order to try and understand why this is so it is useful at this point to consider what is known about motivating adults generally.

In acknowledging that motivation is a concept that explains why people think and behave as they do, American educationalist Wlodkowski (2008, p1) draws on the work of Weiner (1992) observing that being motivated means being *purposeful* by using attention, concentration, imagination and passion to pursue goals. If this thinking is applied to EBL it is possible to understand perhaps why learners report it as motivational. For example Pearce (2013, p113)

noted how “the EBL process allowed them freedom to explore concepts”. However, Pearce (2013) goes on to observe that with freedom came states of liminality as new and unpredicted discoveries were made. But it was moving in and out of liminal states observed Pearce (2013) that seemed to motivate learners, a view that has previously been supported by EBL’s exponents outside of this review who suggest it is the experiential dimensions of EBL’s ontology that enables the learner to drive their own learning and confront the Socratic paradox that is their ignorance (Spronken-Smith, 2008; Hutchings, 2007; Kahn and O’Rourke, 2004 and Price, 2003).

It is possible to see how the freedom EBL affords promotes purposeful learning which Wlodkowski (2008) argues equates to learning that is more meaningful, worthwhile and therefore of benefit. While not part of the review literature this thinking is supported by Jones (2011) who in describing EBL as an approach where collective minds are ‘let loose to learn’ implies this sense of freedom. That freedom is beneficial to learning isn’t new it was central to Dewey’s (1938, p63) seminal text on experience and education in children where it was regarded as a means of “judgement and of power to carry deliberately chosen ends into execution”. As Wlodkowski (2008) observes if motivation bears such a constant relationship to learning for younger students, we can reasonably assume it has a similar relationship with adults.

Being motivated by EBL may also account for another experience perceived as beneficial; developing critical thinking skills reported by Nallen (2016); Snow and Torney (2015); Pearce (2013); Brown et al (2008); Horne et al (2007); Fisher and Moore (2005).

It is Dewey’s (1910) publication ‘*How We Think’* that is widely accepted as the origin of critical thinking which Dewey (1910, p6) describes as “active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends”. As Casey, Clark and Hayes (2017) observe, the critical thinker is fully engaged and able to consider issues and question underlying assumptions by scrutinising evidence.

Having grounds or reasons for belief is essential to professional healthcare teaching students; they must be able to source, interpret and utilise evidence in preparing future practitioners who must also demonstrate these skills. Price (2003) argues that practitioners are often criticised for being unable to utilise available research evidence and in particular draws attention to the

theory-practice gap as one of the primary drivers for the introduction of approaches like EBL within professional education. It is therefore interesting that learners in some studies associate EBL with developing skills for evidence based practice such as the ability to think critically.

Cleverly (2003, p7) observes how EBL methodology "relies on activities like exploration, discussion, analysis and the synthesis of new and old learning, all of which exercise the cluster of investigative and deductive skills that characterise critical thinking" the importance of which is reported more recently in an Irish qualitative study by Nallen (2016). Nallen sought to elicit perceptions of EBL regarding its impact on practice from 14 higher diploma midwifery graduates in two cohorts using semi-structured interviews within a single practice setting and a theory-driven approach as a philosophical framework to underpin the evaluation. Participants had not thought about critical thinking within the context of EBL but when prompted to do so felt EBL had changed the way they thought and improved their skills of analysis. Moreover, they reported being more likely to question practice and identified how EBL had broadened their perspectives; an experience also reported by Pearce (2013) in relation to changing ways of thinking.

Similarly in evaluation research using mixed methods to ascertain first-year pre-registration midwifery students' experiences of EBL as the underpinning approach to their three year curriculum, Snow and Torney (2015) report increased critical thinking skills in their UK study. 85 learners undertook Likert-scale type questionnaires of which six participated in focus group interview to discuss their experience. 73% of respondents to the questionnaires reported increased critical thinking skills as a positive aspect of EBL however; the reasons for this are unclear since there is no reference to qualitative narrative.

Correspondingly, in a UK evaluation of 20 undergraduate midwifery students Fisher and Moore (2005) observed that student key graduate attributes (KGAS) skills; in particular cognitive skills such as critical analysis had developed significantly by engaging with EBL. The study employed focus groups at various intervals within a midwifery degree course. The authors also report that non-EBL students identified minimal development of KGAS in their questionnaire and focus group responses.

That EBL has the potential to develop critical thinking skills is evidenced in a number of other ways by Nallen (2016); Pearce (2013) and Tully (2010). These studies report how learners associate EBL with opportunities to engage in deeper learning characterised by synthesising

theory with practice. This corresponds with Biggs and Tang's (2007) account of deeper learning as a felt need to engage in learning meaningfully focussing on underlying ideas and gaining a sense of the bigger picture and this is reflected in reports of broadening perspectives and a deeper sense of meaning reported by Nallen (2016) Pearce (2013), Browne et al (2008) and Horne et al (2007) leading some participants to question professional practice.

In their UK qualitative evaluation Horne et al (2007) report on findings from a study involving 121 students and facilitators who engaged with EBL in an undergraduate nursing degree. The study was part of a wider project in North West England involving universities encouraged to build EBL capacity. Using nominal group technique and focus group interviews the researchers provide a detailed account of their methodology. Findings suggest that using enquiry encouraged deeper exploration of nursing and allied subject material through independent learning and wider reading. However, the terms EBL and PBL were used interchangeably and the study was underpinned in the main by PBL literature.

Brown et al (2008) present similar findings in their UK qualitative action research project involving 146 undergraduate student midwives whose views of EBL were sought through questionnaire, four focus groups and a collaborative workshop for future planning. However, beyond their claim that EBL provides an opportunity to engage in deeper learning there is no discussion of how this was determined. Moreover, in their conclusion the authors refer to 'evidence' not 'enquiry' based learning which further emphasises the need for conceptual clarity to avoid the risk of misinterpretation and misrepresentation.

What emerges from the review so far is that learners in several studies appreciate the self-directed nature of EBL in driving their own learning and that EBL is associated with deeper approaches to learning as Gouldsborough and Sheader (2006), Rigby et al (2011) and Rush and Barker (2006) report. These findings are mirrored by studies outside of the healthcare education arena by Spronken-Smith (2008); Hutchings (2007); Kahn and O'Rourke (2004) and Price (2003) where increased levels of motivation and the development of critical thinking skills are also reported along with increased levels of self-confidence. Contemplating Wlodkowski's (2008) observations about competence may help to understand the reasons for this. Wlodkowski (2008, p110) considers how competence can build confidence because "practicing newly developing skills and mastering challenging tasks engender positive emotions" and this is reflected in several studies in this review.

For example, Bebb and Pittam (2004) report increasing levels of self-confidence in their small-scale UK evaluation of the EBL experiences of 15 pre-registration nursing students who engaged with IBL in their first year of study. Students' views were sought using questionnaires which then informed semi-structured interviews. When reflecting on their first year, learners experienced increased confidence in a number of ways associated with the EBL process such as overcoming shyness through presenting to peers and feeling more comfortable in asking questions. Some also reported feeling more comfortable about admitting their ignorance to peers during discussions.

UK researchers Brown et al (2008) report similar findings in exploring how students' valued working collaboratively in small EBL groups which was felt to build individual confidence from two aspects; firstly the ability to learn and secondly in developing presentation skills. Moreover, learners felt EBL enabled them to share views and express their true feelings about issues; the latter of which was also observed by Pearce (2013) whose participants felt a sense of liberation in the act of speaking out.

Fisher and Moore (2005) also report that despite initially lacking confidence learner confidence grew as the EBL process unfolded. Learners felt EBL enabled them to explore relevant issues in-depth and as a result felt more confident in their knowledge and understanding. This is also supported by Nallen (2016); Snow and Torney (2015); Rigby et al (2011); Gouldsborough and Sheader (2006); Rush and Barker (2006) where an association was made between being self-directed and having control of learning.

Correspondingly in a small-scale UK evaluation of a new pre-registration midwifery programme that employed EBL Hamilton et al (2012) report how learners valued EBL because they felt it developed their confidence, albeit participants were self-selecting and took part because they enjoyed their EBL experience.

Improved confidence is also reported by Morris and Turnbull (2004) in their UK qualitative evaluation study. However, this study was rather unusual; recognising a previously heavy reliance on instructionism, the authors implemented a shift towards student-centred learning using an approach which they describe as inquiry-based learning where student nurses where invited to act as teachers with the brief of feeding back to peers following a series of parallel resource lectures delivered by teaching staff. Learner experiences were then sought through a

series of focus group interviews involving 240 undergraduate nursing students. Unsurprisingly learners were uncomfortable with adopting the role of teacher.

The relationship between EBL, being self-directed, feeling motivated, critical thinking skills and gaining confidence is also noted by Tully (2010) in a UK study described as phenomenological in approach. Using in-depth unstructured interviews the experiences of six midwifery students were explored at the end of their three year programme. Tully (2010) reports how in the majority of cases learners associated EBL with feeling motivated through being more proactive in finding research and feeling confident to critique it and feed it back to peers. Learners also reported feeling more confident to explore and question things in the clinical environment.

However, the perceived benefits reported by learners across the review literature the categories and themes emerging from the review also suggest EBL poses a number of challenges. These are now discussed.

2.6.2 Experiences of EBL Perceived as Challenging

While learners report many benefits to EBL their reports also reveal EBL correspondingly invokes significant personal challenges. For example, while participants in Pearce's (2013) study reported EBL as motivating, it was also described as overwhelming by some who universally regarded EBL with feelings of anxiety. Pearce (2013) also identifies how participants also reported a sense of vulnerability during EBL discussions where their knowledge was challenged. This was reported to engender feelings exposure. Pearce (2013, p128) later illustrates this by citing one participant, an experienced clinical practitioner, who described their experience by saying "I felt like a novice, as if I was sixteen again and knew nothing again".

Pearce (2013) suggests feeling vulnerable and exposed bear the hallmarks of a threshold process described as one that forces the learner into states of liminality or suspended states of partial understanding (Meyer and Land, 2003).

Moreover, Pearce (2013, p183) describes how the learners in her study underwent an "ontological shift a result of experiencing EBL" leading to temporary loss of identity. Curiously however, most participants described these more challenging aspects of EBL as a necessary if not fundamental part of their development (p115).

That EBL poses a series of simultaneously beneficial and challenging experiences is also reflected in other studies from the review. Elements perceived as beneficial on the one hand but challenging on the other are reported by Tully (2010) Kirwan and Adams (2008) and Bebb and Pittam (2004).

For example while learners reports suggest being self-directed was beneficial by motivating and empowering, studies by Ashby et al (2006) Gouldsborough and Sheader (2006) Fisher and Moore (2005) and Morris and Turnbull (2004) suggest being self-directed was also challenging evidenced by learner reports that EBL was uncomfortable and anxiety-provoking.

Ashby et al (2006) suggest these opposing experiences are associated with the complex and somewhat counter-productive relationship between having the freedom afforded by being self-directed and the pressures of assuming responsibility for self and peer-learning. This is echoed by Snow and Torney (2015) who report how learners experienced difficulty in making the transition from being teacher-led to a student-led way of learning.

Conversely, being self-directed and thereby taking responsibility for the learning of self and others is also reported to broaden perspectives by Kirwan and Adams (2008); Gouldsborough and Sheader (2006) and Fisher and Moore (2005). Learners felt that being self-directed enabled them to develop presentation skills through the need to share information with peers.

It is interesting to note therefore that being self-directed was also reported as intimidating initiating feelings of insecurity and uncertainty by Pearce (2013) Gouldsborough and Sheader (2006) Fisher and Moore (2005) and Morris and Turnbull (2004).

Hamilton et al (2012); Tully (2010); Kirwan and Adams (2008); Ashby et al (2006) and Fisher and Moore (2005) suggest that feelings of uncertainty and insecurity that learners associated with being self-directed were in relation to the need to feel oriented to the EBL process and knowing what was expected of them.

Feelings of uncertainty and insecurity were also associated with the quality of teacher facilitation and the level of scaffolding provided in studies by Hamilton et al (2012) Tully (2010); Kirwan and Adams (2008) and Horne et al (2007).

Teacher facilitation is also associated with experiences perceived as challenging in relation to facilitator style, the quality of guidance received and level of feedback provided during the

EBL process. For example Tully (2010) reported inconsistencies in the approaches taken between facilitators which resulted in learner confusion. This was echoed by Kirwan and Adams (2008) whose participants reported lack of facilitator guidance as a chief cause of apprehension and insecurity particularly in relation to the progress of group discussion where insufficient feedback was provided about the level of detail expected from learners.

Kirwan and Adams (2008) and Goldsborough and Sheader (2006) also report challenges associated with teacher facilitation reported by learners; they note how some facilitators were perceived as being more engaged than others. The researchers report these experiences as important given the facilitator is pivotal in supporting progress, maintaining the dynamics of the group and overseeing group participation and division of labour. This is supported by Goldring and Wood (2009) who describe the role of the facilitator as one that is hugely instrumental in creating an atmosphere for free discussion; the basis on which the EBL process thrives.

Moreover, these reports are significant to the professional healthcare teaching student in understanding the complexity of EBL in being able to recognise that some learners cope well with liminality while others require support and guidance as Pearce (2013) notes.

While EBL seems capable of developing skills commensurate with post-graduate learning such as the ability to work independently, be self-directing and think critically (QAA, 2000) it is also an approach capable of initiating states of uncertainty, be demotivating and create a state of dependence. Through its self-directed approach EBL invokes an ontological change in identity between learner and teacher. Moreover, EBL can create potentially disorientating experiences for a number of reasons some of which can be attributed to variations in facilitation rather than EBL process itself. And as the review has revealed, often reports of uncertainty and insecurity are also presented alongside reports of feeling motivated and empowered.

In this regard it seems that EBL can be simultaneously helpful but challenging which corresponds with my anecdotal observations. These observations highlight an important point by Hutchings (2007) that EBL should not be regarded as a panacea.

However, it also seems that EBL addresses what Mezirow (2000, p3) calls a defining condition of being human; “the need to understand and order the meaning of our experiences and to integrate them with what we know in order to avoid the threat of chaos” and this has been

reported through a number of experiences perceived as beneficial and challenging. The findings from the review are now discussed.

2.7 Review Discussion

With the exception of Pearce's (2013) thesis none of the studies in the review specifically explore postgraduate professional healthcare teaching students' experiences of engaging with EBL as learners. However, what emerges from reports of other health and allied health learners is that EBL is as a powerful approach that carries important benefits and necessary challenges and often simultaneously. In this sense the review literature suggests EBL attracts an almost 'Janus-faced' identity capable of imposing change or transformations in learner behaviour.

For example, learners have described how EBL necessitates becoming independent and self-directed (Bebb and Pittam, 2004; Kirwan and Adams, 2008; Tully, 2010; Horne et al, 2007). EBL unties the typically familiar identity that learners have with their teacher and repositions them in a different relationship in which they become self-directing enquirers which as the literature reveals can be both liberating and challenging and dependent upon effective facilitation and scaffolding. According to Gregory (2002, p81) in Tosey (2006) facilitation literally means 'easing' or helping learners to learn and make sense of their experience. The aim is to nurture self-directed and empowered adults within an environment for enquiry that is safe and in which there is trust that is managed both physically and psychologically. However, learners' reports suggest that in many cases this aim is not realised and this may be due to insufficient support by the teacher.

The ontological shift in identity associated with being self-directed is aligned with an observation made by Biesta (2015) who notes how radically altered views of what it is to be a teacher in pre and post compulsory education and open up new opportunities and challenges for any learner. This has particular relevance for the professional healthcare teaching student who may experience the same challenges as those presented in the review while simultaneously learning how to facilitate EBL as a prospective teacher. And this may account for why EBL simultaneously influences learner motivation both positively and less positively (Snow and Torney, 2015; Hamilton et al, 2012; Rigby et al, 2011; Tully, 2010; Goldsborough and Sheader, 2006; Brown et al, 2007; Ashby et al, 2006 and Fisher and Moore, 2005). This may account for changing levels of confidence reported by the same researchers and the development of

critical thinking skills reported by Nallen (2016); Snow and Torney (2015); Pearce (2013) Brown et al (2008); Horne et al (2007) and Fisher and Moore (2005).

It seems EBL has the potential to change personal and professional meaning perspectives and frames of mind as Mezirow (2000, p8) and latterly Illeris (2014) describe by prompting learners to negotiate and act on their own purposes, values and meanings rather than those uncritically assimilated from others. In this sense findings from the review suggest that learners' descriptions align with the concept of transformative learning; that which enables learners to "acquire and develop changes in their understandings of and dealings with the essential conditions of life and the outside world" (Illeris, 2014, p1). Illeris explains how in its original form, Mezirow's (1978) definition of transformative learning received criticism for its largely cognitive focus on transformations of meaning perspectives, frames of reference and habits of mind. Moreover while Mezirow accepted that emotional, social and societal dimensions were also inherent within learning, they were considered to be concomitant rather than central to learning. For Illeris (2014) these dimensions are inseparable since they are integral to the ontology of the individual learner and this seems to be verified in learners' reports in this review. However, what is less clear is whether learners recognise them as personal transformations.

The acquisition and development of understanding is also consistent with Malabou's (2012) philosophical concept of ontological plasticity; an 'environment' in which the individual maintains and evolves though no studies were found to support this.

While all studies reviewed provide some insight into nursing and allied healthcare students' experiences they largely pertain to undergraduate programmes. Generalisations cannot therefore be made given the postgraduate context of the participants in this study. Moreover, none of the studies sought to interpret these experiences rather they were reported factually. While the studies reviewed allude to the perceived benefits and challenges associated with EBL few offer detailed information about these experiences other than a broad description.

What lacks is rich description that conveys in detail learner experiences of engaging with EBL and whether EBL is perceived to bring about any noticeable changes in the development of professional healthcare teachers. For this reason Gadamer's (1975) hermeneutic philosophy was considered so relevant to this study which is concerned with understanding the life world as it is lived (Laverty 2003).

While one study alludes to Gadamerian hermeneutics this is only in a descriptive sense to illustrate how the study was underpinned; there is no evidence of the repeated movements between interpretations of learners' experiences that would enable the emergent and richer understandings reflect Gadamer's (1975) thinking. In this sense the review has identified a need to probe more deeply into the language leaners' use to report their experiences of engaging with EBL. Perhaps these observations reflect the difficulties of translating the depth of hermeneutic principles into contemporary healthcare professional research noted by Debesay, Nåden and Slettebø (2008).

None of the studies reviewed refer explicitly to EBL as a transformative way of learning despite reporting changes in the learners' dispositions during or as a result of the EBL process. As Malkki and Green (2014, p5) observe "although the notion of transformative learning points to a desirable destination for educational endeavours, the difficulty of the journey is often neglected" and this is an observation supported by this review.

To date no studies have attempted to examine postgraduate professional healthcare teaching students experiences of EBL using Malabou's (2008; 2012) ontological concepts of plasticity and metamorphosis suggesting this thesis represents new and original thinking. It is acknowledged however, that this claim is made on the basis of applying the inclusion and exclusion criteria developed for the review.

2.8 Summary

Aside from Pearce (2013) none of the studies reviewed report professional healthcare teaching students experiences of engaging with EBL as learners. Undertaking the review has helped to define more clearly the focus and position of my research as Thomas (2013, p58) predicted and has enabled me to position relevant literature within the thesis and develop fresh insights as Aveyard (2010) suggests.

Fleming Gaidys and Robb (2003, p116) assert that "essential to any research process is the appropriateness of the research question in relation to underpinning methodological assumptions" and undertaking the review has positioned my research into a more specific context. This prompted me to refine the prima facie research questions presented in chapter one, p8. Thomas (2013) identifies how reading the literature enables this refinement.

The prima facie questions presented on p10 were:

1. What are the experiences of postgraduate professional healthcare teaching students who learn through EBL?
2. Do these experiences indicate that EBL is transformative?
3. Do the concepts of plasticity and metamorphosis help to understand these experiences?

Given the hermeneutic nature of my evolving study it was important to refine and clarify these questions to ensure they were congruent with the aims of interpretation and to generate appropriate and useful data as Fleming, Gaidys and Robb (2003) observe. I therefore refined prima facie question one to make more explicit when EBL was encountered. I also made more explicit my hermeneutic interest in participants' felt experiences within the context of human 'being' initially described by Heidegger (1927) and later by Gadamer (1975). This refinement also made more transparent my intention to invite participants to describe their experiences and moreover, my intention to interpret their experiences hermeneutically. I refined prima facie question two to make clear my intention to explore whether participants descriptions signify any personally transformative changes in their attitudes or behaviour whether in relation to the way they learn or in relation to their developing professional healthcare teaching roles. I refined question three to make more explicit my interest in exploring whether the ontological concepts of plasticity and metamorphosis described by Malabou (2008; 2012) may help to understand these experiences any differently. The revised questions are presented below.

1. In what ways do postgraduate professional healthcare teaching students describe their existential experiences of EBL?
2. Do their descriptions suggest they encountered any personally transformative changes to their attitudes or behaviours as learners and developing professional healthcare teachers?
3. Do the philosophical concepts of plasticity and metamorphosis (Malabou, 2008; 2012) help us to understand their personal experiences as enquiry based learners any differently?

Gadamer (1975) describes how hermeneutics is concerned with questions of experience and understanding in order to interpret the human experience. Given that both are entirely germane to this study it was felt these revisions reflected more closely questions of experience and understanding; questions that are uncommon in literature concerning EBL. Moreover,

Gadamer (1975) emphasises that being human must always be understood within a socio-cultural and historical context. The revised questions were therefore felt to more closely reflect the cultural and historical contexts of the postgraduate professional healthcare teaching students in this study and my endeavour to understand these experiences.

The pivotal role of Gadamer's philosophy within this study is now discussed in chapter three which presents the bricolage of conceptual frameworks underpinning it.

Chapter 3 Bricolage of Conceptual Frameworks

3.1 Introduction

This chapter presents the bricolage of conceptual frameworks underpinning the study. In guiding research Ravitch and Riggan (2017, p8) define a conceptual framework as an "overarching argument for the work, why it is worth doing and how it should be done". As such the frameworks are the foundations of my research. The bricolage comprises eminent educationalists, philosophers and theorists whose thinking has shaped my own in contemplating EBL throughout the doctoral journey. Anthropologist Levi-Strauss (1962) used the word bricolage in *The Savage Mind*. The bricolage metaphor has since influenced several researchers who have conceptualised it as an approach to social inquiry (Kincheloe, 2001; Denzin and Lincoln, 2000). Bricolage attracts a number of metaphoric descriptions; weaving, sewing and montage, all suggesting an assemblage or bringing together. Its purpose in my research is to provide a combined cognitive process to construct and make sense of EBL and the experiences of the learners who were asked to engage with it in ways that reflect my positionality as an interpretivist researcher.

I begin this chapter by discussing why I felt it important to work towards a phenomenological approach and how it was anticipated to illuminate and elaborate the fundamental relations between the phenomenon of EBL and the experiences of the participants involved. I suggest how bricolage as an ongoing process of thinking and understanding was anticipated to enable this. The bricolage of conceptual frameworks is then presented visually with a brief outline of each framework within. A more detailed discussion of each framework and its significance to the study is then discussed.

3.2 Working towards a Phenomenological Understanding

The literature reviewed in chapter two revealed EBL as a complex phenomenon that influences learners' experiences in different and often opposing ways. It was therefore important to contemplate EBL from a number of different perspectives and through a number of different lenses in addressing the ontological questions posed in this study.

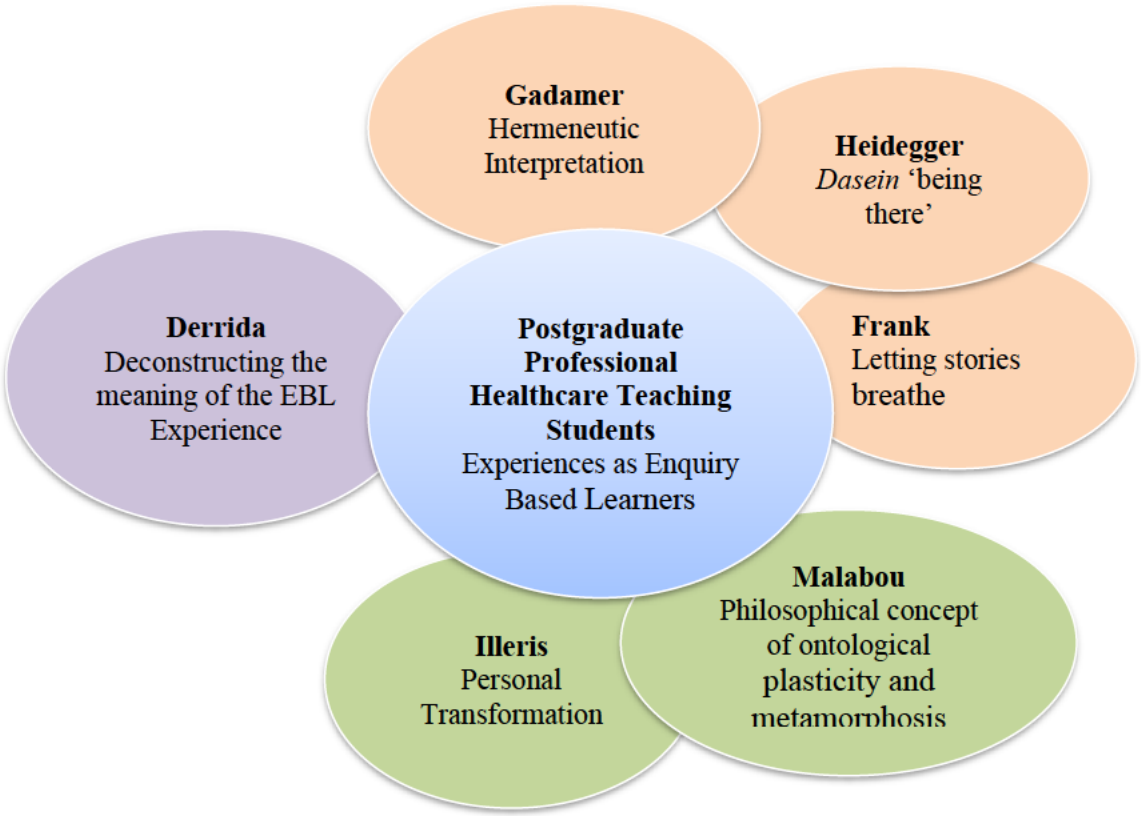
This is supported by Peim (2018. p29) who explains how phenomenology is concerned with "the way we apprehend things and the relations involved in an articulation of how we stand relative to things". Peim (2018) goes on to suggest that to ignore the 'phenomenological

dimension' would be to assume that "research knowledge must be unaware of its relation to the conditions that shape it" (Peim, 2018 p29) and it is against this backdrop that the bricolage of conceptual frameworks was purposefully assembled; to provide "rigor in relation to questions of history and context whilst also providing clearly defined lines of development while avoiding the pitfalls of offering a naively positioned view without addressing the matter of position" Peim (2018, p29). My aim is to demonstrate how bricolage has been instrumental in continually developing and informing my understanding of EBL and how in seeking rigour, it enabled the examination the phenomenon of EBL and its impact through the purposeful assemblage of six philosophers, educationalists and theorists that comprise the conceptual frameworks. The bricolage is now presented.

3.3 Bricolage of Conceptual Frameworks

The bricolage of conceptual frameworks is presented below in Figure 3.1. I begin by offering a brief explanation of its construct followed by a more detailed discussion of each framework in the ensuing sections.

Figure 3. 1 Bricolage of Conceptual Frameworks



The bricolage comprises four philosophers, an educationalist and a socio-theorist. They are positioned and colour-coded to signify their interrelationships which I explain in the following paragraphs. The professional healthcare teaching students are positioned to signify their centrality in the study.

Derrida is positioned on the left. Derrida's (1978) thinking on *deconstruction* was fundamental in enabling the language of EBL's discourse to be scrutinised. Glendinning (2011) notes that Derrida warned we should not rely too naively on our habitual understanding of concepts; a view echoed by Peim (2018) who notes how everyday language (and therefore thinking) is freighted with theory. Drawing on Derrida's thinking has therefore enriched my understanding of EBL and learners' reports about their EBL experiences. I have recognised there can be no ordinary language that is free from ideas since its semantics and syntax emphasise the extent that language constitutes a horizon for our 'being' as Peim (2018) suggests. This is crucial in understanding the lived experience.

Moving clockwise Gadamer whose hermeneutic philosophy underpins the study is positioned alongside his mentor Heidegger. Their juxtaposition not only reflects their relationship but signifies the relevance of Heidegger's (1972) concept of *Dasein* or 'being there' and its influence on Gadamer's hermeneutic philosophy. Frank's (2010) thinking on stories and how they can reveal untold experiences aligns with Heidegger's concept of *Dasein* and Gadamer's beliefs about language as a horizon of hermeneutic ontology revealing what participants' stories tell but do not necessarily say.

Continuing clockwise is Malabou. Supervised by Derrida during her own PhD, Malabou's (2008; 2012) ontological concept of plasticity as a human transformative power capable of bringing about metamorphosis or change has enabled me to contemplate EBL in a new and different way. While Illeris (2014) a Danish Educationalist is unconnected to Malabou his proximity reflects mutual thinking about human transformation. Illeris has spent a lifetime contemplating how learning is capable of alteration into something qualitatively different.

The assemblage within the bricolage was therefore deliberate and purposeful not one of happenstance as Levi Strauss (1962) initially implied. To elaborate on this further I now return to the concept of bricolage and its relevance to the study before providing a more detailed discussion of each framework within.

3.4 The Meaning of Bricolage and its Relevance to this Study

Johnson (2012) and Wibberley (2012) describe how the construction of a bricolage involves the selection of tools and materials from a diverse range of sources. The idea is to create an orientation that affords a number of different standpoints like those in Figure 3.1, p41. As Kincheloe (2001, p679) observes, bricolage is thought to "avoid the parochialism of unidisciplinary approaches and the superficiality of methodological breadth". It does this by enabling unique insights from multiple perspectives. And this is where the making of the bricolage is integral to the hermeneutic process as a way of interpreting experiences; a view that is supported by Wängelin (2007) and Kincheloe (2001). Although Wängelin (2007) writes within an industrial design context their reflections on the alliance between bricolage and hermeneutics remain relevant to this study. Wängelin (2001) notes how together bricolage and hermeneutics generate a way of enabling the researcher to engage with all available knowledge in discussion that typifies the continual process of interpretation. It enables a shared concern for the world as Regan (2012) observes through caring, thinking and contemplating through language. Kincheloe (2001) asserts that bricolage imposes rigour in qualitative research because it avoids the superficial methodological breadth that unified approaches inflict. It is the alliance between hermeneutics and bricolage that enables bricoleurs to attain a more sophisticated level of meaning making through continual interplay, the aim of which is to seek reality in relation to context.

Bricolage is correspondent with Gadamer's (1975) view of understanding in developing openness to meaning. Through bricolage I am embracing universal viewpoints in order to contemplate diverse philosophical and theoretical understandings of various elements encountered within the research process (Kincheloe, 2001; Johnson, 2012; Denzin and Lincoln, 2000). I am acknowledging the complexity and heterogeneity of participants' experiences through using conceptual tools to study the subjective meaning that humans make as Kincheloe (2001) describes. However, Wibberley (2012) and Johnson (2012) note how originally Levi-Strauss (1962) referred to bricolage as making do with whatever is at hand which he later changed to using what is already in existence and reconstructing such material. This change puts a less serendipitous emphasis on reaching for the apt in selecting tools and materials which reflects the bricolage of conceptual frameworks I have used in this study. Over time the bricolage was developed through a conscious and deliberate process of exploration. The

assemblage of its frameworks constitutes a series of purposeful connections to enable the exploration of learners' EBL experiences.

Bricolage has particular relevance for this study in revealing the complexity of these experiences; I share Kincheloe's (2001) view that the complexity of human life cannot be revealed through the parochialism of a unidisciplinary approach. As Kincheloe (2001) notes too often entities are removed from the contexts that shape them whereas bricolage enables a philosophical, epistemological and ontological sensitivity towards participants' being-in-the-world.

This is now explored in relation to Gadamer's (1975) thinking about the hermeneutic experience and is followed by a discussion of each philosopher, educationalist and theorist within the bricolage whose thinking informed my own and subsequently the development of the study.

3.5 Gadamer's Hermeneutic Phenomenology

Like Heidegger, Gadamer refuted Husserl's phenomenology (Kafle, 2011, p186) and rebutted the belief that experience (*Erfahrung)* could be studied from a position of neutrality; of being detached or removed from the immediacy of the experience (de Sales, 2003). The modern concept of science according to Gadamer was insufficient to generate understanding of human beings and their activities. Rather he believed that understanding was a matter of ontology and not solely epistemology (de Sales, 2003).

In defining 'understanding' Gadamer (1975) emphasised that being human necessitates participation within a socio-cultural and historical context. In trying to understand their behaviour, human beings should therefore be studied within this context and this is the basis upon which this study was developed. Moreover, according to Gadamer (1975) the notion of *Dasein* is not confined to the person whose experience is being explored but involves the person undertaking the interpretation and their interaction with the world. In adopting Heidegger's view Gadamer (1975) concluded that humans are constructed by the world in which they live. *Dasein* or 'being there' assumes that 'world' is neither mind nor body but an indissoluble unity between 'person and world' (Koch, 1995; Pascoe, 1996). This notion of indissoluble unity also reflects the assumptions underpinning this study. It is not a scientific examination but

concerned with '*Dasein'* as experienced by the professional healthcare teaching students who engaged with EBL.

Gadamer emphasised the temporality of '*Dasein*' which always starts from the point of view of an historical context that gives rise to particular prejudices (Buckingham et al, 2011). It is impossible for us to contemplate the world without prejudice since prior experience gives rise to preconceived expectations as Debesay, Nåden and Slettebø (2008) observe. Gadamer affirms this in his explanation of the term prejudice which is not associated with the somewhat negative connotation of today. He states "it is the recognition that all understanding inevitably involves some prejudice that gives the hermeneutic problem a real thrust" (Gadamer 2013, p283). As such Gadamer regards prejudice as a form of pre-understanding (Fleming, Gaidys and Robb, 2003).

The notion of prejudice is significant to my role as a researcher. I bring many historically developed pre-understandings about EBL to this study; as a course leader observing the lived EBL experiences of many students and as an academic studying and sharing my evolving thinking at national conferences and latterly in a published book chapter (Stevenson, 2018). To establish what is known about EBL in this way is consistent with Gadamer's (1975) concept of *foregrounding* and *fore projecting* in enabling the contemplation of different opinions, world views and epistemological stances to be considered.

However, Gadamer (2013, p306) cautions that the pre-understandings occupying the interpreter's mind are "not at his free disposal" and as researcher I therefore cannot and should not try to separate in advance the prejudices I have about EBL. I should not therefore try to exercise neutrality; on the contrary, Gadamer would argue it is precisely this level of pre-understanding that gives rise to the conditions of my thinking about EBL. Conversely it is also important to recognise these prejudices may also lead to misunderstandings.

While Gadamer makes clear the role of prejudice in understanding applying his thinking to the research context is difficult since it denies rules as Fleming, Gaidys and Robb (2003) observe. Gadamer (2013, p278) perceived hermeneutics as an approach not a method, as such he provides no prescribed methodology. But as Fleming, Gaidys and Robb (2003) point out the hermeneutic researcher requires a certain structure in order to begin which Gadamer (2013, p306) partially provides by clarifying the conditions for understanding and these are discussed in chapter four p57-86 concerning methodology.

However, in acknowledging that being human necessitates participation within a socio-cultural and historical context Gadamer's philosophy enables me to exercise my concern, 'angst' or 'heedfulness' (Besorgen) introduced in chapter one in trying to understand the question concerning EBL whilst also acknowledging that I am already located within it as a phenomena. And it is this mode of 'being' this awareness of belonging and how we relate with others that makes this kind of understanding possible. This awareness illustrates the significance of being reflexive in understanding the importance of the tradition from which I have come as a nurse and a lecturer, traditions that have shaped my prejudices and fore-meanings in relation to EBL and I discuss these in chapter 6, section 6.2, p125.

The identification of pre-understandings and moreover their periodic review is as Fleming, Gaidys and Robb (2003, p117) observe the process through which researchers are able to "remain oriented to the phenomenon". And it is the co-constitutionality or constant interaction of learner and interpreter's pre-understandings that enable the researcher to experience changes in understanding as "a fusion of horizons from both past and present" (Gadamer, 2013, p317). It is within this context of co-constitutionality that Frank's (2010) publication *Letting Stories Breathe* is complimentary to the hermeneutic stance of this thesis.

3.6 Frank: Letting Stories Breathe

Frank is a sociologist and critical theorist. His life's work comprises reading and writing personal narratives. Frank (2010) identifies the significance of stories and how they affect human lives. Within his writing it is clear to see many parallels with Gadamer's thinking which in relation to this study is particularly important concerning research question one p39.

While Frank (2010, p3, p88) observes that "stories animate human life" he also notes how they can reflect and generate differences between storyteller and interpreter since "on the heels of truth comes the suspicion that the interpretation reduces stories rather than 'letting them breathe'". Frank (2010) aligns this to the objective of hermeneutic interpretation as a process of openness, engagement and ongoing dialogue and the continual search for possibilities of knowing. As Frank acknowledges, even the act of transcribing a story engages one in a level of interpretation.

Given my pre-conceptions and prejudices about EBL I must remain open to participants' stories. Like Gadamer, Frank (2010, p94) acknowledges that hermeneutics begins with the

premise that any understanding of a story is enabled but also limited by understandings already set in place by previous stories. Frank (2010) also acknowledges that prejudice is a necessary base from which to understand and without them I would have no way of deciding what information is useful in my interpretations. However, Frank (2010) forewarns of an underlying tension in trying to understand another person whether through text or speech; no two individuals' horizons overlap or diverge and this difference is arguably necessary otherwise there would be little to say. However, there is also a need for similarity in order to have a basis from which to develop understanding. My interpretation therefore begins by recognising I am caught up in my own stories as are the participants whose stories I am interpreting and this may generate similarities or significant shifts in my horizons. This may give rise to findings that I regard less positively and I must remain aware of this.

Moreover, given there is nothing straightforward about the language of EBL I am reminded of Frank's (2010, p87) of the "slipperiness of meaning at play among multiple perspectives". And this is where the work of Derrida (1978) was significant in helping me to understand the language of EBL used as a metonymy for 'being' by the participants in this study.

3.7 Jacques Derrida: Deconstructing the Meaning of EBL

Derrida (1978, p282) wrote that "language bears within itself the necessity of its own critique" and it was this statement that inspired me to examine the language of EBL's discourse given its lack of commonly agreed definition. Derrida's (1978) *deconstruction* offered a 'way' of enabling the internal workings of EBL's language to be explored. What is known about EBL has evolved within discourse which operates within a system of language accompanied by metaphor that opens up a rich world of meaning (Hutchings, 2007). For Derrida (1978) therein lay a problem; in order to understand text, to explore and assess its claims to truths there had to be something capable of assessment, criticism and appreciation (Glendinning (2011). But in *Structure, Sign and Play in the Discourse of the Human Sciences* Derrida (1978) argued the concept of structure or understanding phenomena using the metaphor of language suggested that language was freighted with metaphysical ideas. In this sense it is easy to conceive what Derrida meant in his view that there was no such thing as 'what a text means' rather he perceived all meaning as inherently ambiguous and capable of being interpreted in different ways.

Applying Derrida's thinking means EBL can have no absolute arché, no definite meaning and no fixed point of presence, rather it is decentred and subject to what Derrida called 'freeplay' with a host of attendant signifiers and signifieds or "fields of infinite substitutions..."(Derrida, 1978 p287). Presence of meaning is therefore impossible because of the absence of the things that EBL does not mean. "There is no transcendental of privileged signified" in EBL's discourse and "the interplay of signification has henceforth no limit" (Derrida, 1978, p280). In this sense those who have written about EBL have arguably produced what Derrida (p280) calls a "multiplicity of destructive discourses and disagreements" which perhaps accounts for the interchangeable use of language between EBL and PBL noted earlier and the lack of commonly agreed definition.

As such there is no definitive agreement about EBL's meaning despite its description as a well-established and increasingly popular pedagogical approach (Stacey, Oxley and Aubeeluck, 2015; Cleaver, Lintern and McLinden, 2014). It has what Derrida (1978, p280) called "particular borrowings" that drag along a host of attendant epistemological and ontological interpretations riddled with 'aporias' contradictions, impasses, gaps and holes (Buckingham et al, 2011) rendering it susceptible to interpretation and translation or conceptual slippage as noted earlier in the thesis. Given Glendenning's (2011) observation that everything has an identity which makes an object different to everything else the idea of understanding EBL would suggest it is marked by identity and moreover *Différance;* Derrida's (1978) conception of what makes something what it is and importantly, what it isn't.

For Gadamer (1975) the significance of language in the relationships between ontology; the general condition of being and the phenomena under review was paramount. It is therefore vital to examine the language of EBL's discourse as a metonymy for 'being' in the world of EBL. Its discourse which has been replenished and renewed provides an archive from which to examine some of the claims to truth and meaning about EBL and deconstruction offered a way of enabling this. However, like Gadamer's philosophy, deconstruction is a 'way' not a method. None the less using Derrida's (1978) thinking enabled a crucial analysis of the internal workings of EBL's language and the conceptual systems within it aligned to Derrida's view that there is always something else to get. This point is alluded to by Frank (2010) in relation to the use of metaphors. Metaphors can twist language and as such stories never resolve the question about the kind of truth being told, rather they highlight that we live with complicated truths.

The ambiguity of language and as a metonymy for 'being' is arguably significant to any research but especially to this study where interpretation draws wholly upon qualitative data comprising participants stories of their EBL experiences.

The literature review suggests there are similarities in the language of learners' stories and the anecdotal observations I have made about learner behaviour when engaged with EBL. And this is where the work of Malabou (2008; 2012) has been instrumental in prompting me to contemplate EBL's potential to bring about individual behaviour change.

3.8 Catherine Malabou: Ontological Plasticity and Metamorphosis

Over several years Malabou has contemplated the concept of ontological plasticity or human modification as a transformative power.

Malabou was mentored by Derrida and I was introduced to her work by my original doctoral supervisor who suggested I read *Ontology of the Accident* (Malabou, 2012). Within Malabou explores the ontological connotations of plasticity as an environment in which the individual maintains and evolves.

Given Malabou's focus on the more destructive implications of life changing traumas such as brain lesion or stroke I made no immediate connection between this short extremely complex text and learners' experiences of EBL. However, I began to see parallels between Malabou's description of the existential incline experienced by those who had undergone life changing traumas and the anecdotally observed changes in learner behaviour exhibited during their engagement with EBL. Through the ontological shift in their identity necessitated by EBL's ontology learners were thrown from their familiar habituated being into their own existential incline as they adjusted to their self-directed role. I began to reflect more closely on the potential impact of this particularly given Malabou's (2012) observation of how experiencing an existential incline has the potential to bring about plasticity and metamorphosis or transformation.

I became inspired to read more of Malabou's work and discovered that in earlier thinking Malabou (2008) had written of plasticity outside of accidents and trauma as that which designates our ability to shape ourselves under the influence of experience, education and culture. Malabou (2008) observed how throughout life we undergo continual modification imposed by experience and our environment. And it is within this context that I began to

contemplate EBLs potential to bring about two competing types of plasticity identified by Malabou (2008); destructive, that capable of throwing the individual from their habituated being by adjusting, developing and transforming, and positive; that capable of enabling transformation through experience, education and culture.

Within the context of this study destructive plasticity was perceived as that capable of throwing learners from their familiar ways of learning particularly where they had previously learned in a taught environment. Positive plasticity was perceived as personal development manifested by the acquisition of new skills or behaviour such as research, critical thinking and debate all of which are of value to their future role as professional healthcare teachers.

From the review it is clear that EBL is both an experience and an environment that imposes change through its ontology and it is therefore possible to conceive EBL as an approach which on the one hand invokes an existential incline like Malabou (2012) describes while on the other engendering a sense of liberation through being 'let loose' as Jones (2011) suggests. Correspondingly both the literature review and anecdotal evidence suggest EBL is capable of increasing learner confidence though it seems confidence wanes during states of liminality (Pearce, 2013). These observations correspond with Malabou's (2008) observation that everything we live and everything we experience has an influence.

And this is where the work of Illeris (2014) has been influential in my thinking about EBL as way of learning that not only brings about changes in meaning making perspectives, frames of reference and habits of mind but also in relation to personal emotional and social development related to identity.

3.9 Knud Illeris: Personal Transformation and Transformative Learning

Illeris (2014) has spent many years further developing Mezirow's (1978) thinking about the concept of transformative learning. Illeris (2014) describes how in its usual association with meaning perspectives, frames of reference and habits of mind transformative learning is too narrow since it is cognitively oriented. Rather, Illeris (2014) argues that concepts of identify and transformative learning are mutually enriched by being brought together and seen in relation to each other.

My rationale for employing EBL reflected the goals of both educationalists; Mezirow's (2000, p28/29) goal of adult learning; fostering greater autonomy in thinking and Illeris' (2014) goal

of constitutionality of autonomy and identity. Anecdotally I have observed how EBL affords the learner greater autonomy through its discovery basis and taking responsibility for their own learning and that of their peers. Mezirow might view these experiences as heightened awareness's of how learners have come to their knowledge and the values that lead them to their own perspectives (Mezirow, 2000). In so doing EBL involves a fundamental questioning and reordering of how one thinks and acts while ascribing a new identity for both learner and teacher (Bebb and Pittam, 2004; Kirwan and Adams, 2008; Tully, 2010; Horne et al, 2007).

To that end Mezirow (2000) might say that EBL brings about transformations through objective and subjective reframing. Objective framing involves critical reflection on the assumptions of others which the EBL process brings about through discussion and debate. Subjective reframing involves critical self-reflection of one's own assumptions which EBL does through questioning and challenging each leaners way of learning in relation to EBL itself.

Interestingly Taylor (2000, p285) in Mezirow (2000) reflects upon what has been written about transformative learning since it first emerged noting how two main patterns of publication have emerged; published papers whose main goal is theoretical critique and empirical studies largely comprising graduate students doctoral dissertations that focus on how transformational learning can be fostered in educational settings. However, as Taylor (2000, p286) also notes "discussion within these publications predominantly resides in a theoretical context with little offered from an empirical perspective and calls for a wider range of research designs and methodologies. Using hermeneutics to interpret and understand the experiences of post graduate professional healthcare teaching students as enquiry based learners might then contribute to the relatively small body of literature whose focus only partially reveals the complexities of 'being there' within the world of EBL.

However, for Illeris (2014) like Malabou (2008; 20112) the more pressing question in transforming is around 'what forms transformation?' from which he calls for a new definition; one that covers all dimensions of human mental capacity and learning such as the emotional and social. Illeris (2014) aligns this thinking to Jarvis (2009) who suggests it is always the person as a whole who learns. He therefore recommends terminology aligned to the wholeness of individual transformation and begins by speaking about personality.

Illeris (2014, p151) refers to the "structures, dispositions, and traits that are characteristic of human beings in general and the single individual in particular" adding that "such traits and

qualities are partly inborn and partly modified by learning; the two parts cannot be separated". This observation echoes Malabou's (2008) contemplations on ontological plasticity and Heidegger (1927) and Gadamer's (1975) views on 'being' where the individual is constantly engaging with history and experience. The perceived parallels in this thinking are significant to the participants in this study; they are experienced professional practitioners who bring to the learning environment a wide range of clinical expertise. However, how they seem to undergo an inverted transition of Benner's (1984) novice to expert on becoming professional healthcare teaching students. Moreover, it is not solely their clinical expertise that is at the centre of their development it is their history, cultural context, individual traits and qualities that will influence that development. And this is related to the second term that Illeris (2014) uses in questioning what forms transformation; that of identity, a concept that Illeris considers to be a combination and interaction between the person and their environment from which the development of the individual is influenced. Again this aligns with Malabou's (2012) thinking about ontological plasticity and Heidegger's (1927) *Dasein* or 'being in the world'. The prior learning experiences of participants in this study were varied; some had undertaken self-directed study and others were only familiar with instructionist methods. In this sense their identity as learners was already moulded. As such EBL posed a real challenge for some particularly those who had not engaged in formal academic study for several years. And this is significant given the observation made by Illeris (2014, p154) that transformative learning "very often involves not only the learner's conscious understanding but also the deeper and unconscious mental layers". He refers to this as another important term that should be reflected in transformative learning; that of 'the soul'. And while Illeris is not suggesting that we attach too much weight to 'the soul', it is clear that emotional and unconscious aspects are instrumental in personal transformation in the same ways as the subjective experience of each individual's life story which he refers to as 'biographicity'. Illeris concludes that identity is therefore inseparable from the mental changes in transformative learning since they represent matters of importance in the totality of the individual.

3.10 Summary

Using the bricolage of conceptual frameworks has provided me with clearer lines of development about how I apprehend EBL in terms of its history and context and this has helped me to avoid the pitfalls of simply offering a naively positioned view of EBL without addressing the matter of position as Peim (2018) suggested. By ignoring the phenomenological dimension

of EBL in my research I would remain unaware of EBL's relation to the conditions that shape it. Kincheloe (2001) might refer to this as 'border work'; the act of developing socio-theoretical and hermeneutic understandings that are necessary for a developing bricoleur.

Using the lenses within the bricolage I have engaged in socio-theoretical and hermeneutic understandings of students' experiences of EBL. This has enabled more rigorous and praxiological insights into EBL as a socio-educational phenomenon as described by Phillimore et al (2016). I have been able to view EBL through many conceptual schemes enabling me to make judgments about truth or value in relation to EBL and its ontology (Stevenson, 2016). In so doing I have avoided the limitations of one-sided reductionism described by Kincheloe (2001).

Through bricolage and the assemblage of philosophical, theoretical and educational ideas I have been able to seek out knowledge generated by a human desire to understand 'self within the world' a goal that correspondent with the thinking of Heidegger (1927), Gadamer (1975), Frank (2010), Malabou (2008, 2012) and Illeris (2014).

As Morawski (1997) in Kincheloe (2001, p682) observes, using bricolage acknowledges that the object of interest, in this case EBL is "inseparable from its context, the language used to describe it, its historical situatedness and the socially and culturally constructed interpretations of its meaning as an entity in the world". As such bricolage provides a process in which the subjective complex meanings that participants as human beings make of their experiences of learning through EBL might be interpreted and from which a number of epistemological and ontological insights have thus far emerged.

As a bricoleur I have mobilised thinking generated by a number of scholars to learn a variety of ways of seeing and interpreting participants' experiences of learning through EBL. The act of bringing these scholars together reflects the purpose of bricolage which is concerned with the possibility of knowing and this reflects Gadamer's (1975) description of the hermeneutic circle which I discuss on p65.

However, bricolage is not only concerned with multiple methods of inquiry, it is *purposeful* and while the bricolage underpinning this research brings together a diverse range of thinkers, each provides a connection that is relevant to the aim of this study as the ensuing discussions illustrate.

Bringing together thinking from Heidegger (1972), Gadamer (1975), Derrida (1978), Malabou (2008, 2012), Frank (2010) and Illeris (2014) represents new and original thinking. As Kellner (1995) in Kincheloe (2001) observes, through bricolage such new relationships and connections open new interpretive windows that enable a more rigorous approach to analysis and interpretation.

However, as Kincheloe (2001) notes, learning to become a bricoleur is a lifelong process that requires the assemblage of diverse literature from multiple perspectives in attempting to make connective insights. This work requires a lifetime of education. I therefore recognise that my development as a bricoleur will continue far beyond my doctoral journey. For this reason I adopt Peim's (2018, p29) view that addressing the phenomenological dimension has been an essential part of my emerging role as a bricoleur; I have returned to the basic questions of Western philosophy concerning 'the-thing-in-itself', here, EBL and my understanding of it as a phenomenon and how it was experienced by the participants in this study. This more sophisticated level of meaning making is necessary if I am to understand the experiences of postgraduate professional healthcare teaching students who were asked to engage with EBL as learners and this is now discussed in greater detail in chapter four which presents the methodology employed in the study.

Chapter 4 Methodology: Using Gadamer's Hermeneutic Tradition

"The task of hermeneutics is to clarify this miracle of understanding"

Gadamer ([1975] 2013, p303)

4.1 Introduction

As Johnston et al (2016) suggest, to fully understand human experience it is necessary to access it through their subjective lens, through their experience. In recognising how understanding and interpretation are indissolubly bound up with one another as Annells, (1996) describes this chapter explains how the study was informed by Gadamer's (1975) philosophical hermeneutics. It is concerned with methodology. However the term methodology is used only to reflect the conditions for understanding within Gadamer's philosophy since to speak of a fixed methodology would conform to the notion that Gadamer rejected (Applebaum, 2011, Fleming, Gaidys and Robb, 2003). Hermeneutics is an orientation, a position on the nature of language, experience and interpretation that enables us to make sense of experience. Therefore to use the terms methodology and methods is arguably at odds with Gadamer's language (Fleming, Gaidys and Robb, 2003) therefore data collection methods are presented as 'understanding through dialogue with text.

The chapter begins with a brief overview of hermeneutics and its origins and meaning before discussing the evolution of modern day hermeneutics drawing on philosophy of Husserl and Heidegger, whose thinking was highly influential in hermeneutic development. I explain how Gadamer further developed the hermeneutic tradition paying particular attention to the concepts of *language*, *dialogue*, *play*, the *hermeneutic circle* and *fusion of horizons* given their centrality to Gadamer's tradition and their relevance to the research questions posed on p39. A self-developed model for understanding based upon my interpretation of Gadamer's philosophy is presented. Within this chapter issues of rigour, bias, trustworthiness, sampling and ethical issues concerning the study are addressed. I begin by introducing hermeneutics, its origins and meaning.

4.1.1 Hermeneutics: Origins and Meaning

Hermeneutics is concerned with the interpretation of language and text in order to understand what they mean (Zimmerman, 2015; Tait 2008). Hermeneutics is an interpretive approach to the study of human society originating from ancient Greece and the interpretation of biblical texts (Park, 1986). The word hermeneutics is an English form of the classical Greek *hermeneus* meaning one who explains things (Jasper, 2004). Its etymology is from the Greek *hermeneuein* meaning to translate or explain; it is how humans interpret the world (Mantzavinos, 2020; Zimmerman, 2015; Buckingham et al, 2011). Its roots are in theology and philosophy (Mantzavinos, 2020; Zimmerman, 2015; Ritchie et al, 2014) where Greek thinkers such as Plato used hermeneutics to discover the truth about ourselves and our world in the name of wisdom.

Zimmerman (2015) and Jasper (2004) note how in Greek mythology Hermes, the messenger of the Gods, was a *hermeneut* who bridged the gap between the divine and humans by carrying messages from the Gods of Olympus to people on earth. Hermes used the words of human language to translate divine mysteries considered to be beyond human capacity. Without Hermes, observes Jasper (2004), the two realms were unable to communicate. Hermeneutics has since been used through time to interpret the Bible, sacred scriptures of Jewish and Christian traditions and other religious texts. It is this urge to seek out and discover the truth that is reflected in the development of hermeneutics from its inception in ancient Greek mythology through to the current day argues Zimmerman (2015).

Modern hermeneutics was brought to the fore in the eighteenth century by German theologian and philosopher Friedrich Schleiermacher (1768-1834) who attempted to address the growing conflict between science and religion through focussing on the universal conditions for understanding. Schleiermacher proposed a ‘general hermeneutic’ or theory of understanding with which to guide interpretation suggesting that human dialogue; anything written or spoken, was fundamental to understanding (Zimmerman, 2015). Schleiermacher was instrumental in expanding understanding from an epistemological perspective to an ontological context by drawing on the long established principles of the hermeneutic circle; a process of understanding that is always influenced by greater context. For example, anything written can only be understood within the context of the words used, the sentences in which the words are used, the chapter within which both are used and the context of the text taken as a whole; a principle that Schleiermacher extended to every aspect of human understanding. Schleiermacher’s

unique contribution to the hermeneutic conversation about knowledge argues Zimmerman (2015) lies in expansion of this textual principle to every dimension of life and the world.

After Schleiermacher a succession of figures developed hermeneutics during the nineteenth century including German philosopher and historian Wilhelm Dilthey (1833-1911) who paid much interest in Schleiermacher's work but moved away from his textual and theological hermeneutics. For Dilthey knowledge about the human sciences was objective and did not seek to enter the mind of another, rather understanding of self could only be achieved by approaching self as others do; from the outside to the inside or by comparing self to others (Makkreel, 2016). As such Dilthey argued that human knowledge was life experience itself (Zimmerman, 2015).

Whereas Schleiermacher focussed on language, Dilthey emphasised other types of expression which he claimed were independent of language but that conveyed meanings such as music, sculpture, painting, gestures, looks and customs (Forster, 2019). Moreover, Dilthey advocated using historical documents to provide a collection of social observations from a particular period of time (Zimmerman, 2015). Forster (2019) and Zimmerman (2015) note how Dilthey made two significant hermeneutic insights; that we only know what it is to be human by looking at other people and their cultures, and that past and present are connected through history which we ourselves have made. Dilthey was one of the first hermeneutic thinkers to place historical emphasis on human consciousness, however, he also observed that while past expression provided some insight into who we are, it could not determine what it was to be human (Zimmerman, 2015).

Edmund Husserl (1839-1938) moved away from previous philosophical endeavours to articulate human experience through language and other signs to one that sought to describe and make sense of the structures and dynamics of human experience. Husserl introduced phenomenology as "a rigorous philosophical description of how phenomena disclose themselves to us in their meaning" (Zimmerman, 2015. P33) and this is now discussed.

4.1.2 Edmund Husserl (1859-1938) Phenomenology

Husserl was a mathematician, logician and epistemologist grounded in scientific knowledge. Smith (2018) and Zimmerman (2015) observe how despite its existence for many centuries, phenomenology came into its own during the early twentieth century through Husserl's work published in *Ideas* (1913).

As the study of structures of consciousness experienced from the first-person perspective, phenomenology is distinct from other key disciplines in philosophy such as ontology, epistemology, logic and ethics (Smith, 2018).

As Zimmerman (2015, p33) notes Descartes' (1596-1650) had left philosophy "with a gap between mind and world" opening up the question of how thought could be reconciled with reality. Husserl addressed this gap through his development of *epoché* or setting aside judgment, to rethink Descartes' duality between thinking and the world (Williams, 2019). Unlike Descartes Husserl believed that the mind was part of reality and not a self-enclosed sphere; as such the mind was correlated with objects in the world (Zimmerman, 2015). The consequence of this generated a new task for Husserl; how objects revealed themselves to the observer. As such Husserl is credited with the vision that objects reveal themselves to human consciousness with meaning through the meeting of the subjective and the objective; through perception, thought, memory, imagination, emotion, desire and so on which Husserl describes as intentionality (Smith, 2018; Zimmerman, 2015; Tait, 2008).

Husserl considered human perception as 'seeing as' where objects always appear to human consciousness as endowed with meaning. He believed phenomenology was a rigorous description of how phenomena disclose themselves to us in their meaning. van Manen (2017, p813) elaborates by describing phenomenology as "the study of 'what gives itself' in lived or prepredicative experience".

Husserl's development of phenomenology took a transcendental turn as he sought conditions for the possibility of knowledge involving the discovery of *epoché* from the Greek notion of abstaining belief (Smith, 2018). Epoché or bracketing is a means of establishing a phenomenological description from a first person perspective exactly as experienced (Beyer, 2018). According to Husserl bracketing is necessary in enabling phenomena to disclose themselves as a lived experience. It demands putting on hold every assumption one naturally makes through habits of mind and is an attempt to hold prior knowledge or beliefs about a phenomena under study in suspension in order to perceive it more clearly (Paley, 1997; LeVasseur, 2003). Descriptions should not therefore rely on existing assumptions about the external world as Paley (1997) observes. Husserl thought this necessary in order to establish a rigorous foundation for the natural and human sciences which were considered to be naïvely

based upon unexamined assumptions about their domains of investigation explains Paley (1997).

Husserl's phenomenology is highly significant when contemplating the act of interpretation since habits of mind are characteristic of everyday understanding. This is illustrated by Zimmerman (2015) who observes how we usually only try to interpret or make sense of something when it is not understood and these instances are normally apparent to us. However, hermeneutics is more than something we resort to when immediate understanding fails us, it is often less obvious. Zimmerman (2015) demonstrates this using the action of a red traffic light; something we respond to by stopping automatically suggesting some sort of unconscious interpretation that is more than a process we resort to when understanding fails us, rather it is already unconsciously at work even though we might grasp an obvious meaning. LeVassuer (2003) observes that while phenomenology lends itself to many health research questions, the concept of bracketing is therefore perplexing.

Husserl's phenomenology is unsuitable for this study since the doctrine of bracketing would confine my interpretations to a process devoid of ontological perspective, context and meaningful understanding. Moreover, Koch (1995) and LeVasseur (2003) observe how bracketing is in fact at odds with the Husserl's concept of intentionality since it signifies an association with the Cartesian problem of separation between consciousness and world.

It is this notion of separation between consciousness and the world that posed such a problem for Husserl's student Heidegger (Zimmerman, 2015; Koch, 1995) who began to develop his central concept of '*being in the world'*; a concept that implied an inseparability between mind and body, lived experience and the historical context of understanding. Heidegger's phenomenology is now discussed.

4.1.3 Martin Heidegger (1889-1976): Phenomenology

Like Husserl, Heidegger is located within a phenomenological tradition. He is most commonly associated with phenomenology and existentialism; a philosophical theory "which holds that a further set of categories governed by the norm of *authenticity* is necessary to grasp human existence" (Crowell, 2020, p1). He is considered to be the prime instigator of existential hermeneutic phenomenology in the modern day who sought to analyse the concept of human being (Koch, 1996; Zimmerman, 2015; Wheeler, 2018; Inwood, 2000; Mantzavinos, 2020).

Wheeler (2018, ch2.2.3) describes how Heidegger reacted against the Cartesian tradition associated with Husserl noting that Descartes had "presented the world 'with its skin off' as a collection of present-at-hand entities to be encountered by subjects". Albeit as Zimmerman (2015) notes, Heidegger also acknowledged how Husserl to some extent had closed the gap between mind and world. Never the less he felt Husserl's link between mind and object still relied too much on Descartes' inner world of mind.

However, Cohen Khan and Steeves (2000) observe that while Heidegger's view of hermeneutics was very close to that of Dilthey and Husserl in understanding the phenomena of the world, it is Heidegger's attempt to understand 'being' itself and how people interpret their lives and make meaning of what they experience that was different. The notion of hermeneutics presented by Dilthey and Husserl was changed significantly by Heidegger; while their interest lay in learning about the structure of the life world Heidegger expanded hermeneutics to encompass the notion of human 'being'. For Heidegger hermeneutics was an interpretation of 'being' and human capacity to comprehend one's existence (Khan and Steeves, 2000).

While not refuting its validity Heidegger argued that science alone failed to capture human experience, rather Heidegger asserted that social science must rest on interpretive foundations (Crowell, 2020; Paley, 1997). For Heidegger (2000 p43) the conversation about knowledge was not a question of epistemology but one of ontology which he described as "the effort to put 'being' into words". The role of hermeneutics was therefore to 'listen' for an important message motivated by personal concern, angst or heedfulness which he called *Besorgen* (Jones, 2011; Inwood, 2000).

For Heidegger, objects in the world did not reveal themselves in a conceptual way as Husserl suggested, rather they were disclosed through practical relationships with our daily existence and being in the world or *Dasein*. Heidegger (2000, p58) explains the origins of *Dasein* or 'being there' as an infinitive of the verb *sein* 'to be'. However, in their translation of Heidegger's (1953) text *Introduction to Metaphysics* Fried and Polt (2000) explain its literal translation as 'the *to* be' which they acknowledge as far too clumsy a rendering given the complexity intended. They conclude that *Dasein* is not any one thing rather it describes 'being there' and how we come to understand what it means to be.

Inwood (2000) and Converse (2012) identify how the significance of historicity for Heidegger was reflected in his view of human life as an ongoing interpretive enterprise as a never-ending

process involving continual interpretation from birth to death. As such Heidegger's view of the hermeneutic effort was not as a theory of interpretation but a philosophical analysis of the way we 'move' in the world and the interrelationships we have with objects in the world as a "historically existent Dasein" opening itself to the "repetitive disclosure of what has-been-there" (Heidegger, 2000, p449).

However, it was Heidegger's perception of the hermeneutic circle as "the movement between parts and the whole that is also operative in unifying horizons from past and present" (Zimmerman, 2015, p51) through which he envisioned the 'whole' as reality situated within everyday individual existence or 'parts'. Inwood (1993) illustrates using a hammer which is interpreted as something familiar not just for what it is but for what it is for and this requires knowledge of associated equipment such as nails and wood. Here understanding is based upon a series of pre-understandings of how we interpret things in the world. As Zimmerman (2015) observes, for Heidegger these pre-understandings or preconceptions are intrinsically essential to interpretation. To that end Heidegger regarded language as symbolic of meaning relations. And it was this significance of language that became the focus of Heidegger's student Gadamer for whom our experience of the world was verbal in nature.

4.1.4 Hans Georg Gadamer (1900-2002) Philosophical Hermeneutics

Gadamer was profoundly affected by Heidegger's philosophy drawing on many of his ideas. He went on to develop central questions about the nature of understanding and what makes understanding possible (Zimmerman, 2015; Weinsheimer and Marshall, 2013). Gadamer believed the aim of philosophical hermeneutics was to understand differently rather than better (Tait, 2008; Koch, 1996).

Gadamer extended Heidegger's work the culmination of which emerged in 1975 in *Truth and Method* which grapples with questions about communication, truth and understanding. While much of Gadamer's philosophy is relevant to this study the concepts of *language*, *dialogue*, *play*, *the hermeneutic circle* and *fusion of horizons* are considered particularly germane. According to Vilhauer (2010) these concepts express how Gadamer envisaged a better vision of what understanding is thereby providing conditions for understanding. While each concept is discussed in the following sections I begin by acknowledging the German origins of *Truth and Method* which has subsequently been published in several languages. As such it is an

interpretation in itself and this has implications for understanding Gadamer's tradition. This is now discussed.

4.1.4.1 Truth and Method: An Interpretation

Gadamer's work has undergone several translations from its German origin. This poses a problem for the researcher who is unable to read Gadamer's philosophy in its original language. My understanding of *Truth and Method* is derived from an interpretation which has implications for the ways it has been understood and moreover, applied as Fleming and Robb (2019) suggest. For example, although most world languages have lexical matches for most words, some cannot be translated directly. For example Weinsheimer and Marshall (2013, pxii) note how in German there are two words for experience; *Erkbnis* and *Erfah-rung* however *Erkbnis* was almost always used to "distinguish what remains valid from what must be rejected in the line of thought it implies". Gadamer refers to *Erfah-rung* much later to reflect the basis for our actual lives in relation to the concepts of history and tradition. These two words illustrate the difficulties of translation in trying to convey original tone and intent.

Tait (2008) draws attention to the potential restrictions of interpretative accuracy as do Peim (2018) and Zimmerman (2015) who observe it is the concepts and ideas residing in language that make our world meaningful. It is the belief that understanding is essentially bound to language that instigated Gadamer's ambition of providing an extensive description of what understanding is. *Language* as a medium for understanding is therefore the first of Gadamer's concepts to be discussed given its centrality to the study.

4.1.4.2 Language as the Medium for Understanding

Malpas (2018) notes how 'conversation' was the basic model of understanding finally reached by Gadamer. Extending Heidegger's existential exploration of understanding through interpretation Gadamer emphasised the significance of language as a metonymy for 'being' and this had particular importance for how I wanted to understand participants' experiences.

The force with which Gadamer (2013, p568/9) contemplates language is captured in the final pages of *Truth and Method* where he poses the question "To what extent does language preform thought?" where he reaffirms the linguistic origins of our education. Like Heidegger Gadamer (2013, p568/9) perceived language as the medium that influenced thought suggesting "while learning, we grow into language and into the world". However, Gadamer also recognised that language was loaded with "'preformed articulations of meanings" (Gadamer (2013, p570). He

wrote “we are confronted with the problem that our own use of language is unconscious (p280)” But this is where Gadamer’s philosophy is helpful in understanding the experiences of the participants in this study for it is through the shared medium of personal, professional and educational language that understanding is positioned. Tait (2008) supports the view that it is the interpreter’s ability to translate through a shared understanding of language that makes understanding possible; a view that is also supported by Vilhauer (2010). However, my understanding is entirely reliant on two significant factors; my ability to understand the high level of abstraction associated with individual experience and my ability to capture participants’ experiences through interpretation of their language and associated meaning making. This is illustrated by Peck and Mummery (2018) who investigated language and individualised nursing care. The researchers use the term ‘*mot juste’* a term that is significant to us all in the way we describe every-day things. *Mot juste* is defined as “the word or phrase that is exactly right in a particular situation” (Cambridge Dictionary, 2020) and illustrates the significance of interpreting text whether written or expressed verbally and transcribed; a point affirmed by Gadamer in describing language as ‘speculative’ given every word carries meaning that goes well beyond what is spoken.

An example of this is provided by Crist and Tanner (2003) in a study underpinned by Gadamer’s tradition where the meaning of receiving family care was explored. The interpretation comprised several phases; participants’ narratives were initially analysed and discussed but revisited continually to identify central concerns and shared connections within and across stories. Narratives revealed new and unexpected views of family care that informed nurses’ knowledge about the diversity of experiences encountered by elderly disabled patients. The study also illustrates an observation Weinsheimer and Marshall (2013) who identify how language is the *Mitte* the ‘medium’ or middle ground that cannot be pre-determined since it relies upon openness to something else. This openness is reflected in Gadamer’s concept of *dialogue* as a linguistically mediated model of understanding (Malpas, 2018). This is now discussed.

4.1.4.3 *Dialogue*

According to Higgs, Paterson and Kinsella (2012) a unique feature of philosophical hermeneutics is the use of *dialogue* or hermeneutic conversation. Packer (1985, p1091) describes *dialogue* as “returning to the object of inquiry again and again each time with an increased understanding and a more complete interpretive account”. It is through *dialogue*

between text and the inquirer that meaning emerges and knowledge is constructed as Vessey (2009) and Austgard (2012) suggest. Gadamer (2013 p569) perceived *dialogue* as something interior to the soul describing it as the "constant going beyond oneself and a return to oneself, one's own opinions and viewpoints" *Dialogue* was perceived as a reflexive act involving movement of thought and inquiry (Austgard, 2012).

Gadamer (2013, p 570) observed "if anything characterises human thought it is this infinite dialogue with ourselves that never leads anywhere definitively". It is a dynamic process in which the alien and the familiar are brought together as Vilhauer (2010) Debesay, Naden and Slettebø (2008) observe. Gadamer's observations about *dialogue* prompted him to question how truth could be determined given it is an expression loaded with conviction, opinion and preformed articulated meanings. He proposed that "to reach understanding in a dialogue is not merely a matter of putting oneself forward and successfully asserting one's own point of view, but being transformed into a communion in which we do not remain what we are" (Gadamer, 2013, p387). As Tait (2008) observes the process of understanding through *dialogue* is not therefore linear where the researcher moves from a state of ignorance to understanding, it is a process that requires knowledge and pre-understanding contextualised by our historically effected consciousness; the way our awareness of the world comes about through history and the way we perceive things (Zimmerman, 2015). Our knowledge is not something we simply *acquire*; it is something in which we *already participate* therefore when a text is open to *dialogue*, pre-understandings and prejudices emerge observes Tait (2008).

As previously noted, Gadamer did not use the term prejudice in a negative sense rather to describe the 'guiding influences' on our thinking (Zimmerman, 2015). However, Gadamer (2013, p306) cautions that "prejudices and fore-meanings that occupy the interpreter's mind are not at his free disposal" and cannot be separated in advance. Regan (2012) explains how Gadamer believed temporal distancing, or the passage of time, allowed the feelings associated with an experience to become more distant enabling the interpreter to further reflect and question without the added distraction of emotion. And it is in this way that *dialogue* enables what may have remained hidden to emerge through the back and forth dialogic movement essential in understanding which is reflected in Gadamer's concept of '*play*'. This is now discussed.

4.1.4.4 *The Concept of Play*

Vilhauer (2010) observes how it is through the concept of *play* or *spiel* that Gadamer perceived understanding as a dynamic process. Gadamer illustrates how *play* is at work in our understanding of everything but he wrote specifically about *play* in relation to art and literature. Gadamer believed that through the work of p*lay* art was able to reveal the world through its ability to allow things to take on a particular appearance. Gadamer (2013, p106) described this phenomenon as "neither the orientation nor even the state of mind of the creator or of those enjoying the work of art nor the freedom of a subjectivity engaged in play, but the mode of *being* of the work of art itself". What Gadamer describes here is what happens when we encounter artwork where the work and the spectator become engaged as players in a continuous to-and-fro movement from which meaning emerges. Vilhauer (201310, pxii) describes this dynamic process as a "reciprocal and dialogical movement that designates the process of understanding".

Vilhauer (2013) observes a similar process in our encounters with text where *play* is crucial to interpretation; it enables us to understand *differently* and motivates us to remain open to possibilities of understanding. This is reflected in Gadamer's (2013, p108) description of the movement of play that "has no goal that brings us to an end; rather it renews itself in constant repetition". Vilhauer (2013) observes how we engage in *play* with text as a communicative event where meaning is shared through the back and forth movement of speaking and listening which Gadamer described as 'presence of spirit'; something that gives rise to different modes of understanding through a series of assumptions arising from our history which we integrate into new experiences encountered. Our understanding enters into *play* between the meaning offered by the text and our presuppositions which prompt us to examine our interpretation in greater detail (Vilhauer, 2013). It is through the enrichment of absorbing new meaning that our understanding is informed by the *play* process as a circular movement within the hermeneutic circle within which some greater context always influences how we come to understand (Zimmerman, 2015; Vilhauer, 2010). The hermeneutic circle is now discussed.

4.1.4.5 *The Hermeneutic Circle*

For Gadamer (2013, p305) the hermeneutic circle was "fundamental to all understanding". Zimmerman (2015) illustrates this in relation to language where text consists of sentences that together make up the text as a whole while the whole text defines the meaning of each sentence. However, each word only has meaning within the context of the sentence, passage, chapter or

whole text in which it is placed and this is always within a historical context. It is the significance of these relationships between whole and parts that are crucial to this study; they illustrate how the hermeneutic circle is symbolic of understanding as a recursive process.

It is therefore crucial to recognise the ambiguity of language as a metonymy for being; a point also emphasised by Tait (2008) who suggests a logical conclusion to draw from Gadamer's views on language is that the interpreter will understand text differently from its creator as both bring their pre-understandings to the process. This highlights the significance of presuppositions within the hermeneutic process as Baert (2005) observes given that anyone trying to understand is accompanied by their own interests and views of the world.

Moreover, Gadamer (2013, p308) notes how the intrinsic content of what a thing has to say only appears after it is separated from the circumstances that gave rise to it through temporal distancing which he describes as "a positive and productive condition enabling understanding that provides a supportive ground of the course of events in which the present is rooted". Regan (2012) illustrates the significance of temporal distance in returning to a piece of reflective writing which captures an experience noting how the issues involved become clearer with the distance of time and without the distraction of emotion. And it is this notion of recurrent receptivity to new understandings through the circularity of continual interaction between language, *dialogue* and *play* that according to Gadamer enables contemplation of the whole in terms of the detail and the detail in terms of the whole. The outcome of this circular process is what Gadamer called a *fusion of horizons* where past is united with present from which a multiplicity of possibilities emerges and this is now discussed.

4.1.4.6 *Fusion of Horizons*

Gadamer (2013, p317, p386) wrote that "understanding is always a *fusion of horizons*" where something new and something old merge. He went on to say that "the horizon of the present is continually in the process of being formed because we are continually having to test our prejudices" (Gadamer, 2013 p317).

According to Vessey (2009) Gadamer's view that a *fusion of horizons* is brought about by successful *dialogue* has attracted criticism from those who argue that our understanding of something determines whether it is within or beyond our horizon; if it is beyond, there is arguably no fusion since the phenomena cannot be understood. A similar observation is made by Laverty (2003) who describes a horizon as a vantage point from which a range of vision is

possible; while being able to see beyond the close at hand implies a horizon, someone without horizon will value what is nearest and will therefore not see far enough. In this sense argues Laverty (2003) there can be no fusion. But Gadamer (2013, p306) almost anticipates this criticism by emphasising that hermeneutics "must start from the position that a person seeking to understand something has a bond to the subject matter". This implies a sense of historical familiarity which Gadamer (2013, p317) later confirms by stating "the horizon of the present cannot be formed without the past". The relevance of Gadamer's thinking is now discussed in relation to professional healthcare research.

4.1.5 Relevance of Gadamer's Philosophy to Nursing and Healthcare Research

Gadamer's philosophy has been used to contemplate healthcare professional practice for over thirty years (Pascoe, 1996). The following are some examples.

For example, Standing (2009) identifies the value of hermeneutics in understanding the care experience in a four-year longitudinal study prompted by her personal experience as an acutely ill patient. Using in-depth semi-structured interviews student nurses perceptions of clinical decision making in their transition to registered professional were explored. Standing (2009, p20) emphasises the significance of recognising human wholeness suggesting that experiential, practical and instinctive understanding is more meaningful than that of abstract theoretical knowledge concluding that phenomenological research enables nurses "to understand how individuals perceive and make sense of their lived experience".

Tait's (2008) thesis employs a Gadamerian-informed philosophical framework comprising seven conditions for understanding to explore nurses' experiences of recognising and managing patients with clinical deterioration and critical illness. Tait (2008, p146) observes how using Gadamer's tradition enabled the "mapping of history and pre-understandings" an acknowledgement that is relevant to understanding of EBL and the relationship I have with the participants in this study. Tait (2008, p135) concludes that using Gadamerian principles enabled "a new shared understanding of the experience of caring for critically ill patients" to emerge.

Craig (2017) undertook research concerning nurses' experiences of developing skills of service improvement during their journey from student to newly registered nurse using Gadamer's philosophy. Craig (2017, p107) asserts that applying Gadamer's thinking generated an inspired and interpretive methodology enabling "the uncovering of meaning and understanding between

texts and the researcher". Craig (2017, p131) explains how the "borrowing of stories" obtained through interview and engagement with the hermeneutic circle, provided the basis for understanding participants' experiences as they were shared within the context of space and time. The results enabled a new model of self-efficacy in service improvement.

Hermeneutic phenomenology has also informed allied healthcare studies. Glover (2008) draws on the *fusion of horizons* to examine the lived experiences of NHS podiatrists and occupational stress through collage and interviews. Although not identified as such using artwork aligns with Gadamer's perception of the work of *play* where art and spectator engage in a continuous to-and-fro movement from which meaning emerges. Glover (2008) concludes that Gadamer's philosophy enabled an interpretation of experiences as temporal truths which over time continue to change.

Also in the field of allied healthcare Lawrence (2017) draws on phenomenological hermeneutics in a thesis exploring the contribution of social work in adult learning disability care services. The study sought to capture personal interpretations as representative of the lived experience or 'lifeworld' of allied health professionals and service users through semi-structured interviews. Lawrence (2017, p330) acknowledges that "embracing the notion of a lived-world experience particularly within the context of learning disabilities entails a certain amount of unpredictability as each response generated a unique perspective" but simultaneously affirms that using hermeneutic phenomenology "led to an emphasis on rich description and interpretation of individual lived-worlds". Lawrence (2017) concludes that to use only scientific methods within the positivist domain would have been insufficient to understand the complexities of individual experience.

However, health and allied health practitioners have received criticism for over twenty years for making unsubstantiated claims about the approaches they employ according to Fleming, Gaidys and Robb (2003) Laverty (2003) Paley (1997) and Crotty (1996). Crotty's (1996) review of over thirty nursing studies directed criticism for adopting an American hybrid of original European philosophy which failed to reflect accurately the original. Crotty's claims were supported by Paley (1997, 1998) who observed how some studies claimed to be hermeneutic but the approaches employed were essentially Cartesian in splitting reality from experience. Paley (1997) attributed this to using secondary references rather than the original. Crotty's observations are echoed more recently by Tait (2008) who suggests that despite the

ongoing growth of qualitative research nurse researchers continue to make incongruous claims about the philosophies employed. These observations highlight the importance of demonstrating my understanding of Gadamer's concepts and their relevance to this study.

4.1.6 Relevance of Gadamer's Philosophy to this Study

Language is the medium through which the participants in this study conveyed their experiences. It is also the medium through which I interpreted those experiences. However, Gadamer perceived language as complex and loaded with preformed articulation of meanings accompanied by prejudice. But to Gadamer this is what gave hermeneutics its real thrust in gaining new insights. This is important as Zimmerman (2015) observes since when we understand something we try to make sense of it within our own life context to understand it meaningfully. I am moving within a familiar cultural environment where I am able to perceive words in a pre-established context of meaning as Zimmerman (2015) describes. I am connected to the world of EBL and the participants within it. It is this commonality that makes the miracle of understanding possible argues Austgard (2012) and it is through engaging in *dialogue* with *language* that I anticipated doing this.

Gadamer perceived *dialogue* as intimately connected with the search for meaning. It is critical to this study as a process necessary for interpreting experiences within the context of my historical pre-understandings. This would be discouraged in other traditions such as Husserlian phenomenology but considered essential by Gadamer in recognising that historically affected consciousness cannot and should not be separated out in advance of understanding. It is my historically affected consciousness and accompanying pre-understandings that Gadamer saw as essential in *dialogue* and making sense of participants' experiences; a process in which the concept of *play* is at work. As the continuous to-ing and fro-ing movement that makes interpretation a dynamic process from which meaning emerges *play* is relevant to this study in two ways; firstly during face to face conversation and secondly in reading participant-generated texts. It is through the circularity of movement between *language dialogue* and *play* that I anticipated a greater context of meaning from which I would continually review, interpret and understand participants' experiences rather than analyse them in a linear fashion where significant interpretation may have been lost.

Moreover, through a *fusion of horizons* the past is connected to the present from which a fluid multiplicity of possibilities can emerge enabling a way of understanding that is shared rather

than one that is isolated or bracketed. As someone positioned inside the social group being studied this is significant ethically and methodologically since it would have been impossible to bracket or suspend my own assumptions and beliefs about EBL given my proximity to it and the participants asked to engage with it. Gadamer argues that it is our prejudices that open us up to understanding. As Malpas (2018) observes this happens through our prior hermeneutical situatedness and this is illustrated in the way I have developed my knowledge about EBL to date through the bricolage of conceptual frameworks presented in chapter three. They represent a *fusion of horizons*, a vantage point from which a range of visions concerning EBL have been possible as Laverty (2003) describes. However, because my knowledge and experience of EBL is close at hand there is a danger I may not see far enough and should therefore heed Gadamer's (2013, p279) warning against "arbitrary limitations imposed by imperceptible habits of thought". As such I recognise that my knowledge of EBL is determined by the fore structures of fore-having, fore-sight, fore-conceptions and fore-understandings that Gadamer describes, none of which are born of EBL itself but from my interpretations of it and I must remain open to other meaning; a parallel that is reflected in the process of EBL itself.

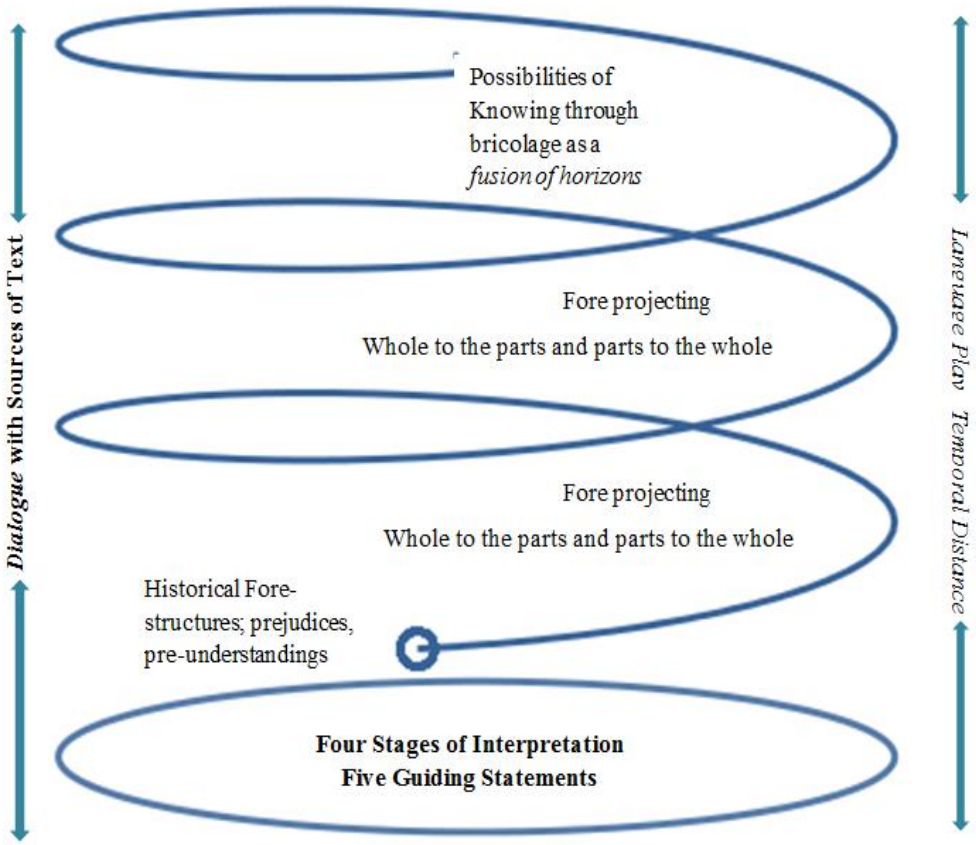
While these discussions illustrate the relevance of Gadamer's philosophy to this study Gadamer (2013, pxxii) stipulates quite clearly that the hermeneutics described is *not* a methodology. It is therefore now important to demonstrate how these concepts were incorporated into my research in order to demonstrate ontological and methodological consistency as Tait (2008) suggests.

However, from studies in the literature review and further afield it is clear that with the exception of Tait (2008) few researchers make explicit the ways in which Gadamer's philosophy is applied to the practice of research. This has made the task of identifying 'good' philosophical hermeneutic studies from which to inform this study difficult. However those within a health/allied healthcare context provide some guidance. In particular Tait's (2008) account of Gadamerian ontology and epistemology was helpful in guiding the development of my approach to understanding through *dialogue* and the relationships between the interpreter and their engagements with the text. The following sections therefore illustrate how Gadamer's concepts informed a self-developed model for understanding.

4.1.7 A Gadamerian-informed Model for Understanding

The self-developed Gadamerian-informed model for understanding is presented in Figure 4.1 below. It was created to guide the process of interpretation.

Figure 4. 1 A Gadamerian-informed Model for Understanding



The model is based upon my interpretation of the concepts presented in the preceding sections and demonstrates how I returned to Gadamer's original text as Fleming and Robb (2019) recommend. Developing the model was also aided by the interpretations of other researchers such as Craig (2017) Austgard (2012) Tait (2008) Glover (2008) and Cohen, Khan and Steeves (2000). Vilhauer (2013) who has studied Gadamer's work in depth was also instrumental in its design along with Wängelin (2007) who enabled me to recognise the relationship between bricolage and hermeneutics.

4.1.7.1 Explanation of the Model and Researcher's Engagement

The model comprises the conditions for understanding described by Gadamer. It is presented as a spiral to reflect the continual process of interpretation and understanding and aligns with Gadamer's (2013, p279) description of the hermeneutic circle as one that is ontological and "not to be reduced to the level of a vicious circle".

Debesay, Naden and Slettebø (2008) and Laverty (2003) note it is the spiralling movement back and forth within the hermeneutic circle that enables the researcher to understand. The model acknowledges that understanding is historically bound and embraces Gadamer's (2013, p309) view that "the discovery of true meaning is never finished.

These conditions for understanding are communicated through the five self-developed guiding statements presented below in Figure 4.2.

Figure 4. 2 Five Self-Developed Guiding Statements

1. Recognise the influence of historical fore-structures and prejudices and the limitations imposed by habits of thought.
2. Recognise language as a shared but complex medium in which mind and world are connected.
3. Remain open and receptive to constant revision of one's interpretation and the making of new meanings through dialogue and the work of *play*
4. Recognise the need for coherence between whole and parts in ensuring text remains emic
5. Recognise understanding as a bricolage of recursive and continual fusion of horizons

An example of how these statements guided my interpretation is illustrated below using one participant's interview transcript. They were reflecting on how EBL had influenced their learning.

> *"I didn't really know how I got there but it was fascinating (laughter) so you stay there for a bit don't you! Whether you get that with any other process I don't know but EBL*

for me meant I went down all these other avenues and I don't know what happened to my brain but I can certainly recall it all".

Guiding statement 1 alerted me to my prejudices concerning EBL as an approach perceived to afford a greater sense of learning freedom. Failing to acknowledge this would not align with Gadamer's thinking about the significant influence of imperceptible had I remained unreceptive to other meaning. The extract might simply have indicated an interest in the subject matter for example.

The need to remain open was accentuated by guiding statement 2. Although accompanied by a shared understanding of language individual perceptions of words may have been different.

This was reinforced by guiding statement 3. After reading the same extract again I realised the participant may have taken a potentially haphazard approach to the enquiry.

Guiding statement 4 therefore prompted me to return to the originating paragraph to ensure the words remained emic and contextual.

Guiding statement 5 reiterated the significance of this within the context of temporal distancing where a later interpretation of the extract was understood to reflect how other avenues of exploration has broadened their horizons.

To further guide my understanding four stages of interpretation by Fleming, Gaidys and Rob (2003) were incorporated into the model. The stages provide an important reminder of the ontological structure of understanding as "a circular movement that runs backward and forward along the text" (Gadamer, 2013, p304).

They are presented in Figure 4.3 overleaf.

Figure 4. 3 Four Stages of Interpretation (Fleming, Gaidys and Robb, 2003)

Stage 1 Examination of all texts

This is the starting point of analysis since the researcher's interpretation of the whole text will influence their understanding of the parts. This initial examination will be influenced by the fore-structures inherent with the researcher's fore-understandings.

Stage 2 Investigation of sentences

Each sentence is examined with the aim of revealing its meaning. In so doing a series of themes emerge leading to a more detailed understanding.

Stage 3 Relate sentences to the meaning of the whole text

This is intended to expand the researcher's understanding and is representative of Gadamer's regard for movement back to the whole within the hermeneutic circle. It is this action that enables the researcher's understanding of the parts to broaden.

Stage 4 Identify passages of shared understanding between researcher and participants

These passages may appear in the researcher's report of findings.

Although presented in a linear fashion my engagement with the stages involved moving back and forth along the text as Gadamer described enabling me to understand "the whole in terms of the detail and the detail in terms of the whole" (Gadamer, 2013, p302). I now discuss the sources of text sought in answering the research questions posed on p41.

4.2 Sources of Text

4.2.1 Introduction

It is important to identify and discuss the sources of text and their role in generating *dialogue*. As McCaffrey Raffin-Bouchal and Moules (2012) observe this type of discussion reveals how human endeavour is inevitably flawed in the pursuit of good practice. This is illustrated in relation to two sources of text sought within this study; video recordings of EBL discussions and the development of personal blogs, the latter of which I discuss in section 4.2.5, p79. Video recordings were intended to capture participants' interactions as experienced however, filming altered the dynamics of the group and individuals became camera-conscious and less inclined

to engage in naturally occurring discussions. I therefore recorded only when the external examiner was unable to attend. I now discuss other sources of text utilised.

The sources of text comprise self and participant-generated sources. I begin by presenting self-generated sources.

4.2.2 Self-generated Sources of Text

These comprised a historical and contextual review of the literature and a reflexive diary (Table 4.1 below). The historical and contextual review enabled me to set the history and tradition of EBL within the context of professional healthcare teaching by engaging with different opinions, other researchers, world views and epistemological stances as Austgard (2012) describes. The review became integrated into my historical consciousness and was pivotal in further developing my sense of fore-understanding.

The reflexive diary captured my ongoing review of study decisions and progress. This is recommended by hermeneuticists Koch and Harrington (1998, p887) who advocate that as a researcher guided by Gadamerian philosophy it is assumed the study will be guided by "a historically produced text and historically produced reader". This was achieved by capturing thoughts and events concerning the circularity of my relationship with participants as a fellow academic, course leader and researcher and my emergent understanding within the bricolage of conceptual frameworks underpinning the study.

Table 4. 1 Self-generated Sources of Text

Sources of Text	Purpose
Historical and contextual review of the literature	Setting the history and tradition of EBL within the context of professional healthcare teacher preparation enabling the development of my historical consciousness.
My reflexive diary	To capture and reflect on my professional background in relation to the study, its participants. To capture the process of reviewing study decisions and progress in relation to the bricolage of conceptual frameworks.

I now discuss the participant-generated sources of text

4.2.3 Participant-generated Sources of Text

Four individually generated sources of text were sought from each participant. They are presented below in Table 4.2. Participants were provided with guidelines containing information about each source and its intended purpose (Appendix 7, p200).

Table 4. 2 Participant-generated Sources of Text

Participant-Generated Sources of Text	Purpose
Before Engagement	Individual perceptions of EBL and perceived impact on learning.
During Engagement with EBL	Live narratives as personal blogs to record lived experience of EBL
Beyond Engagement with EBL	Written reflections about EBL experience One-to-one unstructured interviews involving dialogue as conversation about EBL experience.

Packer (1985, p1091) describes the difference between a rationalist and hermeneutic interpretation as "a little like the difference between a map of a city and an account of that city by someone who lives in it and walks its streets". The sources of text were sought throughout the EBL journey to capture participants' experiences as Packer describes; as they were lived. Through *dialogue* with the sources of text I hoped to reveal what participants' stories told but did not necessarily say as Frank (2010).The texts were also anticipated to provide a historical source from which participants would later reflect on their journeys through temporal distancing.

Each source is now discussed in the historical order sought.

4.2.4 Before Engagement: Pre-EBL Account of Individual Perceptions

I invited participants to write a short account about their perceptions of EBL and its perceived impact on their learning. My intention was to move EBL as a theoretical concept discussed at module onset into their consciousness. Merleau-Ponty (1945) observed that when we analyse our perception of something we transport it into our consciousness. The account was therefore intended to generate a horizon of the present. Through temporal distancing the account would also provide an historical text for reflection.

All participants produced an account though they found this challenging; they were unfamiliar with writing subjectively and their accounts were written in an academic style. They yielded vital insight however concerning individual perceptions of EBL and its anticipated influence on learning. On reflection it may have been better to gather this information through naturally occurring conversation where participants may have felt less uneasy about writing subjectively.

4.2.5 During Engagement: Live Narratives as Personal Blogs

I invited participants to maintain a personal blog where they could record their lived thoughts and feelings about EBL as their journey unfolded. van Manen (2017 p 812) explains that the adjective 'lived' only becomes methodologically significant once we understand the importance of the role it plays in investigating experiences. The personal blog was anticipated to capture participants' feelings in the present by blogging their thoughts following each EBL discussion. While everyone engaged with their blogs, the focus of their entries was mixed; some were minimal others more detailed however both had a tendency to describe weekly activities rather than how they felt about their journey. This unintended outcome reflects McCaffrey Raffin-Bouchal and Moules' (2012) point about the flaws of human endeavor and echoes Gadamer's (2013, p280) warning of how we are often pulled up short by the text, it "either does not yield any meaning at all or its meaning is not compatible with what we had expected".

4.2.6 Beyond Engagement: Individual Written Reflections

To engage their historically effected consciousness I invited participants to develop a written reflection about their journey once ended. Gadamer (2013, p308) refers to the passage of time as "the supportive ground in which the present is rooted". It was anticipated that reflecting on their original perceptions ahead of the journey participants would reflect on their lived experiences. This is supported by Boud and Walker (1998, p191) who observe that "one of the key ideas and features of all aspects of learning from experience is that of reflection". The habit of reflecting was also endorsed by Dewey (1938) and van Manen (2017). Participants' written reflections contained a wealth of expressive, nuanced powerful narratives about their experiences of EBL.

4.2.7 Beyond Engagement: One-to-One Unstructured Interviews

I invited each participant to engage in *dialogue* with me in a one-to-one unstructured interview beyond the EBL process. The interviews were undertaken over a two week period to

accommodate participant availability. Crist and Tanner (2003) observe how in interpreting human meaning and experience, philosophical hermeneutics enables access to practical acts of living through narratives such as interview. I recorded each interview to capture vocal intonations, expressions and gestures as Crist and Tanner (2003) suggest. Ritchie et al (2014) note how interview affords depth of focus on the individual and their unique perspective using verbal communication and spoken narratives. As Agrey (2104, p397) observes "what emerges in beginning a conversation is that it is neither owned by the questioner or the interview but it's an experience in which they both dwell together"; a view endorsed by Gadamer. I therefore began each interview by asking participant to talk to me about their experiences of EBL in order to "uncover what it means *to be* as it reveals itself" (Vandermause and Fleming, 2011, p369). This opening request signified my interest participants' personal experience and encouraged *them* to determine the focus of our conversation. This openness was in contrast to the interview being directed or the questions set which would have stifled spontaneity. As Vandermause and Fleming (2011) observe as the hermeneutic interview unfolds interpretation begins and this gave rise to additional prompts concerning previously-generated sources of text and my historical fore structures. As Gadamer (2013, p378) stated "A person who wants to understand must question what lies behind what is said". Prompts created the openness and movement between players that McCaffrey, Raffin-Bouchal and Moules (2012) describe. This aligns with Gadamer's view on genuine conversation as an exchange that takes its own twists and turns and reaches its own conclusions. This is illustrated in the following extracts where a participant was reflecting on their initial feelings about EBL.

Participant *" I thought at the beginning, well it's, you know, another way of doing some group work if you like, so, erm, I think if you want to cover a lot then it's a good way to do it"*

Researcher *"Can you identify in what way?"*

Participant *"Erm, well, because we made the enquiry ourselves (pause) We had to find ways of finding the information out rather than it just being handed to us (pause) Erm, and sometimes it felt like 'Oh gosh! I'm going down the wrong path here' so that made you then question it yourself more and look at it in a different way".*

This illustrates how the openness of conversation enabled the personal context of the participant's experience to be explored which allowed something more to emerge as Gadamer described.

The interviews were later transcribed. They yielded rich, deep and honest accounts of participants' experiences. Field notes taken during each interview were incorporated into the transcripts. This was extremely helpful during later reading of the transcript when the context wasn't always as clear despite accurate annotation. However in the search for meaning I replayed the recording while simultaneously reading the transcripts to ensure the context remained emic. The search for meaning from the sources of texts is now discussed.

4.2.8 The Search for Meaning through Dialogue with Sources of Text

Dialogue with the sources of text was guided by the Gadamerian-informed model for understanding. Steeves (2000) and Koch and Harrington (1998) note that for the hermeneutic phenomenological researcher, making sense of text comes with writing about it which enables the arrangement of ideas and relationships using words as symbols. *Dialogue* began as soon as I received each source of text and I recorded my thoughts as they emerged. Cohen, Khan and Steeves (2000) describe this as the movement between two metaphors; that of field text during data collection and narrative text emerging through the researchers own understanding of the data thereafter. This helped to build an interpretive picture of each participant's experiences within the context of temporal distancing during which my interpretations often changed. This was illustrated most notably when I had to take an unforeseen one-year leave of absence and it was interesting to note how my initial interpretations had changed when I resumed *dialogue.* Gadamer (2013, p308) perceives time not as a gulf but "the supportive ground of the course of events in which the present is rooted". The period of absence was not therefore something to be overcome rather it reaffirmed the significance of temporal distancing which Gadamer regarded as a positive condition enabling understanding that involves the back and forth movements necessary within the hermeneutic circle.

Dialogue took place within and outside of the individual context by drawing on the literature review and bricolage of conceptual frameworks enabling a fusion of professional, cultural and educational horizons accompanied by my historicity, temporality and inherent fore-conceptions and pre-understandings. All enabled me to remain within the hermeneutic circle. Cohen, Khan and Steeves (2000) suggest it is through the metaphor of horizons that humans understand each other in everyday life. However, as Austgard (2012) points out the real task is expressing this cognitive movement to the reader in such a way that is conveys how analysis was accomplished.

I therefore now describe my cognitive movement using Gaidys Fleming and Robb's (2003) four stages presented in Figure 4.3, p74.

4.2.8.1 Stage 1: Examination of all texts

Whilst the Gadamerian-informed model provided valuable guidance, when it came to reading the sources of text I found myself wondering where to begin and what to do; an experience also noted by Lawler (1998). I began by assembling all sources into participant collections. I read each source one at a time in order to think about the meaning of what was being said. This which involved movement from one text to the other by reading and rereading texts in no set order (Austgard, 2012) which enabled me to gain an understanding of the overall journey. Each source was read over and over in order to remain open to new meanings as Cohen Khan and Steeves (2000) advocate. These meanings were initially recorded in the margins of each source for comparisons with further dialogue through temporal distancing. It is interesting to note how sources generated before the EBL journey felt somewhat abstract and removed whereas when reading the interview transcripts participants' voices were clearly audible in my mind making them feel more personal and meaningful. de Sales (2003) makes a similar observation noting how this made the interview transcripts feel evocatively intimate.

4.2.8.2 Stage 2: Investigation of sentences

I read and re-read sentences from each source several times. Austgard (2012, p832) notes how Gadamer described this movement as one "where the mind hurries from one thing to the other, turns this way and that, considering this and that, and seeks the perfect expression of its thoughts". For reference purposes line numbers were inserted into each source alongside statements describing participants' experiences which were then extracted. These statements included synonyms or phrases that defined elements of EBL and the EBL experience. I was cautious to retain the emic context of these statements and the actual words used remained unaltered. This was a challenging process particularly in relation to written narratives where I wanted to ask participants questions for purposes of clarity but was unable to given the passage of time making it necessary to 'read between the lines' as Regan (2012) describes. Also challenging was to heed Gadamer's (2013, p401) warning that "understanding is not based on transposing oneself into another person" neither is it "to get inside another person and relive his experiences. It is to come to an understanding about the subject matter".

4.2.8.3 Stage 3: Relating sentences to the meaning of the whole text

I began to search for patterns of meaning from observations made in stages one and two. At all times I was careful not to be overly reductionistic or lose sight of the meaning of the whole text as cautioned by Cohen Khan and Steeves (2000). I did this by continuing to ensure statements remained emic within the context of their source while contemplating them within the context of their collection. This illustrates how writing assisted me in coming to understand the journey of each participant as Steeves (2000) predicted.

4.2.8.4 Stage 4: Identifying passages of shared understanding

Fore projecting between parts and whole enabled me to identify participants' shared and unique ideas within the sources of text. Categories were identified and grouped into themes according to their emic similarities as Steeves (2000) describes. At every step I re-examined each source in order to validate the interpretive process. When I felt understanding had been reached I created a narrative of each participant's journey and this was cross referenced against the composite sources of text to ensure interpretation as authentic as possible.

While Gadamer described interpretation as inextricably linked to the interpreter's present situation he also signified the difficulties associated with habits of thought which I experienced. This is also noted by Austgard (2012) and Tait (2008) whose advice to regard the text with candour, openness and absolute priority while being continually reflexive, was helpful.

The process of *dialogue* ended as Cohen, Kahn and Steeves (2000) and Fleming, Gaidys and Robb (2003) describe; when a coherent picture of the whole was achieved. My interpretation of participants' experiences of EBL is presented in chapter five, p87-124.

However, as Robson (2011) notes all people-based research generates questions concerning trustworthiness, bias and rigour which are now discussed.

4.2.9 Trustworthiness: Issues of Bias and Rigour

As Ritchie et al (2014) observe it is important that research is well-designed, well-conducted and generates well-founded and trustworthy evidence; an observation that is significant given this study which is not 'located' within a specific methodology. While I believe I have translated the principles of Gadamer's philosophy as faithfully as possible I cannot claim methodological accuracy since no methodology exists. I also acknowledge Johnston et al's

concern (2016) regarding rigour in qualitative research particularly phenomenology because of its subjective nature.

However, for Gadamer (2013, p283) it was "the recognition that all understanding inevitably involves some prejudice" that gave hermeneutics its power. Moreover, Gadamer argued that historically affected consciousness could not and should not be separated out in advance of understanding. This was affirmed in Gadamer's (2013, p281) advice to remain open to other meaning while being situated within our own which "does not mean when we listen to someone or we read we must forget all our own ideas".

In addressing the issue of rigour Ritchie et al (2014) suggest using verification strategies such as methodological coherence; explaining the relationship between the research questions and methodology, sampling and the collection and analysis of data all of which I discuss within this chapter. I have illustrated methodological coherence by presenting a detailed explanation of how the conditions for understanding within Gadamer's tradition informed the study and how these relate to the research questions. I have explained how the sources of text and their interpretation were anticipated to reflect this coherence and I discuss sampling in section 4.2.10.

However, I have been unable to validate my final interpretations with all participants. While this is recognised as a limitation it reflects the unforeseen challenges researchers often face in real life projects as Cohen, Kahn and Steeves (2000) and Thomas (2013) observe. Additionally the personal blogs did not generate the type of narrative anticipated and in future I would factor in a contingency as Thomas (2013) recommends. Similarly, two participants did not provide reflective accounts despite prompting as Thomas (2013) suggests but they later engaged in the one-to-one interviews.

Despite these challenges I am reminded of Gadamer's view of shared understanding as that arising through the universality of language. I am also reminded of Regan's (2012) observation about reading between the lines. For Gadamer interpretation which was not about finding truth but realising how truth emerges to the reader. To that end I believe understanding was possible through the professional and cultural relationship shared between participants and me.

I now discuss sampling and population.

4.2.10 Sampling

As outlined in Chapter one, p3-4 of the thesis the sample comprised eleven postgraduate professional healthcare teaching students; nine nurses, one midwife and a podiatrist. Sampling was therefore as Merriam (2004) suggests purposeful with information rich cases which aligns with a hermeneutic approach. Aveyard (2010) identifies how purposive sample size tends to be small, as was the case here, particularly in a qualitative study to enable in-depth understanding.

I now discuss the ethical consideration pertaining to the study.

4.2.11 Ethical Considerations

One of the first priorities in conducting any research is gaining ethical approval to undertake the study (Thomas, 2013). Ethical approval was achieved ahead of the study in November 2015 in accordance with institutional policy and process (see Appendices 4&5). The process of ethical approval was not only significant in sanctioning the study but in ensuring protection and respect for participants. This was particularly important given my relationship with them as course lead which placed potentially placed us both in positions of vulnerability. It was therefore necessary to protect both parties and mitigate risk as Peter and Friedland (2017) suggest.

Each participant was therefore asked to consent to their participation (Appendix 6). Assurances were given regarding their anonymity and confidentiality and the parameters of the study were made transparent. The right to withdraw from the study at any time and without repercussion was reiterated and all participants were alerted to the university student support strategy which remained in place throughout the duration of the study. All sources of text were stored securely on a password protected computer and to ensure anonymity sources of text were coded.

My own risk of vulnerability was minimised by the support of my doctoral supervisors with whom I could discuss any vulnerability concerns. I was also able to access the university staff wellbeing infrastructure if required. These measures were imperative given my relationship with participants as researcher insider as outlined on p182 of the ethical approval form. However; my intention throughout the study was to create an environment where we both felt able to pose questions allowing for a continual *fusion of horizons*. Given I was not perceived as a stranger may account for how I was more readily accepted and trusted as Bonner and

Tolhurst (2002) suggest. As such I was able to involve myself fully with participants and their activities.

I now summarise this chapter.

4.2.12 Summary

Within this chapter against a backdrop of philosophers whose thinking was instrumental in the evolution of hermeneutics I have illustrated why Gadamer's tradition was regarded as the fulcrum to exploring participants' experiences of EBL. Drawing on the concepts of *language, dialogue, play, the hermeneutic circle* and *fusion of horizons* embedded within the self-developed Gadamerian-informed model for understanding enabled participants to communicate their experiences through sources of text in a non-threatening way that remained open to meaning. As such the dynamic between the phenomena of EBL, participants' experiences and my position as someone located within the group being studied gave rise to understanding as a meaningful whole. This is illustrated in chapter five where I present a Gadamerian hermeneutic interpretation of professional healthcare teaching students experiences of EBL.

Chapter 5

A Gadamerian Hermeneutic Interpretation of Postgraduate Professional Healthcare Teaching Students Experiences as Enquiry Based Learners

"A person trying to read a text is prepared for it to tell him something"

Gadamer ([1975] 2000, p282)

5.1 Introduction

This chapter presents my interpretations of participants' experiences of EBL during the final module of their PGCE.

I begin by considering why I selected the theme and quote method described by (Steeves 2000) for purposes of presenting my interpretations. I explain how the initial themes determined changed over time and I illustrate this using two examples. I present the revised themes and associated subthemes in a visual diagram before discussing them in greater depth. For clarity and consistency each theme and its subthemes are discussed using a similar format; beginning with an introduction to the theme and its subthemes I explain how they emerged from participants' descriptions. I provide a composite discussion incorporating participant quotes to illustrate my interpretations. A short summary follows each theme before summarising the chapter. I begin by discussing how the themes emerged using the theme and quote method.

5.2. The Emergence of Themes using the Theme and Quote Method

Cohen Kahn and Steeves (2000) suggest there are numerous variations in how hermeneutic researchers present their findings and there are no rules that determine the form presentation should take.

Steeves (2000) explains how in the theme and quote method the overall themes are stated. They are accompanied by subthemes that describe or are related to the themes identified. I made the distinction between theme and subtheme using guidance from Steeves (2000) and Thomas (2013). Thomas (2013) describes a theme as that which captures or summarises the contents of data which here refer to the sources of text. Steeves (2000) explains how a subtheme describes

the theme by being integral to it. Paragraphs therefore incorporate a quote or quotes to illustrate how findings were used to derive them.

Using this method the composite sources of text revealed a complex picture of participants' experiences. Participants' descriptions initially suggested they encountered various ways of being and feeling within the EBL process which I recorded into a grid pertaining to each individual. I then looked for evidence of commonality and difference across participants descriptions from which eight themes emerged (see Table 5.1 below). The themes reflect the areas where various ways of being or feeling were expressed within the sources of text. They provided initial insight into the socio-cultural and historical context of experience as Gadamer (1975) described.

Table 5. 1 Initial Themes

1. Being self-directed
2. Personal motivation
3. Collaborative working
4. Group dynamics & productivity
5. Scaffolding
6. Deep and surface learning
7. Discovery learning
8. Personal development

However, continual engagement with the Gadamerian-informed model of understanding discussed in chapter four (Figure 4.1, p71) and in particular the five self-developed guiding statements (Figure 4.2, p72) and four stages of interpreting texts (Gaidys Fleming and Robb, 2003) (Figure 4.3, p74) enabled new interpretations illuminating significant relationships between themes. Through temporal distancing these relationships emerged by reading and re-reading the sources of text as whole and parts within the circularity of dialogic movement and the work of *play* discussed in chapter four section 4.1.4, p67. Given their complexity these new interpretations often created conflict in my thinking and illustrate the difficulties of 'pigeonholing' human attributes. To that end I did not perceive the themes as static and continued *dialogue* resulted in reducing eight themes to three, each with their own subthemes.

For example, interpretations revealed complex interrelationships between theme one; self-directed learning, theme seven discovery learning and theme two personal motivation. In turn these were associated with theme five and the need for scaffolding. Themes two, five and seven therefore emerged as subthemes.

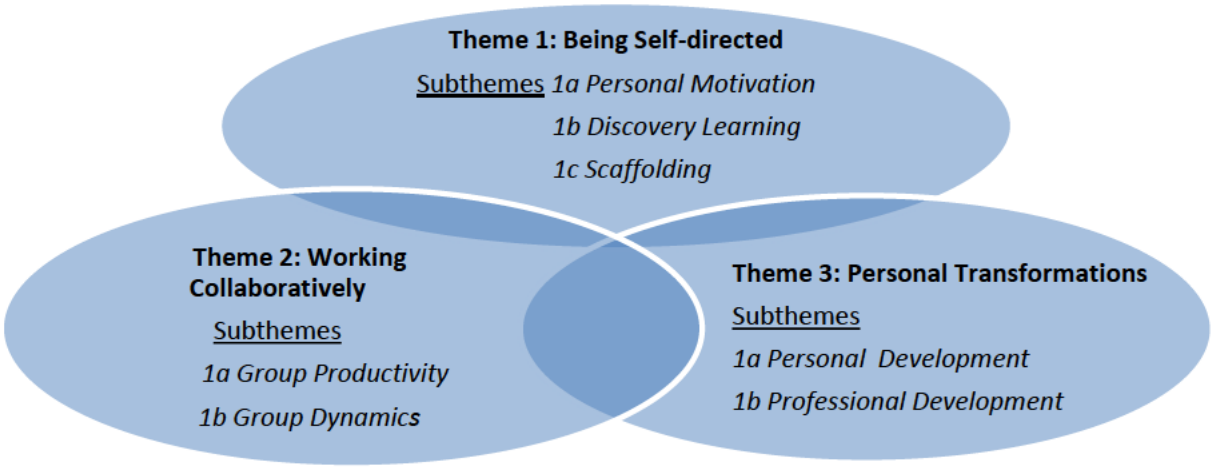
Similarly, interpretations revealed complex relationships between theme three; collaborative working and theme four group dynamics and productivity the latter of which became different subthemes. Theme six deep and surface learning was later interpreted to be associated with theme seven discovery learning which later became a subtheme.

Additionally participants' descriptions often roamed freely between themes and sometimes back and forth making it difficult to identify where to discuss a particular subtheme, however the resultant themes are perceived to be an authentic interpretation of the composite sources of text.

No one theme is attributed any one participant rather they reflect my understanding of participants' experiences of EBL collectively.

The three themes and their associated subthemes are presented in Figure 5.1 below using a visual representation to reflect their relationships. I present each theme overleaf.

Figure 5. 1 Three Themes and Sub-themes



5.3 Presentation of Themes

In the following sections each theme from Figure 5.1 is presented as a composite discussion with its subthemes to reflect the complexity of participants' experiences. Presenting themes and subthemes separately would ignore this complexity and not reflect Gadamer's perception of understanding; that where possibilities of knowing arise through a *fusion of horizons* emerging from the complex hermeneutic interplay of movement between *language*, *dialogue*, the work of *play* and temporal distancing.

To illustrate my interpretations they are accompanied by extracts from participants' sources of text as Cohen Khan and Steeves (2000) suggest. To protect participant identity in my discussion an alphanumerical coding system appears alongside each extract, for example *P1 (6, pre-EBL)* refers to participant 1 line 6 pre-EBL account of individual perceptions.

In the following sections I present each theme. I describe the focus of each theme, how it emerged from my interpretations and provide a composite discussion incorporating participants' quotes to illustrate the derivation of my interpretations as Steeves (2000) suggests. A short summary follows each theme. I begin with Theme 1: Being self-directed.

5.3.1 Theme 1: Being Self-directed

Theme one concerns participants' experiences of learning autonomously. This theme and its associated subthemes emerged consistently throughout *dialogue* with the sources of text.

Being self-directed was anticipated by all eleven participants explicitly and implicitly. Where implied participants used language regarded as synonymous with being self-directed. This was reflected in phrases such as, being student–led, student-centred, learning for one's self, pursuing one's own lines of enquiry, finding information, finding out, looking things up, learning through discovery and investigating.

Continued *dialogue* within the sources of text revealed three further subthemes interpreted as integral to participants' experiences of being self-directed. They are:

- Subtheme 1a) Personal motivation
- Subtheme 1b) *Discovery learning*
- Subtheme 1c) *Scaffolding*

Subtheme 1a) *Personal motivation* emerged from participants' descriptions about being self-directed and whether this was intrinsically or extrinsically driven.

Subtheme 1b) *Discovery learning* emerged from a cluster of participants' descriptions associated with the experiential nature of EBL such as feeling liberated, finding direction, having a deeper or more superficial sense of learning and experiencing changing perspectives.

Subtheme 1c) S*caffolding* emerged from interpretations of descriptions associated with the role of guidance and support at peer and facilitator levels.

Theme 1 and its subthemes are now presented as a composite discussion.

Ahead of the journey, although EBL was described an unfamiliar way of learning by all eleven participants; their descriptions suggest they expected to engage in self-directed activities which they anticipated as a beneficial approach to their learning. This is illustrated in the following extracts from six participants:

> *P1 (6 pre-EBL) I think I tend to learn by enquiry based learning already. Throughout my career I have tended to look things up and investigate and having an inquisitive and enquiring mind has helped me to progress my knowledge further.*
>
> *P3 (3-6 pre-EBL) EBL is essentially taking the focus from traditional teacher-led knowledge to a more student-centred approach aiming to encourage students to learn for themselves promoting a deeper level of learning and understanding.*
>
> *P4 (7 pre-EBL) I think I might enjoy this way of learning as I tend to do this informally in my life already. I regularly get told I drive people crazy asking questions but I have to make it make sense in my head for me to truly understand. I enjoy the opportunity to ask questions as for me it deepens my level of understanding especially when it comes to application.*
>
> *P7 (24 pre-EBL) I feel quite optimistic about being self-directed as I often need to understand the bigger picture of a topic before getting down to pin point finer details so I relish the idea of being able to go away and study something.*
>
> *P11 (12 Pre-EBL) it (EBL) is allowing discovery of information for the students – self-directed learning.*

In all of these extracts participants make a clear association between EBL and being self-directed. Their descriptions can be associated with subthemes 1a) *personal motivation* and 1b)

discovery learning. In each extract there is a sense of being intrinsically motivated to study independently. There is also an association between discovery learning and learning gains. This is expressed in three ways; as knowledge progression (P1), a sense of deeper learning and understanding (P3, P4) and gaining broader perspectives (P7). P3 also implies the shift from being teacher-led to student-led is liberatory and this is echoed by P4 and P11. P4 further endorses this in the following extract.

> *P4 (14 pre-EBL) I do feel people learn well when they have to find out for themselves and go through the experience of exploring ideas I think it helps people develop self-resilience.*

Here P4 reinforces their sense of intrinsic motivation by describing the importance of being able to explore ideas independently. They also imply that being self-directed and discovery learning is associated with a deeper sense of learning. This association is echoed by P9 in the following extract.

> *P9 (8 pre-EBL) I get we learn better when finding out or discovering the information independently.*

In associating discovery learning with 'better' learning P9 implies that learning is somehow more meaningful. Their description also suggests a felt need to engage suggesting they are driven intrinsically and extrinsically by the need to discover. Their extract implies they associate discovery learning with learning gains. These observations are echoed in following extract from P8.

> *P8 (33 pre-EBL) I consider the benefits of EBL to be similar to PBL, encouraged to learn for yourself, not spoon-fed information, form our own thoughts and opinions, choice, creativity.*

Here P8 signifies that discovery learning enables independent thinking which they regard positively and in preference to being taught. They suggest EBL enables changing perspectives and their use of the words choice and creativity imply that being self-directed brings about a sense of liberation through having the freedom to learn differently. However, for other participants' while being self-directed was anticipated positively on the one hand, it was paradoxically anticipated with some trepidation on the other. This is illustrated in the following

extract from P1. Their description also relates to subthemes 1a) *personal motivation* and 1b) *discovery learning.*

> *P1 (32 pre-EBL) EBL might make it more difficult to precisely define the issues as the enquiry could be very broad. It may feel like a scatter gun approach that is then difficult to make sense of. This could be frustrating and I may feel uncomfortable as it is so student-centred.*

In this extract P1 is clearly anxious about the student-led nature of EBL despite their propensity to learn by enquiry described in their previous extract. While intrinsically motivated P1s concerns about a scatter gun approach suggest they are simultaneously apprehensive about discovery learning and not being able to find meaningful direction. This paradoxical regard about being self-directed was revealed in descriptions by other participants who on the one hand anticipated EBL positively while on the other harboured concerns about finding direction and understanding what was expected of them. This is illustrated in the following extracts.

> *P2 (24 pre-EBL) I expect I'll enjoy it (the EBL process) once I get past the initial uncertainty of what I am supposed to do.*

> *P6 (14 pre-EBL) I find it difficult to begin a new project but once I know what it is that is needed, the reaching is easier.*

> *P8 (28-30 pre-EBL) Facing these new methods of learning can be daunting and at the offset may be confusing. For development of this learning style I would need guidance on 'how to do it', as I may have abilities in some areas but not others.*

While these extracts are concerned with subthemes 1a) *personal motivation* and 1b) *discovery learning* in that they infer a sense of internal drive to engage with being self-directed they also bring into play subtheme 1c) *scaffolding* in the way participants describe their anxieties about knowing what to do. Their descriptions suggest while intrinsically motivated to engage in the EBL process, participants are extrinsically motivated by their uncertainties signified by the need for clarification and guidance. This is echoed in descriptions by P3 and P10 in the following extracts.

P3 (17 pre-EBL) I feel that there has to be a balance of enough information given by the tutor to ensure understanding of the assignment/project to prevent any misunderstanding.

P10 (13 pre-EBL) EBL may be more student focused only requiring minimal support from the tutor. The only concern would be if participants lost focus or went off track with their thought processes.

While these extracts suggest P3 and P10 are both intrinsically motivated to engage in the EBL process their descriptions also imply a sense of insecurity about being self-directed and the need to strike a balance between being self-directed and receiving support from the facilitator. Their descriptions suggest the facilitator has a vital role in providing reassurance and some degree of guidance in the journey of discovery. This need to strike a balance between self-direction and facilitator scaffolding was echoed by another participant but for different reasons as the following extracts from P9 illustrate.

P9 (5 pre-EBL) I have just recently returned to study after a 10 year gap and I understand it (EBL) to be self-directed investigations about a topic or subject.

P9 (12 pre-EBL) Do I have the IT skills to research the topic and the skills to do this effectively? I have the basic skills now but I do not use the library resources to the maximum.

Here P9 identifies two concerns both related to subthemes 1a) *personal motivation,* 1b) *discovery learning and* 1c) *scaffolding;* firstly their anxiety about not engaging in any formal studies for several years, and secondly; their concerns about having insufficient IT skills and sourcing information. The fact that P9 has enrolled onto the PGCE after so many years away from formal study implies they are intrinsically motivated to become self-directed and engage in discovery learning however; they are also extrinsically motivated by their concerns about having insufficient IT skills. Both concerns indirectly signify their felt need for scaffolding in coping with being self-directed. When reflecting on their experience of EBL beyond the journey however, P9 gave no indication that these concerns had hampered their experience as the following extracts reveal.

P9 (4 reflection) When I reflect on the EBL process, it's with fondness and appreciation. There have been such a lot of 'learns' for me - the benefit of EBL as a learning tool and the surprise that this was the case.

P9 (8 interview) Its changed the way that I've learned – let me have a think about that – I'm more open to know that there's a different way of learning – where I didn't know that before.

In these extracts P9 makes no explicit reference to their initial concerns about being self-directed or their perceived IT skill deficit. Moreover, their descriptions suggest their experience of being self-directed was unexpectedly positive despite their unfamiliarity with EBL. Furthermore P9 suggests that being externally motivated to engage in self-directed learning had introduced them to a different way of learning which implies EBL had some influence on their personal learning style. In the second extract there is also a sense that being self-directed may influence their developing professional healthcare teacher role in becoming more open to different ways of learning. However, when reflecting on their experience beyond the EBL journey P9 later describes how effective facilitator scaffolding was instrumental in their positive experience as the following extract illustrates.

P9 (118 interview) I think you've got to have really good facilitation – and hand hold – that virtual hand hold when things are a little bit unsteady – erm without that good facilitation – I think that makes impact – and we had a lot of trust in you and we knew that you weren't going to let us down, lead us into something that we couldn't cope with – so I think that was another very important point.

In this extract P9 identifies how their positive regard for being self-directed hinged entirely on striking the balance between being self-directed and receiving adequate facilitator support; a point also identified by P3 and P10 earlier in this section. P9 implies this balance was achieved by placing trust in me as their facilitator. However, in the following extract they also suggest scaffolding derived from peer support; a view that is echoed by P1 and P8 in the following extracts.

P9 (20 interview) I think it (EBL) worked really, really well for us – it was brilliant – I was really naïve in the beginning – BUT would it work as well if it was a different group

P1 (85 interview) we helped one another through it I think.

P8 (34 interview) I was lucky because the group were very like-minded, err would accept that responsibility go away, do what they had to do and bring it back (pause) erm (pause) there wasn't anybody that didn't put that I'd say 100% really.

In these extracts it is clear that peer support was regarded as important scaffold in the success of the EBL journey. However, P9 contemplates whether the success of their experience would have differed in another group; a point also alluded to by P8 in describing their group as very likeminded in their approach.

It seems that whether facilitator or peer-led, scaffolding was perceived as an important support mechanism even by those participants who did not anticipate needing it ahead of the EBL journey. These participants later described scaffolding as an important survival mechanism in being self-directed. For example, in the following extracts P6 describes how facilitator scaffolding helped them to regain focus.

P6 (42 reflection) the limited guidance we received from the tutor was welcomed to ensure we were on track and help guide our thought processes when we lost focus

P6 (134 interview) I liked the fact that you (facilitator) were there even though you didn't do too much guidance – that reassured us that we were all heading in the right direction – and the feedback that you gave throughout the process so that was really helpful.

In these extracts P6 identifies how facilitator scaffolding was important whether provided directly through guidance or indirectly by simply being in the room. There is also a sense that the latter somehow drove progress irrespective of intervention. This interpretation is supported by the description of P1 who in the following extract reflects on the uncertainty of direction that paradoxically impacted positively on their progress.

P1 (19 Interview) In a way I think it (being self-directed) did make it different because I suppose we didn't really know what we were looking for initially and we had to find that out ourselves rather than being given it from the tutor. But in a way that was 'good' because it made you look at things in a much broader way perhaps than you'd

just been given the information and just read that information and it wouldn't have 'stayed in' and was just surface learning?.

Here P1 implies that it was the uncertainty of direction that drove them on; a view echoed by P2 in the following extract.

P2 (9 reflection) During my reading I have gone 'off-piste' numerous times as I found related & interesting articles, I think this has led to a much broader and deeper knowledge about the subject that I was looking into. Any time that I spent on the enquiry seemed to raise more questions than I got answers to which left me wanted to read more.

P2 had previously talked about getting past the initial uncertainty of what they were supposed to do. However, beyond their EBL experience they described how the uncertainty of 'going off-piste' had made them want to read more. They later elaborated on this during interview.

P2 (33 interview) I ended up on Hermon's brain model and I didn't really know how I got there but it was fascinating (laughter) so you stay there for a bit don't you!. So whether you get that with any other process I don't know but EBL for me meant I went down all these other avenues and I don't know what happened to my brain but I can certainly recall it when I came to write the framework (reference to a future assignment).

In this extract P2 implies how subthemes 1a) *personal motivation* and 1b) *discovery learning* gave rise to a sense of freedom, of liberation to look beyond their immediate horizons serendipitously. Their experience is also described by P4 who in her interview recalled stumbling across the story of Procrustes, a figure of Greek mythology in a particular line of enquiry and how this inadvertently made them reflect on the role of conformity and differentiation in learning (P4, 145 interview). For both participants discovery learning seems to provide another kind of scaffolding; that of liberation or the freedom to explore which in these examples enabled them to encounter new and unfamiliar concepts using unanticipated lenses. Moreover, both descriptions suggest the knowledge gained through discovery was meaningful to their learning.

That discovery learning is in itself a scaffold to more meaningful learning is echoed by P8 who had previously anticipated feeling daunted ahead of the EBL process. However, they too

described their lived experience of being self-directed positively as the following extracts illustrate.

> *P8 (38 reflection) I do believe this to be a really good way to learn as it encourages self-exploration of subject matter.*

> *P8 (101 interview) I think yeah, it's made me stop and look at myself as a learner, an independent learner, but I've grown to be broader.*

Here P8 suggests that while the role of facilitator as scaffolder was important; it was the experience of discovery that scaffolded meaningful learning, a point also identified by P6 and P1 earlier in this section in their descriptions of how uncertainty drove their enquiry forward with minimal facilitator intervention. P1 illustrates this in the following extract.

> *P1 (48 interview) there were only a couple of times you commented and it wasn't really trying to reign us back in – it was more of a comment from you to help us think again about something.*

In this extract P1 suggests that limited facilitator scaffolding was positive in that it enabled the group to discover freely and contemplate concepts in a different way.

However, while the liberation associated with discovery learning was described positively by some it was the role of facilitator scaffolding that was regarded as pivotal in progressing with the enquiry as the following extract illustrates.

> *P5 (25 interview) we came to a point where we'd exhausted everything and then it was like "well what do we do now?"*

The extract from P5 suggests that although the group had found initial direction in being self-directed that facilitator scaffolding was necessary at intervals in order to move forward. P5 illustrates this in conveying the uncertainty of the group.

Despite the intervening periods of uncertainty, when reflecting back on their experiences of being self-directed the group described their experiences in positive terms despite their initial uncertainties. This is illustrated in the following extract from P6.

> *P6 (61 interview) I've been interested in those things (laughter) or its broadened my outlook or 'I've never looked at that before' or 'this is new to me' also it connects with*

other parts of the course we've already done and so I thought 'ok this is relevant to what we're doing now but it also connects to erm, another piece of work that we've done

This extract from P6 illustrates the paradoxical experience of being self-directed. Ahead of their EBL journey P6 felt anxious about knowing what to do but went on to describe how the uncertainty of discovery learning had in fact enabled them to take a broader approach to the subject matter. Their description suggests this helped them to assimilate new learning with existing knowledge and in so doing broadened their horizons. This is reiterated in the following extracts.

P3 (138 interview) It's like we've just been saying - in the traditional lecture method you could be sitting in there and taking notes but are you actually learning through that? I've felt that I've learned more through the EBL process.

P4 (7-9 reflection) I have enjoyed the opportunity to undertake EBL and I think it has been very beneficial. I think as a style of learning it suits my personality very well. I am naturally inquisitive and internally motivated to discover and find things out.

P7 (42) EBL allowed the group to take responsibility for our own learning, which at the time proved a challenge, but in retrospect allowed us to follow a different pathway to learn and develop, and as a result we have formulated our own model.

These extracts are associated with subtheme 1a) *personal motivation* in that they reveal personal drive. They are also concerned with 1b) *discovery learning.* For P3 while the experience of being self-directed deviated from their familiar way of learning their description suggests they have experienced learning gains. For P4 being self-directed suited their intrinsic motivation for independent discovery so cementing their perception of self as an independent learner. For P7 being self-directed and taking responsibility for their own learning and that of others was simultaneously motivational and challenging but enabled them to broaden their existing horizons to the extent they felt able to create an educational model. These descriptions suggest the liberation of discovery learning gave rise to a deeper sense of learning that was driven by an intrinsic and extrinsic drive to progress. This was perhaps best illustrated P4 who elsewhere in their interview transcript referred to their continued thinking beyond module contact hours where they ended up 'ten steps even further down the line' (P4 (32 interview).

This sense that being self-directed is more beneficial to learning is further illustrated in the following extracts.

> *P7 (2 reflection) I feel as though my knowledge has grown far more than I ever think it would have done had I sat in a lecture.*

> *P7 (61 interview) I think it (EBL) makes you use your brain rather than just sitting and looking at a power point where it's really passive– it's because it's much more active – you have to use your brain in a slightly differently way I think .*

In these extracts P7 endorses the view of P3 and the liberation afforded by discovery and how discovery learning enabled them to learn more than if they were a passive learner. In the second extract P7 elaborates on why this is so and suggests the involvement of active thinking as opposed to passive learning in their description of using their brain. This is also reflected in the following extract from P9 who explains how the act of discovery enabled new information. They also explain how this was utilised.

> *P9 (20 reflection) There were new avenues to explore each week based on what we had found but it remained connected and we were applying it to previous discussions and this embedded knowledge .*

In this extract P9 describes how through discovery the group were able to contemplate new findings and relate this to their existing knowledge in order to make sense of it. P9 further illustrates the positive impact of discovery but this time in relation to their individual development in the following extract.

> *P9 (83 interview) all of a sudden it was my starting point – there might be something else I can contribute to here – it's not just 'I'm not very good at text so I can't do it'!*

In this extract P9 describes how discovery learning enabled them to contribute to the group's enquiry endeavours. Their description suggests that being self-directed was enabling and liberating in providing them with the impetus to contribute to group discussions when they had previously felt unable to do so.

This enabling and liberating experience is also described by P10 in the following extract.

> *P10 (16 interview) I really felt that I had gone deeper, learning*

P10 (109 interview) EBL I think it's, there isn't an answer (reference to the enquiry trigger) so I think it could almost go on and on and on you could just keep reading and finding out and erm (another longish pause) And how I learn - my learning styles are maybe more effective in EBL than in lectures from a learning style I don't learn just with the rote learning

P10 had previously made no judgement about the perceived value of being self-directed ahead of the EBL process but here they clearly describe gaining a deeper sense having engaged with EBL. Their descriptions identify the benefits experienced which suggest P10 was able to explore a wider range of subject matter through discovery learning. Moreover, P10 alludes to a change in their propensity for learning to one that involves enquiry as opposed to being taught.

However, one participant's descriptions of their EBL journey suggest their anticipations of being self-directed differed greatly from their experience. Ahead of the EBL process P11 associated EBL with discovery learning and their perception of this was described positively in an enabling way. When reflecting on their experience during interview they had a rather different outlook as the following extracts reveal. The extracts are associated with subthemes 1a) *personal motivation* and 1b) *discovery learning*

P11 (12 Pre-EBL) it (EBL) is allowing discovery of information for the students – self-directed learning.

P11 (81 interview) Not really, no (when asked if EBL had made any difference to their learning). I could see the bigger picture because it was split down into portions without me having to go and look for it myself erm, but for me I could look at the bits that I had and go 'in depth'

P11 (113 interview) I can only remember my bit that I actually went away and researched or learned or you know…

These extracts reveal a significant change in perspective by P11. The anticipation of liberation and discovery implied in the first extract did not reflect their lived experience. Their second extract suggests they experienced little in the way of perceived learning gain. However, they simultaneously acknowledge being able to see beyond their immediate horizon in the way they describe the discovery process but they did not perceive this as a learning gain. Neither do they

associate the sense of deeper learning gained from their own research, which they identify in the second extract, with being self-directed.

5.3.1.1 Theme 1 Summary

EBL was an unfamiliar way of learning for all eleven participants. However ahead of the journey everyone anticipated being self-directed within the EBL process.

Expectations of being self-directed were described in beneficial and anxiety-provoking ways and were associated with three subthemes; 1a) *personal motivation,* 1b) *discovery learning and* 1c) *scaffolding.*

Subtheme 1a) *personal motivation* was interpreted to play a significant role in everyone's journey explicitly and implicitly and in two ways; firstly as an individual characteristic and secondly, as a drive extrinsically imposed by the EBL process. Those who were intrinsically motivated ahead of EBL sustained their motivation throughout while those whose motivation was imposed by EBL implied they were intrinsically motivated by the end of their journey through descriptions of their experiences.

Subtheme 1b) *discovery learning* was anticipated to attract benefits and drawbacks ahead of the EBL process.

The anticipated benefits of discovery learning were described in terms of being independent and learning gains and pertained to broadening perspectives, progressing individual knowledge and gaining a deeper sense of learning. Beyond the EBL journey ten of the eleven participants suggest these benefits were experienced.

Perceived drawbacks were associated with the challenges of shifting from being taught to discovery learning and were associated with anxieties about finding direction and striking a balance between being independent or facilitator-led. One participant experienced particular anxiety about their IT skills.

Those concerned with the shift from being taught and striking a balance between being self-directed and facilitator-led later implied that discovery learning had opened up unexpected avenues of exploration. These participants described their experience of discovery learning as liberatory and associated their experience with knowledge enhancement and a deeper sense of

learning. The participant with concerns about their IT skills omitted to reflect on this anxiety but later described how discovery and peer support had empowered them.

Subtheme 1c) *scaffolding* was anticipated ahead of the journey in three ways; firstly, to provide information about what was expected during the EBL process, secondly, in relation to finding direction, and thirdly, in relation to striking a balance between being self-directed and being facilitator-led. Beyond the EBL journey participants described their experience of being self-directed in ways that suggests the need for scaffolding gradually diminished as the journey unfolded. Participants also described how peer support provided vital scaffolding in enabling them to gain a sense of independence through working collaboratively which is the second theme to emerge from dialogue with the sources of text. This is now presented.

5.3.2. Theme 2: Working Collaboratively

Theme 2 focuses on how participants described their experiences of working together within the EBL process. This theme emerged during the early stages of *dialogue* with the sources of text and was a consistently emerging theme throughout participants' descriptions of their EBL experience.

Deeper immersion with the sources of text revealed three subthemes. These subthemes were integral to the ways participants' described their experiences of collaborative working. They are:

- Subtheme 2a) *Group Productivity*
- Subtheme 2b) *Group Dynamics*

A brief explanation of each subtheme now follows.

Subtheme 2a) *Group Productivity* emerged from participants' descriptions of the perceived benefits and drawbacks of group working and its impact on learning. Encompassed here are organisation and planning, the process of decision making, utilisation of time, the creation of ground rules and assignment of group roles (chair, scribe and timekeeper) and responsibilities.

Subtheme 2b) *Group Dynamics* emerged from participants' descriptions of how they communicated and interacted with each other. Encompassed within this subtheme are

participants' descriptions of having 'voice' in relation to dominant and less loquacious group members.

Theme 1 and its two subthemes are now presented as a composite discussion.

Ahead of their EBL journey all eleven participants anticipated working collaboratively and this was described explicitly and implicitly using language synonymous with collaborative working such as group work, subgroup work and working with peers. However, there were some initial concerns about working collaboratively which were based on participants' previous experiences as the following extracts demonstrate.

> *P6 (17 pre-EBL) I find group work hard as I need time to think and reflect. When I am involved in group work, preparation is essential, or I can feel out of my depth or left behind with the discussion.*

> *P7 (17 pre-EBL) In terms of group investigation within a large group such as this, it quite naturally tends to take a long time to make relatively simple decisions, sometimes going around in circles to only end up back at a decision made earlier. This at times seems tedious and a waste of time.*

In these extracts participants describe the perceived drawbacks of group working. They are associated with subtheme 2a) *group productivity.* Their descriptions are largely concerned with organisation and planning. For example P6 describes their anxiety about the perceived pace of work and their ability to cope with this in the time available while P7 describes their anxiety about the time taken for decision making when several group members are involved.

However, five participants (P2 3 7 9 and 10) anticipated that group work would give rise to challenges associated with subtheme 2b) *group dynamics* which were perceived to potentially influence subtheme 1a) *group productivity.* Some of these challenges are illustrated in the following extracts.

> *P3 (26 pre-EBL) When working within a group, it is sometimes difficult to successfully complete an EBL topic or assignment – particularly in terms of group dynamics. Some people within the group may not contribute as much as others or seem disinterested, and this can affect the progress and relationship of the topic and the group – having*

experienced this myself. In comparison, it may be felt that members of the group are not allowing others to contribute and this can also be distressing for the team.

P7 (13 pre-EBL) My concern with this, lies in the size of the group, and the more vocal nature of some members. Some are very keen to offer their thoughts and opinions whilst others who are less vocal but have equally valid points are less easily heard. On the contrary there may be members who do not speak up, and let others "do the work".

P9 (18 pre-EBL) Will the group be strong enough to cope with challenges and differences of opinion from everyone, will it 'upset the apple cart?' It's friendly and comfortable within the group will EBL change the dynamics of the team?

In these extracts participants described their concerns about group working. Their concerns suggest they anticipated similar challenges to those previously experienced and refer to a complex array of factors concerning group dynamics and their influence on group productivity.

Three participants (P2, 3 and 7) anticipated challenges concerning group members perceived as more dominant. The same participants were concerned about the silencing effect of these members on those perceived as less dominant. Dominant group members were described as those with voices perceived to be louder and more determined to have their opinions heard while less dominant members as those whose voices are unheard. The perceived impact of the more dominant suggests they were anticipated to influence the interest sustained by less dominant members. The participants who anticipated these challenges were also concerned about achieving a fair distribution of workload in group activities. The impact of these challenges was perceived to pose a risk to the internal dynamics of the group.

Conversely, ahead of the EBL process four participants (P1, P5, P7 and P10) anticipated that group work would bring about a number of benefits. One of these (P7) had correspondingly anticipated drawbacks. The benefits identified concern subtheme 2a) *group productivity* and are illustrated in the following extracts.

P1 (28 pre-EBL) the group enquiry work should help to improve my own knowledge by learning from others and listening to other opinions.

P5 (12 pre-EBL) In my teaching experience smaller groups often offer better answers or solutions to problems and collaborative thinking as a larger group has offered structure or evaluation of a chosen subject.

P7 (22 pre-EBL) I anticipate that I will need to be undertaking wider and deeper reading, in order to effectively contribute to the knowledge that my group is developing.

P10 (23 pre-EBL) The importance of making the process more varied, such as group work, is essential to ensure everyone's needs are met.

These extracts illustrate how working collaboratively was perceived as beneficial at group and individual levels. For three participants (P1, P7 and P10) their expectations were based on previous experience. P1 anticipated that group work would extend their personal knowledge while P7 who had previously anticipated challenges regarding group dynamics anticipated being able to contribute more effectively to group progress by using their personal research. Similarly, P10 who had previously anticipated challenges with group productivity also anticipated individual gain from the variety of findings generated within the group. For P5 however, the benefits of group work were based on their former experience of subject review as a developing professional teacher and not as a learner. They were the only participant to reflect on group working from this perspective.

The complex relationship between the perceived benefits and challenges of group work continued to emerge beyond the EBL experience and often in ways that were contradictory to previous anticipations. For example, P9 who had anticipated that group work would be challenging given the dynamics within the group later described their experience in extremely positive terms. Additionally P6 who was concerned about the perceived pace of work later described not only being able to sustain their concentration but an increase in confidence on the back of this as the following extract illustrates.

P6 (13 reflection) I felt I would struggle in the discussions as it takes me longer to process information and I was fearful that I would not be able to keep up with the pace of the discussion. I did struggle with this area but was able to maintain concentration and this has begun to increase my confidence and self-efficacy.

However, one participant's description suggests an inversion of this experience; P11 had not anticipated challenges with group work but later identified how the pace of group discussions prevented them from contributing as the following extracts illustrate.

> *P11 (69 interview) Sometimes it moved a bit too fast – but that might be me because I've got a thing personally about what's being said and what's being talked about and especially if people are using abbreviations…*

> *P11 (76 interview) It's moved on three or four points further on and yet you had something to say about that point erm, or you might not be somebody who can speak out loud enough to be able to be spoken out above somebody else .*

P11 was not only disabled by the pace of work they were inhibited by the influence of subtheme 2b) *group dynamics.* P11 describes loss of voice within the group due to dominant group members, a situation previously anticipated by P2 3 and 7 who reflecting on their initial anxieties about this later confirmed their voices were not always heard as the following extracts illustrate.

> *P2 (18 reflection) Sometimes the group work was frustrating, although the group work well together and support each other we are all individual and have our own ideas so at times it was hard to get your opinions heard or to agree overall decisions.*

> *P3 (18 reflection) I did feel at times that due to the size of the group it was on occasions difficult for everyone to express their comments and be heard effectively.*

> *P7(31 interview) I think sometimes with the EBL work if my voice wasn't being heard or I felt that somebody else was not listening to me or was going on about their concept or was perhaps not bringing it back to the question it would frustrate me*

In these extracts P2, P3 and P7 describe how loss of voice prevented them from expressing their ideas during group discussions. This concerns subthemes 1a) *group productivity* and 1b) *group dynamics* where the latter is described as influencing the former. This influential relationship was described by some participants an anxiety provoking but one that was addressed in part by the assignation of the group Chair. The Chair was perceived to help redress the balance between louder and quieter voices as illustrated in the following extract.

P6 (16 reflection) on a number of occasions the Chair recognised individual's difficulties to engage in the discussion and went onto invite opinion. This provided me opportunity to give my thoughts and be heard.

In this extract P6 suggests the interventions of the Chair enabled them and others like them to contribute to group discussion by recognising the difficulty they encountered in being heard. P8 endorsed this view when reflecting on the role of the Chair in the following extract.

P8 (22 reflection) (the Chair) did allow others the opportunity & experience of coming out of our comfort zones a little further.

P8 describes here two important actions; firstly how the Chair created opportunities for less vocal members to speak and secondly, how this action gave voice to those more reluctant to speak. Their actions had an important effect on group dynamics which in turn influenced group productivity through the act of sensitivity and enablement.

That group dynamics should influence group productivity was noted by others. For example in the following extract P5 who had previously anticipated challenges associated with group size and the potential for lack of structured progress notes how productivity came from within the group by recognising the idiosyncrasies of its members.

P5 (16 reflection) we learned from each other what our strengths were and supported our misgivings as a team. Individual opinions were not ignored and we each felt the courage to step up and take a leading role in the process.

The perception that subtheme 1a) *group productivity* was influenced by subtheme 1b) *group dynamics* is reinforced by others when reflecting on the importance of ground rules in regulating the contributions of individual members during group activities to ensure a fair distribution of work as the following extracts illustrate.

P6 (22 reflection) we all took responsibility for our part in the process. Having the roles of Chair, scribe and time keeper helped the process by ensuring each individual played a part and kept the focus clear.

P9 (27 reflection) It was clear if one of us didn't contribute it had a domino effect and impacted others.

These extracts highlight the importance of group roles in relation to subthemes 2b) *group dynamics* and 1a) *group productivity.* They illustrate how group roles were perceived as helpful in bringing about a sense of responsibility in everyone to play their part and uphold their agreed responsibilities. However, those undertaking group roles described the stress associated with adopting the role as the following extract illustrates.

> *P1 (67 reflection) Trying to listen to everyone and pick out pertinent points that would keep the group on track was hard, especially when I felt like I had missed some points and we had moved on to something else .*
>
> *P4 (174 interview) I did the role of the scribe which I do enjoy doing that because I do like to try and listen to everybody's ideas – you can't write it word for word 'cause you'd never be able to keep up, but like try to summarise what they've said and almost synthesise that and put it how it needs to be so I do like doing that. And then because I'd gone home afterwards and thought about it and came up with that idea for the model and drawn it - out ready for the next EBL*
>
> *P8 (41 interview) EBL would be quite a hard process or more challenging (raised intonation at end) particularly for the Chair (pause) maybe in having to err recognise who was working (pause) perhaps well and who wasn't and I'd say that would be quite erm, may be quite difficult - would need to be responded to by the group because that wouldn't be a fair process either.*

These extracts illustrate the complex interaction of subthemes 1a) *group productivity* and 1b) *group dynamics.* They describe how assuming the role of Chair and Scribe was stressful in having to adopt two identities; firstly that of group member and secondly that of group regulator and the conflict encountered in switching between both.

This is illustrated in the first extract by P1 who acknowledges the difficulty of absorbing the views of the group while trying to determine an appropriate direction. The stress of this dual role is echoed by P4 and P8 who despite adopting different roles both describe the challenges of regulating group discussions while trying to sustain their individual momentum in group discussions.

The complexities associated with subtheme 2b) *group dynamics* and their influence on 2a) *group productivity* were echoed in participants' reflections on group discussion beyond the EBL process as the following extracts reveal.

> *P2 (92 interview) It's a bit overwhelming initially 'cause you don't want to speak – you don't want to speak over people, you don't want to say something that's really stupid. But bit by bit I think we all got used to that,*

> *P4 (30 interview) While I enjoy it and I think it's good, it is frustrating sometimes just because of different personalities in the group*

In these extracts P2 and P4 describe the difficulties of adjusting to the complexities of engaging in group discussions in the way they describe striking the balance between being too outspoken and not speaking out enough. Their descriptions imply a similar sense of difficulty encountered by P4 and P8 in sustaining individual momentum while contributing effectively to group productivity.

However, despite its challenges group discussion was also perceived to afford individual gains as the following extract from P9 reveals.

> *P9 (109 interview) Well it consolidated things that I already knew – but particularly with the theories, the learning theories – I couldn't get that at the beginning – that was just too much for me I couldn't quite understand it and then hearing it over and over again – and people applying it in a different way and all of a sudden – the penny dropped and I thought I get it now! And that was by conversation.*

In this extract P9 describes how group productivity and the culmination of different perspectives generated from group working resulted in a greater sense of understanding. P9 gives a real sense of the impact of group discussion in in the following reflection.

> *P9 (reflection) The team transformed from a disjointed group of professionals fumbling around a subject that we were not clear on, to a well-oiled piece of machinery. The longer it went on the better at it we became; it was so powerful in fact, that there was a grieving process when it came to an end. I thought 'how am I going to get go back to normality now I have all this information.*

In this extract P9 describes how subtheme 1a) *group productivity* progressed incrementally into something very powerful through collaboration; a view that was ultimately echoed by ten of the eleven participants despite their correspondingly less positive views concerning subtheme 1b) *group dynamics*. The following extracts illustrate some of the benefits identified in relation to subtheme 2a) *group productivity*.

> *P1 (41 reflection) I was able to learn from my peers through the explorations they had done individually and then brought to the discussions. This enabled me to cover more ground than I could have done alone, which was great.*

> *P3 (8 interview) Because obviously everyone looks at things from different angles and you might see that somebody else has looked at it differently pause erm, to how you would have interpreted it and I think that's quite a learning curve in terms of the EBL process because then you can take that forward into your further learning . And it's about thinking outside the box and bigger picture erm definitely.*

> *P4 (8 interview) I think when there's a group of you I think you can feed from each other and understand things more and people can help you to put things into context that you might not realise until you have an open conversation with somebody about it. I think I learn better doing that because I've got the chance to ask questions and do it in my own words*

These extracts illustrate a range of benefits that participants associate with learning from one another. There is a sense that in pooling their ideas participants were able gain different wider perspectives which helped them to clarify their thinking.

Moreover, despite the challenges associated with subtheme 1b) *group dynamics* there is sense that working collaboratively enabled participants to develop a sense of tolerance as illustrated in the following extracts from P5 and P9.

> *P5 (16 reflection) We learned from each other what our strengths were and supported our misgiving's as a team*

> *P9 (32 interview) we knew everybody's little quirks – or we were more aware of them*

In these extracts P5 and P9 imply that working collaboratively had a positive influence on subtheme 1b) *group dynamics* by creating a sense of familiarity and tolerance which in turn is

perceived to have influenced subtheme 1a) *group productivity.* This is further illustrated by P1 in the following extract where they describe how the concerns about group working and learning from one another anticipated ahead of the EBL process transpired to be unfounded.

> *P1 (81 interview) I think I was a bit nervous about it and how it was going to work out, but I don't think I needed to be now. .*

However for one participant (P11) their view on learning from one another in group work was very different.

> *P11 (83 interview) if you were to ask me about some of the other points other people had looked at I still wouldn't properly have a clue who the people were that they'd researched or the article that they'd researched because it wasn't shared err, so…*

Later during interview, P11 acknowledged that group work had enabled them to gain a broader outlook more so than had they researched the enquiry alone.

> *P11 (274 interview) I think broadening my outlook was more around all the different ideas that were coming out so if we set off with ten structured points in the first place – and I think I had one of them points to look at whereas other people had more – it would have taken me a lot longer to go away and look at them ten points and I couldn't have done that in that week.*

5.3.2.1 Theme 2 Summary

Working collaboratively was interpreted as a complex process associated with subthemes 2a) *group productivity* and 2b) *group dynamics* and participants' descriptions suggest there was strong interplay between both subthemes.

Interpretations of participants' sources of text suggest that working in groups was anticipated to attract more drawbacks than benefits based on participants' previous experiences of group working.

Ahead of the EBL journey the perceived drawbacks of group working were associated with subtheme 2a) *group productivity* and concerned group organisation and planning, the coordination of activities, being able to establish direction, coping with the pace of work, being

able to retain concentration and having sufficient time to assimilate information. Perceived drawbacks were also associated with subtheme 2b) *group dynamics* and concerned the anticipated influence of more dominant group members and their impact on those perceived as less dominant. This was perceived to influence subtheme 2a) *group productivity* in the ways some participants anticipated being unable to contribute to group activities such as discussion.

Ahead of the EBL journey the perceived benefits of group working were associated with subtheme 2a) *group productivity* and being able to extend the group's knowledge base.

Beyond the EBL journey interpretations of participants' experiences suggest the drawbacks anticipated in relation to subtheme 2a) *group productivity* did not materialise. Group organisation and planning was interpreted as efficient and participants managed to establish and sustain direction in pursuing their EBL enquiry. However, the pace of work was interpreted as enabling and disabling. Some group members felt able to concentrate and assimilate information during group discussions while others found this more difficult. In relation to subtheme 2b) *group dynamics* the experiences of those who had anticipated struggling to make their voice heard during group activities were interpreted to experience some loss of voice during group discussion and decision making. Conversely for others this was also interpreted as a stimulus in ensuring they were heard.

Beyond the EBL journey interpretations of participants' experiences suggest that perceived benefits in relation to subtheme 2a) *group productivity,* were realised and that through working collaboratively the group had extended their knowledge. Working collaboratively was interpreted to enable all but one group members to learn from one another even those who did not perceive any benefit from working collaboratively or whose experiences described losing voice.

These benefits are associated with the third theme to emerge from *dialogue* with the sources of text; that of personal transformations which I now present.

5.3.3 Theme 3: Personal Transformations

Theme three emerged from participants' descriptions of changes or transformations in outlook or in relation to the organisation of self during or beyond their EBL experience. These transformations were sometimes acknowledged explicitly or inferred and as *dialogue*

continued emerged as two further subthemes whose focus reflects their impact at personal and professional levels. These subthemes often share a complex relationship. They are:

- Subtheme 3a) *Personal Development*
- Subtheme 3b) *Professional Development*

A brief explanation of each follows.

Subtheme 3a) *Personal Development* reflects participants' descriptions of becoming more self-aware of their attitudes and behaviours, changes to levels of confidence and how engaging with EBL has influenced their individual learning styles.

Subtheme 3b) *Professional Development* reflects participants' descriptions of how EBL has impacted on their role as developing professional healthcare teachers.

Theme 3 and its subthemes are now presented as a composite discussion.

The ways in which participants described their experiences of EBL suggest they encountered a range of personal transformations some of which were recognised as such while others were not.

For example, in relation to subtheme 3a) *personal development* nine of the eleven participants' descriptions suggests EBL imposed a greater sense of self-awareness which was often accompanied by increased personal confidence. P9 and P10 illustrate this in the following extracts.

> *P9 (85 interview) it's (EBL) made me stop and look at myself as a learner, an independent learner, but I've grown to be broader,*
>
> *P10 (45 interview) it's made me realise that, you know, your feeding into it is just as important as everybody else's, so (pause) from a learning point of view I felt that's been very valuable*

Both extracts suggest EBL prompted heightened self-awareness and perceptions of self-worth. For P9 this was recognising they were able to learn independently while for P11 this came with recognising the worth of their professional opinion. Both extracts imply increased confidence associated with improved self-worth.

That EBL engendered self-awareness in this way is also reflected by P1 and P2. Their extracts below suggest they gained insight into their personal values and behaviour and pertain to subthemes 3a) *personal development* and 3b) *professional development.*

> *P1 (89 interview) The EBL work has made me more conscious of my behaviour and views but this has been positive because it has encouraged more divergent thinking. I can see that this is useful for students to progress.*

> *P2 (22 reflection) Working with a group however made me reflect on my own actions and attitude, I realised that I need to be clearer and more assertive in getting my points across and also that I can be stubborn and not participate if ignored. I believe that the process has made me more self-aware.*

In the first extract P1 describes how EBL imposed a personal transformation by encouraging them to diversify their thinking beyond their immediate horizon. In this sense their transformation pertains subtheme 3a) *personal development*. However, their description also relates to subtheme 3b) *professional development* since the act of having to diversify their thinking simultaneously encouraged them to contemplate the benefits of diversification with students. P2 also describes their transformation in relation to subtheme 3a) *personal development.* In becoming self-aware P2 recognised the need to engage and communicate more effectively; skills that are also associated with subtheme 3b) *professional development* though not explicitly in this case. Through engaging with EBL P1 and P2 have reflected on their attitudes towards group work and their normal mode of conduct. Both extracts suggest gaining greater confidence an experience also described by others to the extent they felt able to take an existing educational model and develop it further as the following extracts reveal.

> *P1 (96 interview) f we are going able to produce something that can potentially help other people (reference to the educational model) – that's great news and that's really quite exciting I think that as a group we might be able to do that.*

> *P4 (28 reflection) I feel proud of us as a group as I think we did very well to discuss and explore the set question but I also feel proud and humble that we were able to come up with a model that reflected our thinking and communicated our whole journey.*

Both extracts illustrate that P1 and P4 experienced a sense of increased confidence associated with subthemes 3a) *personal development* and 3b) *professional development*. Both extracts

identify how creating the model gave them and the group a sense of personal and professional achievement. That EBL was associated with increased confidence is reflected by others. Their descriptions also suggest that increased levels of confidence developed them personally as the following extracts illustrate.

> *P1 (105 reflection) it (EBL) has helped me and it certainly helped the confidence of everyone else.*
>
> *P6 (10 reflection) it (EBL) allowed me to recognise my development, and has provided me with reassurance and increased confidence in myself.*
>
> *P6 (88 interview) on a personal level and my own development erm, I feel it's, I feel more confident*
>
> *P8 (111 interview) I would get a little bit nervous erm in waiting my turn to deliver back but that's been really good for me because that really makes you grow and develop doesn't it and have the confidence to speak out.*
>
> *P10 (122 interview) I feel I've become more confident in the group because I always have a fear that what I say may be wrong or (pause) it may be conflicting with what somebody has just said or so I tend to digest it a lot more than I should sometimes whereas EBL I think it's made me realise that when you make a statement that when you've read a statement, it's not wrong,*

In these extracts P1 P6 P8 and P10 imply that engaging in EBL gave them a stronger feeling of self-worth. In this sense both imply their engagement not only influenced their personal development but also their professional development which P6 reiterated at interview

> *P6 (108 interview) I would do it (EBL) again because I feel that I could gain from it at another time erm, because I would know what to expect and my self-esteem and confidence would be a little bit stronger erm, and because I think because I think I've come away with – not only new understand but its reinforced some of the things we've previously looked at*

In this extract P6 reiterates personal transformations concerning personal and professional developments. They reaffirm their confidence and observe how EBL has enabled them to consolidate their existing knowledge while learning something new. P6 had previously

identified how anxious they felt at the prospect of group discussion and 'keeping up' with the pace of work so this personal transformation was quite significant for them.

A sense of personal transformation was described by others in relation to subthemes 3a) *personal development* and 3b) *professional development.* For example in the following extracts P9 describes how confidence came with the acquisition of new skills and how this was particularly important to them having spent several years away from any kind of formal study.

> *P9 (12-16 interview) when I think of EBL I think yeah it was a positive experience – I got so much out of it – learned a lot – got some really useful skills – just about the practical side of things like how to search for information, how to sift through it, I hadn't studied for ten years, so this was a big ask for me, using all the IT stuff – so I was sort of starting again.*

> *P9 (71 interview) I mean the impact is that I'm better now at searching through literature – I'm more open to go and open up electronic stuff so my technical skills have improved. I suppose It's given me the confidence to think I can contribute at an academic level and I'm with a lot of very, very experienced professionals but it's a confidence thing for me to know that just because I wasn't so savvy with the electronic bit it didn't mean I hadn't got anything to contribute.*

In the first extract P9 describes the beneficial impact of EBL as extrinsically motivational in driving their desire to address their perceived IT skill deficit and the personal effort involved in addressing that. In the second extract the impact of that effort is however, described in a liberating way; not just in terms of skill acquisition but in simultaneously enabling their confidence to grow sufficiently they felt able to contribute more fully to group discussions. In this sense skill acquisition gave rise to transformations in relation to both subthemes 3a) *personal development* and 3b) *professional development* and illustrate how one development can influence the other.

That EBL gave rise to greater self-belief and increased confidence was also described by others who on the strength of their experience declared their intention to employ group work in their future professional healthcare teaching practice when they had previously shied away from doing so.

P7 (96 interview) I think it's probably given me more confidence to use group work in practice because I know it can be very effective

P8 (117 interview) Just in having my own individual confidence in speaking out on what I believe is right and what I've learned from at the time, but also I would think it makes me look at teaching others in a different way Because I've seen the benefit of EBL for me in the group, that's transferable, I now look at how I could use that in my own teaching

In these extracts P7 and P8 describe how the group was beneficial in developing their personal confidence. This prompted them to review their perspectives on group work in learning and teaching. P7 states this explicitly while P8 describes how EBLs group work requirement has revealed other ways of learning. Again both extracts illustrate the complex relationships between subthemes 3a) *personal development* and 3b) *professional development.*

That EBL is influential in developing self-worth is also illustrated in the following extracts where participants described how group work enabled them to understand that knowledge carries with it many different perspectives.

P3 (87 interview) working in a group doing that activity as I say you were listening to other people's ideas, everyone does things differently and things were coming up that I would thought 'ooh well I probably wouldn't have thought of that' so I went away and looked at that. And I think that helps with the overall learning in the group with EBL.

P5 (73 interview) you read a piece of research and you just have your own concept of it and I think sometimes you can't see the wood for the trees because you just see what's written in front of you, whereas if you discuss it as a group you tend to think outside the box and look in from the outside in and think "ok it means this" but it could mean this.

P7 (12 interview) I think (pause) I've learned to learn from other people which I don't know whether it surprised me, but I think learning from what other people have been doing, I sat back and thought "oh that's interesting – I didn't know that…" and I think learning from peers I guess has been quite interesting, more so than sitting looking at a power point or just listening to somebody talking about the same things. I think I've learned from other people's experiences of learning which has been quite interesting.

P7 elaborates;

> *P7 (78 interview) I think I've forced myself to say 'actually there's other views here I need to take into account so I think I've probably learned to do that and to say 'well actually this isn't just about me looking at what I'm looking at its about what so-and-so's learned about it from their perspective so yeah I think it probably has…*

These extracts from P3, 5 and 7 also illustrate the complex relationships between subthemes 3a) *personal development* and 3b) *professional development.* They describe how EBL's necessity for working independently and collaboratively culminated in a broader learning experience that informed professional development and they describe how the act of conversation enabled this. P5 describes how discussion clarified their thinking while P7 describes the liberation of moving away from their perceived limitations of being taught. In this respect professional knowledge gain seems to have been the impetus to changing views about learning and teaching as the following extracts reveal.

> *P1 (53 reflection) My views before undertaking the PGCE were that group work sometimes felt like an easy option for the teacher, I can see now that it needs withitness to handle the various directions that the enquiry may take and requires a skilful teacher. I think because I have been brought up on 'talk and chalk' I have found it difficult at times to consider the value of a different approach and this EBL work has made me think much more about teaching and learning activities.*

> *P7 (21 reflection) I'm not sure that I am the biggest fan of group work- I think I am a little selfish and like to learn by myself! However going through this process I have had to learn to accept other people's thought processes and opinions, and actually I am probably much better off because of it. In fact, I have used group work recently in some of my own teaching, and despite initial grumblings about group work it has evaluated very positively.*

> *P8 (28 reflection) I do believe this to be a really good way to learn as encourages self-exploration of subject matter but also personal development in taking responsibility for one's own learning. Rather than lecture delivery style this seeks the learners own opinion, on the question to be answered (if there is an answer), and better prepares*

professionals for the real world of complex health care decisions within a multi-disciplinary environment.

Again these extracts illustrate transformations concerning subthemes 3a) *personal development* and 3b) *professional development* in the ways participants describe their changing perspectives on group work. All describe the benefits of group work and on the strength of their experience reviewed their stance on employing it as developing professional healthcare teachers. P1 illustrates this in their revised view of group work as a complex process rather than a previously perceived easy option; a view based on previous experience. Similarly P8 whose prior learning was largely taught suggests EBL better prepares independent thinkers, a view echoed by P7 who despite their initial concerns had already incorporated group work into their professional healthcare teaching practice. This transformation was also described by P1, 3 and 7 who signal their intention to employ EBL within their professional healthcare teaching practice.

P1 (86 reflection) I need to think about how I might include this type of enquiry based approach in my own teaching as I can see it would lend itself in some areas, for example in the leadership work

P3 (158 interview) doing the teaching role that I'm looking forward to doing after this course, erm, I think it's a great activity we've been part of – to take that forward. Because I think I'll be able to use it in everyday practice as well as any academic study I do.

P7 (4 reflection) Not only my knowledge, but the way in which I feel I can now consequently apply that knowledge in a real world situation. I think about my own lesson planning in a very different way, and I suppose therefore that I have perhaps changed a little as a result of this process!

These extracts illustrate how the experience of EBL has prompted P1, 3 and 7 to contemplate EBL in their developing teaching practice. P1 makes an association between their experience and the field of leadership suggesting they see its potential benefits in leadership preparation. P3 not only perceives EBL to be of value in their developing teaching role but also in their current practice role. They also signal an intention to continue learning through enquiry. In this sense EBL has influenced their personal and professional development. P7 also signals their intention to implement EBL within their developing professional healthcare teaching practice.

These extracts also illustrate the complex relationship between subthemes 3a) *personal development* and 3b) *professional development*.

Aside from influencing their developing professional healthcare teaching practice other descriptions by P1 2 4 and 7 suggest that EBL was personally transformative in changing their personal learning styles. In some cases this is identified explicitly at others inferred and for some this change was signified as more permanent. All extracts suggest transformations associated with subthemes 3a) *personal development* and 3b) *professional development.*

> *P1 (65 interview) it (EBL) has given me more confidence in the group so I think that's changed me – because maybe traditionally I've always been a bit solitary with studying and I think erm, the group work that we've done on this course particularly has helped me see the value of peer support.*
>
> *P2 (6 reflection) Personally I have been more familiar with lecture type teaching however the EBL process has driven me to be more self-directed having a clear purpose each week of what I need to research.*
>
> *P4 (97 interview) I think it's made me erm feel like I need to (pause) search things a little bit deeper whereas I think you tend to do just enough just to pass – a pass is a pass and I think you do tend to enough just to pass and I think because you're looking a bit deeper it's more of the understanding of why you're doing something and (pause) the wanting to do it as well*
>
> *P7 (27 reflection) as a result I have a deeper knowledge base, which I am able to apply in my own practice. I have learnt to learn from my peers, and realised that there are other ways to learn other than in isolation!*

However, at interview P7 later went on to say

> *P7 (28 interview) I don't know…I think I still like the way I learn (laughter) I'll probably always gravitate towards that… I like silence to work.*
>
> *P9 (83 interview) it's changed the way that I've learned –- let me have a think about that – I'm more open to know that there's a different way of learning – where I didn't know that before – I knew that I could read – of course I can read – hopefully anyway!*

And I can listen – but it is about the conversation it's the conversation that make /that embed that information.

P11 (166 interview) yes that sort of side of things (being self-directed) allowed better learning for me than just sitting listening to somebody tell me.

These six extracts illustrate how EBL has brought about personal transitions in relation to learning style. For example, P1 explicitly identifies how EBL has enabled them to gain more confidence. However, they also identify how EBL has opened up a new way of learning. Their description implies an intention to engage in group work more than in the past. P2 also implies a transformation by describing a shift from being taught to being self-directed. Their description implies the latter has given them a greater sense of focus. P4 describes their experience of EBL as one that gave them greater impetus to become more critically analytical in their learning. However, although in their reflective account P7 described their experience as transformative they later suggested in interview an inclination to return to their familiar solitary learning style and illustrates the work of temporal distancing. Aa more permanent intent to change their way of learning however, is described by P9 who emphasises the value of conversation in EBL while P11, implies the transition from being taught to being self-directed also brought about benefits suggesting a potential for being self-directed in future learning.

5.3.3.2 Theme 3 Summary

Participants' descriptions suggest that EBL brought about a number of personal transformations pertaining to subthemes 3a) *personal development* and 3b) *professional development.* Participants' descriptions also suggest that both subthemes were inextricably linked and one subtheme was frequently associated with the other.

Personal transformations were often described explicitly or inferred however, they were identified as perceived changes in personal behaviour rather than transformations. Moreover, changes were sometimes unrecognised by participants themselves, rather they emerged through my interpretation of their experiences. Some of the transformations described were implied to be more permanent than others.

In relation to subtheme 3a) *personal development* participants' descriptions revealed an explicit association between EBL and gaining a greater sense of self-awareness regarding personal

attitudes and behaviour. An association was also made between greater confidence and self-worth. Confidence growth and self-worth were often associated with being self-directed which for some participants represented a significant transformation in learning style. Greater self-awareness, confidence and self-worth were perceived as more permanent transformations and were attributed to the diversity of thinking associated with EBL. For one participant EBL enabled the acquisition of IT skills related and searching and retrieving information. This was interpreted as a more permanent change. For others EBL was explicitly associated with intended changes to their future personal learning styles.

In relation to subtheme 3b) *professional development* participants associated EBL with changes to their developing roles as professional healthcare teachers. This was described in a number of ways. For example, several participants described how their perceptions of group work had changed because of their experience of engaging with EBL. They describe how group work enabled them to communicate more effectively in group discussions and had enabled them to recognise the value of peer support. This was implied as a more permanent change. For others EBL was associated explicitly with creating opportunities for intellectual creativity. For some their EBL experience had influenced their decision to employ group work on a more permanent basis in their professional healthcare teaching practice on the basis that it was perceived to be of potential benefit to their students.

5.3.4 Chapter Summary

Through the process of *dialogue* with participants sources of text EBL is interpreted to be associated with three themes; Theme 1: *being self-directed,* Theme 2: *working collaboratively* and Theme 3: *personal transformations*. Participants' descriptions suggest they experienced a number of benefits and drawbacks associated with EBL. Their experiences also suggest a number of personal transformations.

However, it is important to acknowledge that the interpretations presented in this chapter will remain open to infinite possibilities of future understanding through the passage of time or temporal distancing as Gadamer described. In this sense the interpretation is a horizon of the present which is not perceived as a fixed set of opinions and valuations. The interpretation like any other therefore reflects an understanding that is different, not better as Gadamer defined and I discuss this further in my reflections on the strengths and limitations of the study in chapter seven.

In the following chapter my interpretations are discussed as possibilities of knowing through bricolage as a fusion of horizons.

Chapter 6

Possibilities of Knowing through Bricolage as a Fusion of Horizons (discussion of findings)

6.1 Introduction

In this chapter I discuss my Gadamerian-informed interpretations of postgraduate professional healthcare teaching students' experiences of EBL as possibilities of knowing through bricolage as a shared horizon of understanding; understanding that has emerged through continual *dialogue,* the work of *play* and temporal distancing, within the hermeneutic circle.

In acknowledging Gadamer's (2013, p317) observation that "the horizon of the present is continually in the process of being formed because we are continually having to test all our prejudices" I discuss the origins of my pre-understandings concerning EBL. I do this since my prejudices are integral to my interpretations of participants' experiences.

I then return to the research questions posed of this study and discuss them within the context of the sources of text, the literature review and the conceptual framework that has informed my understanding of EBL over many years. Doing so reflects Gadamer's (2013, p317) belief that "the horizon of the present cannot be formed without the past".

Within this chapter I also acknowledge the limitations of the study and discuss how these might be addressed in future research.

I begin by addressing my pre-understandings as researcher.

6.2 My Pre-understandings as Researcher

In seeking professional healthcare teaching students' experiences of EBL the questions posed are ontological and relate to 'being' and therefore existence as described by Effingham (2013). The study is therefore positioned within the qualitative, interpretive paradigm which according to Munhall (2012) reflects the multifaceted context of real life experiences. The study is social research and therefore reflexive. Fox and Allen (2013) note how in social research reflexivity is not an option because the researcher is inextricably involved in what takes place as was the case here. My relationship with participants and my interest in EBL meant I was accompanied by historically developed habits of mind. However, given Gadamer's view (2013, p283) of

prejudice as conduit for understanding I discuss the influence of my prejudice in the following paragraphs.

Throughout my doctoral journey I have maintained an electronic reflexive journal to capture my evolving thinking. Sometimes planned but often serendipitous entries typically reflected the numerous questions I had about the study, its aims, design and evolution. The journal helped make sense of my journey and I include extracts from it to illustrate this in Appendix 8. The journal provided a platform of self-awareness whose value in qualitative research is highlighted by Lipp (2007) and Freshwater and Rolfe (2001) and in hermeneutics by Tait (2008) and Clancy (2013). Being self-aware enabled me to establish trustworthiness and rigour by making explicit my outlook. However, Tait (2008) signifies the danger of being over-indulgent rather than looking critically at the research process in context. Conversely, Tait (2008) acknowledges being reflexive enables the researcher to analyse critically their relationship with the phenomenon under review. Engaging in *dialogue* with my reflexive journal enabled me to contemplate my pre-understandings about EBL as Tait (2008) describes and I have analysed critically how these pre-understandings have influenced the study as Lipp (2007) recommends.

That I adopted EBL to encourage learner independence is reflected in my prejudices concerning its value. I believe it is as an approach that broadens learners' horizons and affords them a greater sense of critical thought beyond that of instructionism. These values are reflected in the novel *Zen and the Art of Motorcycle Maintenance* (Pirsig, 1974, p4) where Pirsig describes how the world appears from a car window compared with that of a motorbike; the car window frames everything just like a television whereas from the motorbike the frame is gone. The rider is in contact with everything and experiences an overwhelming sense of presence. I perceive instructionism as the view from the car window; the learner is only able to see what is framed by the teacher whereas EBL represents the view from the motorbike; the learner can see numerous horizons because the teacher's frame is gone. However, I do not regard EBL a panacea. To assume all adult learners aspire to be independent is to disregard the significance of differentiation. Reflecting on my stance illustrates how my expectations gave me a working hypothesis from which to develop further my understanding as Regan (2012) observes. Importantly being reflexive assisted my interpretations by developing a shared understanding of participants experiences as Tait (2008) describes. The identification of prejudices and moreover, their periodic review was central to this process and provided a way of entering the

hermeneutic circle while remaining oriented in the way Fleming, Gaidys and Robb (2003, p117) explain. This was achieved by alternating between sources of text, my historical prejudices and fore understandings, findings from the literature review and bricolage of conceptual frameworks. In so doing I remained consistent with Gadamer's concept of foregrounding and fore projecting in contemplating participants' experiences within the context of other researchers and epistemological stances as Austgard (2012) advocates. The culmination of this process enabled possibilities of knowing based upon the Gadamerian-informed model for understanding presented in chapter five. These possibilities are now presented in the following section which considers each of the revised research questions posed of this study presented in chapter two: section 2.8, p41.

6.3 Possibilities of Knowing: Research Question 1

In what ways do postgraduate professional healthcare teaching students describe their existential experiences of EBL?

All participants associated EBL with being self-directed as individuals and as groups. However, EBL was also perceived as a new way of learning. The expectations associated with being self-directed were described in beneficial and anxiety provoking ways.

Subtheme 1a) personal motivation played a significant role for everyone; however, two types of motivation emerged; intrinsic where descriptions suggest motivation was an inherent characteristic within the individual and extrinsic where descriptions suggest participants became motivated by EBL's ontology and the need to engage in discovery learning.

Ahead of the EBL journey those perceived as intrinsically motivated described their normal tendency to study independently. They associated being self-directed with advancing their personal knowledge. These interpretations correspond with findings by Pearce (2013) who reported how postgraduate professional healthcare teaching students felt intrinsically motivated to develop their educative practice and gain broader perspectives. Those perceived as intrinsically motivated also anticipated that working collaboratively would enhance group knowledge through sharing information and gaining a deeper sense of understanding. However, paradoxically given their existing propensity to study independently they were simultaneously concerned about engaging with EBL as an unfamiliar way of learning that involved working independently. As such EBL became extrinsically motivating.

Ahead of the EBL journey those perceived as extrinsically motivated described their uncertainties about what to expect given EBL was an unfamiliar way of learning. Moreover, they were concerned at not being able to find direction. This uncertainty was tangible across the group. Their descriptions suggest that being apprehensive motivated them to engage but with an expectation of guidance and support. For one participant their engagement was driven by the length of time spent away from formal study and a perceived IT skill deficit.

Beyond the EBL experience participants' descriptions reveal a complex range of interpretations suggesting everyone remained personally motivated whether intrinsically or extrinsically throughout their EBL journeys. This corresponds with findings from Tully (2010); Kirwan and Adams (2008); Rush and Barker (2006) and Ashby et al (2006) who all report how EBL seemed to ignite a sense of personal motivation and perhaps illustrates how and why people think and behave as they do in being purposeful in the pursuit of their goals as Wlodkowski (2008) and Weiner (1992) observe.

The significance of personal motivation was perhaps most evident in the ways participants made the shift from familiar ways of learning to becoming self-directed which necessitated their engagement with subtheme 1b) *discovery learning* and constructing their own knowledge as described by Bruner (1961). Participants had to reposition their identity and untie their familiar relationship with me as their teacher. Biesta (2015) describes this as the shift from teaching to learning which for the learner can afford opportunity on the one hand but uncertainty on the other. This observation is echoed by Pearce (2013) who describes the complexities associated with the ontological shift necessitated by EBL.

In recalling the transition to being self-directed participants descriptions suggest they were caught between two existential planes as described by Meyer and Land (2005) and Malkki and Green (2014). This was particularly notable in P1, 8 and 9 whose personal motivation to engage with EBL was simultaneously accompanied by concerns about being self-directed. Malkki and Green (2014) suggest that although disconcerting for the learner, this sense of uncertainty is essential in order to progress. This corresponds with Meyer and Land's (2005) explanation of experiencing states of liminality characterised by the stripping away of familiar identities and the oscillation experienced between old and new identities.

This shift in identity can be compared with the concept of 'thrownness' identified by Heidegger and Gadamer which refers to one's existence of being thrown into world. Participants'

descriptions suggest they were thrown from their habituated being or *Dasein* into the world of EBL and this was described in beneficial and challenging terms. However, despite their initial uncertainties those who were anxious about being self-directed such as participants 1, 8 and 9 later described how discovery learning had motivated them to broaden their perspectives; a transformation also noted by Pearce (2013). In this sense leaners' descriptions suggest that EBL was somewhat 'Janus faced' in its capacity for provoking contrasting experiences and this is reflected by Ashby et al (2006) Gouldsborough and Sheader (2006) Fisher and Moore (2005) and Morris and Turnbull (2004).

The anxiety of shifting from familiar ways of learning is also reflected in findings by Bebb and Pittam (2004) though these participants perceived their EBL experience as unstructured which participants in this study did not. However Bebb and Pittam's (2004) finding highlights the significance of subtheme 1c) *scaffolding* at facilitator and peer levels.

Scaffolding was utilised in this study as a helpful structured interaction whose aim was to help participants achieve their particular goals. This corresponds with the description by Wood, Bruner and Ross (1976). Participants in this study anticipated scaffolding in the way of support and guidance ahead of their engagement with EBL. Beyond their experience they suggest it was beneficial to their progress by enabling them to do more for themselves. Scaffolding comprised guidance, prompts and encouragement; elements of support that are also described as important in maintaining motivation according to Hamilton et al (2012); Kirwan and Adams (2008); Ashby et al (2006) and Fisher and Moore (2005). The importance of effective scaffolding is also evidenced by Tully (2010) who suggest how inconsistencies in facilitation can create confusion and uncertainty.

Daloz (1999) describes the importance of scaffolding as a way of striking the balance between guiding and promoting independence. He describes how the mentor initially holds a guiding light for the learner but as the learner progresses the mentor's role changes; sometimes walking ahead of the learner and sometimes walking behind the mentor seems to sense when the time is right to hold out a helping hand. This notion of sometimes leading and sometimes being led was reflected in participants' descriptions and while initially anxious about being self-directed their reliance on teacher facilitation gradually receded; they were no longer 'holding on while letting go'. Rather their support came from within the group through peer support. This process

was described by several participants but was emphasised particularly by P1 and P6. This gradual reduction in teacher-reliance is also noted by Pearce (2013).

Participants described how their own experience of scaffolding enabled them to identify the skills of an effective facilitator in relation to their developing professional healthcare teaching practice. Their descriptions, which pertain to subtheme 3b) *professional development* identifies the significance of the facilitator's sense of awareness in recognising the right time to step in and guide. This sense of awareness is important in relation to the argument posed by Kirschner Sweller and Clark (2006) that discovery learning ignores what is known about the architectural structures of the human brain by forcing learners to grapple with long and short term memory which imposes cognitive strain. It was therefore important to acknowledge the feelings of anxiety and apprehension that participants initially described. This is echoed by Pearce (2013) whose participants also felt overwhelmed, vulnerable and exposed in becoming self-directed and Ashby et al (2006) Morris and Turnbull (2004) Fisher and Moore (2005) and Gouldsborough and Sheader (2006) whose participants felt intimidated and burdened by EBL's ontology.

These findings illustrate how EBL is often accompanied by attendant losses as well as gains in both undergraduate and postgraduate study and perhaps reflect the difficulties in adjusting not only to discovery learning but in making sense of learning. Participants in this study implied that being able to assimilate new knowledge was a significant factor in their learning which was aided by group discussion. However, some initially experienced difficulty with the pace of discussions. Their descriptions reflect Land and Meyer's (2005) concept of liminality in finding certain knowledge difficult or troublesome. This was illustrated by P6 and 11 when in the process of trying to reflect on someone's comment they describe how the discussion had moved on and the moment was lost. These participants identified concentration as a vitally important factor in sustaining momentum and their descriptions identify how the knowledge afforded by discovery can be beneficial and troublesome when trying to locate its relevance to existing knowledge. Pearce (2013) makes a similar observation in describing how participants grappled with integrating new knowledge in order to reconstruct prior knowledge after letting go of it. However, like Meyer and Land (2005) and Malkki and Green (2014) Pearce (2013) suggests states of liminality aided the development of critical thinking skills; an observation that corresponds with participants descriptions of their EBL experience when reflecting on it. Their descriptions pertain to subthemes 3a) *personal development* and subtheme 3b)

professional development and reveal a distinct change in outlook by those who ahead of the EBL journey were apprehensive about what was expected and being able to find direction who beyond their journey described how discovery learning enabled them to gain a sense of deeper understanding. This was particularly noticeable in P1, P2, P3, P6, P7 and P8 who all described how EBL had opened up new and unexpected avenues of exploration.

EBL's capacity for opening up unexpected paths and detours can be aligned to Heidegger's (1927) concept of wood paths. Heidegger was a great mountain walker and from his experiences of walking over several years described the many paths he had followed. Heidegger regarded these paths as thinking spaces and it is within this context that participants' described how the unexpected detours encountered enabled them to broaden their thinking. An example of this was described by P2 who stumbled across Hermon's brain model while looking for something else. They later recalled how this serendipitous encounter provided the impetus to explore the model further which led to other avenues of thought resulting in learning gain and changed perspectives about learning.

Another example was described by P4 who happened across Procrustes, a figure from Greek mythology that killed his victims by making them lie on an iron bed. If any part of their body overhung the edge of the bed he would force them to fit by amputation. While seemingly unrelated to their professional development this rather bizarre and unexpected encounter enabled P4 to contemplate the concept of differentiation. P4 reflected on how in their experience, learners were made to 'fit' into an educational context irrespective of their needs which they perceived were often ignored. P2 and 4 shared their discoveries during an EBL group discussion. Everyone could recall these discoveries beyond the EBL journey. They illustrate how Malabou (2012) perceives learning; that which involves engagement with knowledge rather than being subjected it bringing with it the feeling of new responsibilities which P2 and 4 exercised in sharing their knowledge with peers. Their examples illustrate how their discoveries arose from being self-directed and engaging in critical thinking. Their descriptions imply their unanticipated learning felt more real and thought provoking and was relevant to their developing teaching practice. This act of calling into question professional practice against the backdrop of self-directed learning is also reported by Nallen (2016) and Tully (2010) while Ashby et al (2006) suggests it is taking responsibility for self-learning and determining the focus of the subject under review that enables critical thinking.

Nallen (2016); Snow and Torney (2015); Pearce, (2013); Brown et al (2008); Horne et al (2007); Rush and Barker (2006); Fisher and Moore (2005) all report how EBL engenders critical analysis and changing perspectives. Their findings were reflected in many participants descriptions in this study who associated EBL with feeling liberated through discovery learning. That freedom to learn was perceived in this way reflects Dewey's (1938) thinking which although pertained to children is highly relevant here. Participants' descriptions suggest they had to make judgements and deliberately conduct themselves as Dewey described. This was described most notably in relation to subtheme 2a) *working collaboratively.*

All participants anticipated group would extend their knowledge however, group work was initially anticipated to attract more drawbacks than benefits in relation to subthemes 2a) *group productivity* and 2b) *group dynamics.*

In relation to group productivity drawbacks were based on previous experiences of group working and individual concerns about moving from working alone to working with others and an accompanying loss of control in finding direction. They illustrate how participants anticipated moving out of their comfort zone and reflect another example of Heidegger's concept of 'thrownness'. However, when reflecting on their experiences participants descriptions suggest group organisation and planning was coordinated and productive. No scattergun approach was described or loss of control inferred. This was illustrated in particularly expressive terms by P9 who beyond the EBL experience described the group as a well-oiled powerful piece of machinery that grieved when the EBL process ended.

One particular aspect of group working; group discussion was described a key factor in the perceived productivity of the group. Participants described how discussion enabled them to learn from one another by exchanging views, thrashing things out and deliberating which they regarded as highly beneficial in extending individual and collective knowledge and understanding.

While the value of working collaboratively in EBL is reported by Snow and Torney (2015); Pearce (2013); Horne et al (2007); Rush and Barker (2006); Ashby et al (2006); Gouldsborough and Sheader (2006); Fisher and Moore (2005); Glasper (2001), the descriptions of some participants' in this study however, imply that group discussions were simultaneously anxiety-provoking in relation to group dynamics and the challenges anticipated in relation to peers perceived as more dominant and their influence on the voice of those perceived as less

dominant. Brookfield (2015) refers to the paradox of discussion which on the one hand is a powerful learning tool but on the other can be disenfranchising particularly if dominated by more loquacious group members.

However, when reflecting on group discussion participants later described how the anticipation of losing voice seemed to increase their sense of determination to be heard. The notion that discussion can enable the less loquacious learner to contribute to discussion effectively is observed by Bebb and Pittam (2004) but in a different way. They describe how presenting to peers helped some participants to overcome their shyness.

Descriptions by P1 2 4 6 and 10 suggest those perceived as less dominant underwent a period of adjustment where their voice emerged by gaining greater confidence; an observation echoed by Pearce (2013). That EBL engendered confidence is also noted by Tully (2010); Hamilton et al (2012); Brown et al (2008); Bebb and Pittam (2004) and Morris and Turnbull (2004). One of the most graphically illustrated confidence gains was described by P9 who ahead of their journey lacked confidence given the length of time they had been away from formal study. They later described how discovery learning and discussion had significantly increased their confidence and sense of self-worth. They described how discovery learning had enabled them to contribute to group discussion and debate with conviction. P9 attributed their confidence gain to the conversations afforded by EBL which they had never previously experienced. P9 also developed IT skills and the ability to search and retrieve literature which they described as adding to their sense of new found confidence and self-belief.

P9's example is one of a number of confidence gains described or implied by the participants in this study and with greater confidence came a number of personal transformations which are now explored in relation to research question two.

6.4 Possibilities of Knowing: Research Question 2

Do their descriptions suggest they encountered any personally transformative changes to their attitudes or behaviours as learners and developing professional healthcare teachers?

Participants' descriptions suggest they underwent personally transformative alterations in attitude and behaviour during their EBL journey. These changes concern subthemes 3a) *personal development* and 3b) *professional development.* They are indicative of subjective reframing as described by Brookfield (2000) illustrated by changes to participants' personal behaviour, identity and subsequent reordering of thought. Their descriptions imply something qualitatively different as described by Illeris' (2014).

During *dialogue* it became clear that personal and professional development were inextricably linked and mutually influential. For example participants' described how they became more self-aware, gained greater confidence and developed a greater sense of self-worth. Their descriptions suggest they associated these qualitative changes with gaining broader knowledge perspectives and a deeper sense of learning. This process of reframing was perceived to alter their behaviour in group discussions and their attitudes towards learning and teaching as developing professional healthcare teachers. This was most notably observed in descriptions by P, 1, 2, 3, 4, 6, 7 and 8 who despite their apprehensions about EBL ahead of the journey, all implied changing attitudes about working collaboratively.

P1 described their attitude towards engaging collaboratively in group work very differently ahead and beyond the EBL experience. P1 acknowledged their tendency to be a solitary worker who regarded group work as an easy option for the teacher. They were therefore concerned that working collaboratively as a group would result in loss of control and an uncoordinated approach to the enquiry that would be unproductive. P1's anxieties illustrate what Mezirow (2000) identified as the defining condition of being human; the need to avoid the threat of chaos. However, P1 later described the benefits of working collaboratively; their descriptions suggest the group were organised and productive and generated a broader range of knowledge than would have been possible to generate alone. Their descriptions signify a change in attitude later confirmed by their intention to incorporate EBL as a collaborative activity into their professional healthcare teaching practice.

Similarly ahead of the EBL journey P7 described their apprehension about working collaboratively given their propensity for solitary working. They too were concerned about

group productivity. However, during their EBL journey P7 later described the benefits of group work which had enabled them to contemplate an alternative approach to learning. On the basis of their experience P1 implemented group work in their newly appointed post as a lecturer before their EBL experience had ended.

The experiences described by P1 and 7 illustrate how as their personal histories developed during the EBL process they experienced changes to their underlying attitudes and expectations. Mezirow (1978) and latterly Illeris (2014) describe this as transformative learning illustrated here by developing a greater self-awareness and changed outlook or subjective reframing through knowledge and experience. According to Illeris (2014) dimensions of change such as these illustrated by P 1 and 7 are necessary for individual development, understanding and our dealings with the essential conditions of life and the outside world.

Further examples of subjective reframing were illustrated by P1, 2, 3, 4, 7 and 9 in relation to their changed perceptions of learning and intended future learning behaviours. Their descriptions imply their experiences of EBL had influenced their learning preference to one of enquiry. For all but P7 this was implied to be a more permanent change. It would be interesting to explore the longer term impact of EBL on learning behaviour in a future research study particularly given that anecdotally several former PGCE students have since described how EBL changed their way of learning on a permanent basis. They associate this change with gaining a greater sense of self-confidence which they perceive was brought about by EBL's capacity for discovery learning; an association that is reflected in several participants descriptions from this study.

For example, P10 described how ahead of the EBL process they lacked the confidence to engage in group discussions. Their descriptions suggest they experienced imposter phenomenon (Cisco, 2020) in feeling an intellectual fraud. P10 had identified how their anxieties about 'not being right' had impeded her ability to contribute to group discussions. However, they later identified how EBL had opened up a broader range of learning opportunities than previously encountered which revealed the complexity of professional knowledge. This discovery helped them to realise there were no 'right or wrong answers' in group discussions and gave them the confidence to engage. P10's descriptions suggest they gained greater 'voice' and the impetus to share knowledge as a way of offering a different perspective to peers. Although P10 described their experience of EBL as uncomfortable at

times in having to be ‘assertive’ they later described how they had employed group discussion as a newly appointed professional healthcare lecturer during the EBL journey.

Gaining a greater degree of self-confidence was also described by P8 and P9 in describing how EBL made them more self-aware of their capacity to learn independently. their descriptions also illustrate a reframing of perceived self-worth and self-belief.

Similarly in describing the group’s achievement in further developing an educational model P1 and P4 suggest that discovery learning provided the group with a freedom to reorder their thinking which enabled them to become creative. Their descriptions of collaborative discovery are captured in an expression coined by Jones (2011); ‘setting collective minds let loose to learn’ which P1 and 4 suggest would not have been possible through only being taught.

Wlodkowski (2008) considers how perceived competences like those described by P1 and 4 can build confidence and this was noted in other participants such as P5 who at the onset of EBL described having little idea of what EBL involved. They described their initial concerns about not being to find a solution to the enquiry before realising there was no solution to be found. They later described how their expectation to problem-solve originated from being a nurse. They later described how EBL had reframed their attitude to learning by enabling them to ‘think outside the box’ which they described as more beneficial than simply trying to come up with an answer.

Interestingly the changes observed in the preceding paragraphs were not always recognised as personal transformations by those that described them. An example of this was illustrated by P11 whose prior learning experience comprised of being taught yet their descriptions suggest they had learned no differently in EBL than in a taught situation. However, P11 descriptions suggested significant personal growth and development beyond their engagement with EBL where they identified how being self-directed had been more beneficial to their learning. Illeris (2014) reflects on how the expression of transformative learning does not in itself indicate what is transformed, and this seems to be the case for P11. Similarly, participants alluded to but did not describe explicitly the development of critical thinking skills, rather this aspect of their personal and professional development emerged through *dialogue* with the sources of text and perhaps illustrates how personal changes in self are not always recognised as Illeris (2014) suggests. This observation was also noted by Nallen (2016) whose participants did not make the connection between critical thinking and EBL until prompted.

It is also interesting how those who *did* recognise changes in their personal and professional development in their reflective accounts did not refer to these changes at interview. This may suggest the influence of temporal distancing and changing perspectives on what was perceived as important in the EBL experience brought about by the passage of time.

These examples illustrate how stories such as those described by the participants in this study animate human life by generating differences between storyteller and interpreter as Frank (2010) observed. And it is these differences that have generated my understanding of their experiences; differences that have come to the fore through the interactions of *language, dialogue* and the work of *play* within the hermeneutic circle, differences that have culminated in a fusion of horizons.

While learners' experiences of personal transformations are implicit within the literature review, they are not always explicitly described. As such the possibilities of knowing presented in the preceding sections here have enabled different interpretations to come to the fore. Participants' descriptions suggest EBL is capable of subjective reframing as described by Brookfield (2000) illustrated by changes to participants' personal behaviour, identity and subsequent reordering of thought. Their descriptions imply something qualitatively different as described by Illeris' (2014).

The final section of my interpretation therefore now explores whether the concepts of plasticity and metamorphosis enable these experiences to be understood any differently.

6.5 Possibilities of Knowing Research Question 3

Do the philosophical concepts of plasticity and metamorphosis (Malabou, 2008; 2012) help us to understand their personal experiences as enquiry based learners any differently?

Malabou's (2008; 2012) concepts of plasticity and metamorphosis were introduced in chapter three and participants' descriptions suggests that EBL was perceived as way of learning that created an environment aligned to both concepts; one in which participants maintained and evolved through degrees of metamorphosis. However, participants' descriptions also suggest they encountered both types of plasticity; positive and destructive illustrated in the ways they convey the changes imposed by EBL; changes that were accompanied by attendant losses and gains and often simultaneously. In this sense drawing upon Malabou's concepts has enabled a

different understanding of participants' experiences of EBL to emerge as the following discussions demonstrate.

Malabou (2012) explains how destructive plasticity is imposed through change or thrownness from an individual's habituated being or sense of normality causing the individual to become strangers to them self. Participants' in this study suggest they encountered destructive plasticity in experiencing a sense of thrownness associated with the ontological adjustments necessitated in becoming self-directed. This ontological shift was also observed by Pearce (2013) but not in the ways described here which illustrate how destructive plasticity brought about metamorphosis and transformation to the extent that participants became 'strangers to themselves' as Malabou (2012) describes.

Most participants were unfamiliar with EBL ahead of engaging with it and their sense of thrownness was communicated in describing how they perceived EBL as different to their usual way of learning. This was implied to be disorientating and stressful since it involved changes related to perceived normal learning style and a shift in relationship between learner and teacher. This was illustrated by those who described their normal learning style as teacher-led and by those who described a tendency to learn independently. Interestingly those who described a tendency to learn independently simultaneously described their anxiety about being self-directed. A sense of thrownness was also revealed in the ways participants described the untying of familiar relationships as I adopted the role of facilitator. This was particularly significant for those whose prior learning experience had been predominantly taught where the direction of learning had been determined by the teacher. Their sense of thrownness was illustrated in the ways they described their anxieties about taking responsibility for finding direction in approaching the enquiry. However, their descriptions suggest their response to this thrownness was aligned to another type of plasticity; synaptic which Malabou (2008, p13) describes as "rendering oneself to one's environment, in a word, to adapt to everything, to be ready for all adjustments". The descriptions of participants in this study suggest this adjustment was achieved through metamorphosis and transformation.

In taking responsibility for their own learning and that of their peers participants descriptions suggest EBL "gave birth to the feeling of new responsibilities" as Malabou (2008, p14) describes. Moreover, in adapting to these new responsibilities participants descriptions suggest they became strangers to themselves; caught between two existential planes as described by

Meyer and Land (2005) and Malkki and Green (2014) in seeking balance between being independent and the need to be guided while adjusting to their new identity as independent learners. This sense of adjustment is reflected in Malabou's (2008) explanation of how humans are capable of adapting and undoing past formations. In the ontological shift to discovery learning participants adapted their past formation of being more passively positioned to self-directed.

In so doing their adjustment reflects Malabou's (2008) description of the human ability to respond to everything that is lived and experienced. This was illustrated in particularly graphic terms by one participant for whom EBL had created great initial uncertainty followed by an overwhelming sense of achievement. This illustrates the complex interplay between destructive and positive plasticity within EBL that is reflective of it as a space that is contradictory in its transformational potential.

For others a sense of thrownness was revealed in their descriptions of discovery learning particularly in relation to the presentation and discussion of accumulated knowledge during group discussions. While discovery learning was perceived as beneficial in gaining broader perspectives there were concerns about being able to relate new knowledge to existing knowledge. This was communicated in ways that suggest participants were simultaneously thrown between states of liberation in finding new and unexpected knowledge as Dewey (1938) described but also states of liminality in experiencing the uncertainty of making connections between old and new as described by Land and Meyer (2005). This thrownness illustrates the competing interplay between both plasticities as Malabou (2008) described.

Conversely, while participants' descriptions reveal how the ontological shift necessitated by EBL, becoming self-directed and engaging in discovery learning invoked a sense of thrownness, they also reveal participants also experienced a sense of positive plasticity. This was illustrated in the ways participants described how EBL had changed their personal behaviour in becoming more self-aware and more confidence with which came a greater sense of self-worth. Participants also described developing greater skills of critical thinking, a deeper sense of learning in relation to their roles as developing professional healthcare teachers accompanied by changing views about learning and teaching. Participants also described generated opportunities for them to invent create and style as Malabou (2008) describes. This was revealed through descriptions of how discovery learning had enabled participants to

engage in a broader range of knowledge; knowledge that was often unanticipated but described in ways that suggest it invoked a greater sense of interest and critical engagement that prompted reflection on participants' developing professional healthcare teaching practice. For example, two participants in particular provided graphic descriptions of their encounters with Hermon's brain theory and the Greek mythological character Procrustes. While initially perceived as interesting but abstract, their discoveries were later described as influential in their development and that of their peers. These participants went on to further develop an existing educational model with their peers. In recomposing and further developing their learning participants were engaged *with* knowledge rather than being subjected *to it* as Malabou (2008) describes. This corresponds with Heidegger's (1953) view that teaching is about 'letting learn' and 'willing students to know' and reflects that learning is more than the acquisition of new knowledge; rather, learning is brought about by change. And although change as described the participants in this study brought with it a sense of liminality this was later described as a necessary part of their learning, a view that corresponds with Malkki and Green (2014) who suggest it is the synthesis of abstract knowledge and the ability to contemplate it critically that is stressful but necessary in learning. The benefits of liminality were particularly illustrated by a number of participants in the way they described how knowledge that at first seemed abstract was actually highly relevant to the group's developing professional healthcare teaching practice. Moreover, when reflecting on the achievement of creating the educational model participants' suggested their opportunity to be so creative would not have been possible in a solely taught environment.

While the discussions in this section illustrate how participants encountered both types of plasticity they also illustrate how the experiential dimensions of EBL's ontology enabled participants to become through metamorphosis in the ways described by Malabou (2008) and this was illustrated by all participants. Their descriptions suggest they underwent personal transformations of varying degrees the extent of which suggests they became strangers to themselves as Malabou (2008) describes.

However, while everyone's descriptions suggest they experienced changes in confidence, self-worth and independence it is one participant's descriptions in particular that illustrates how using Malabou's (2008) concepts of plasticity and metamorphosis enabled their experiences to be understood differently. Prior to their engagement this participant regarded EBL with scepticism. They described the effort involved in their adjustment as a 'big ask' given the

period of time spent away from formal academic study. They described all manner of fears and anxieties associated with the imposter phenomenon (Cisco, 2020) and feeling an intellectual fraud. However, when reflecting on their EBL experience they described it a personal starting point, one that enabled them to realise they were not only capable of learning independently but of engaging in critical debate which was something they had previously shied away from for fear of being inadequately informed. The shift in their confidence not only illustrates the competing interplay between both plasticities that Malabou (2008) describes, but also how this interplay resulted in metamorphosis and transformation through experiencing an existential incline.

However, as Malabou (2012) observes, we remain largely ignorant of our own plasticity, we do not even detect its presence. Moreover we remain unaware of its impact and this was evident in several participants' descriptions their own metamorphosis went unrecognised despite alluding to it in their descriptions. This was particularly noticeable for one participant whose descriptions suggest they experienced nothing but negative plasticity. They did not perceive EBL had changed them, their learning style or their outlook as a professional healthcare teacher in any way. However, their descriptions suggest the transition from their historical experience of being taught to one of discovery learning was perceived beneficially. They were the only participant to describe their experience of EBL in this way. Moreover, when reflecting on their journeys while the remaining participants' described many benefits they did not make an immediate association between these benefits and EBL.

While these interpretations shed new and valuable light on participants' experiences, I recognise there are limitations to the study which I now discuss.

6.6 Limitations of the Study

Undertaking the study has revealed its limitations which Thomas (2013) advises should be acknowledged. The sample of eleven is small and risks distortion as Thomas (2013) describes since the experiences of professional healthcare teaching students may differ greatly to others.

Despite acknowledging my pre-understandings concerning EBL the study was at risk from my imperceptible habits of thought. My interpretation therefore reflects an understanding that is different not better.

Two sources of text did not yield the response anticipated. The blog was perhaps not explained as well as it could have been and I was probably naïve to anticipate video recording without consequence.

Finally it is impossible to gauge whether the plasticity and metamorphosis revealed are permanent but this identifies the opportunity for a further study.

6.7 Summary

In this chapter I presented my Gadamerian-informed interpretations of participants' experiences as possibilities of knowing through bricolage as a fusion of horizons in relation to the research questions posed. The limitations of the study were acknowledged and an opportunity for a further study identified.

I now conclude my thesis.

Chapter 7 Conclusion

I set out to explore the experiences of one group of postgraduate professional healthcare teaching students who engaged with EBL during the final module of their PGCE. Using a bricolage of conceptual frameworks alongside Gadamer's (1975) hermeneutic philosophy enabled the complexity of these experiences to emerge by synthesising a diverse range of information. This gave rise to a more sophisticated level of meaning making.

Gadamer's philosophy acknowledged the impossibility of interpreting participants' experiences without presupposition and permitted their historical social and cultural situatedness to emerge over time through language as a metonymy for being. Through dialogue and the work of play three themes emerged concerning the EBL experience: being self-directed, working collaboratively and personal transformations. Each theme was associated with several inextricably linked subthemes revealing complex interrelationships.

While theme one: being self-directed is associated with developing skills of critical thinking by Nallen (2016) and others this study identifies the significance of the ontological shift involved in becoming self-directed. While Pearce (2013) associates this shift with liminality this study reveals how it threw participants between two existential planes as Malkki and Green (2014) described. Participants were 'holding on while letting go' of their familiar identities as learners while trying to develop their skills as novice teachers. The stress imposed by repositioning identity in this way is echoed by Biesta (2015) and illustrates the significance of striking the balance between guiding (Daloz, 1999) and letting collective minds loose to learn (Jones, 2011). I am therefore now more aware of the impact of EBL and the 'thrownness' it invokes and the realisation that professional healthcare teaching students may not necessarily welcome taking the lead in learning just because they are novice teachers.

In relation to theme two: working collaboratively, several authors including Snow and Torney (2015) and Pearce (2013) report its value. However this study reveals how working collaboratively generated more challenges than benefits concerning group dynamics and influence of dominant group members. This was particularly prevalent in group discussions which were simultaneously experienced as disenfranchising and liberating as Brookfield (2015) suggests. However, the role of more dominant members also seemed to provoke quieter members to develop confidence and find voice; a finding echoed by Bebb and Pittam (2004).

These findings accentuate the need for maintaining an inclusive EBL environment which is of relevance to the professional healthcare teacher in relation to their own developing practice.

In relation to theme three: personal transformations, drawing on Malabou's (2008; 2012) ontological concepts of plasticity and metamorphosis have enabled professional healthcare teachers' experiences of EBL to be explored in a fundamentally different way; one that has revealed EBL's potentially transformative powers. These powers aren't visible they are held in some sort of ontological reserve without the status of being there but they have the capacity to be unleashed by EBL's ontology. While others have explored learning as a transformative process (Mezirow, 1978; Illeris, 2014) none has explored EBL's transformative capacity in this way. This represents new and original thinking about the existential impact of EBL on professional healthcare teaching students' development and moreover, their ensuing practice. This study has revealed how EBL is capable of moulding and sculpting the professional teaching student through two competing types of plasticity resulting in personal and professional transformation or metamorphosis in self-awareness, levels of independence and personal confidence. These altered states culminated in changing perspectives on personal learning styles and professional views about learning and teaching. This is significant given that most participants have since become healthcare academics many within my employing university. Their approach is one that fosters the same intellectual curiosity associated with *Come to the Edge* and EBL.

Drawing on Malabou's thinking has also revealed something of my own plasticity and metamorphosis. Undertaking this study has changed my assumptions about EBL; while I continue to regard it as an approach of value to the developing professional healthcare teacher it is also one that should be employed with sensitivity. I have also experienced metamorphosis in relation to my professional identity having recently changed my professional identity to become Head of Education Enhancement where I am shaping my field and influencing the work of others. In this sense it seems that participants and I have both encountered experiential learning as Dewey (1938) described in modifying as a result of our experiences.

The themes and transformative process revealed by the study are presented visually overleaf.

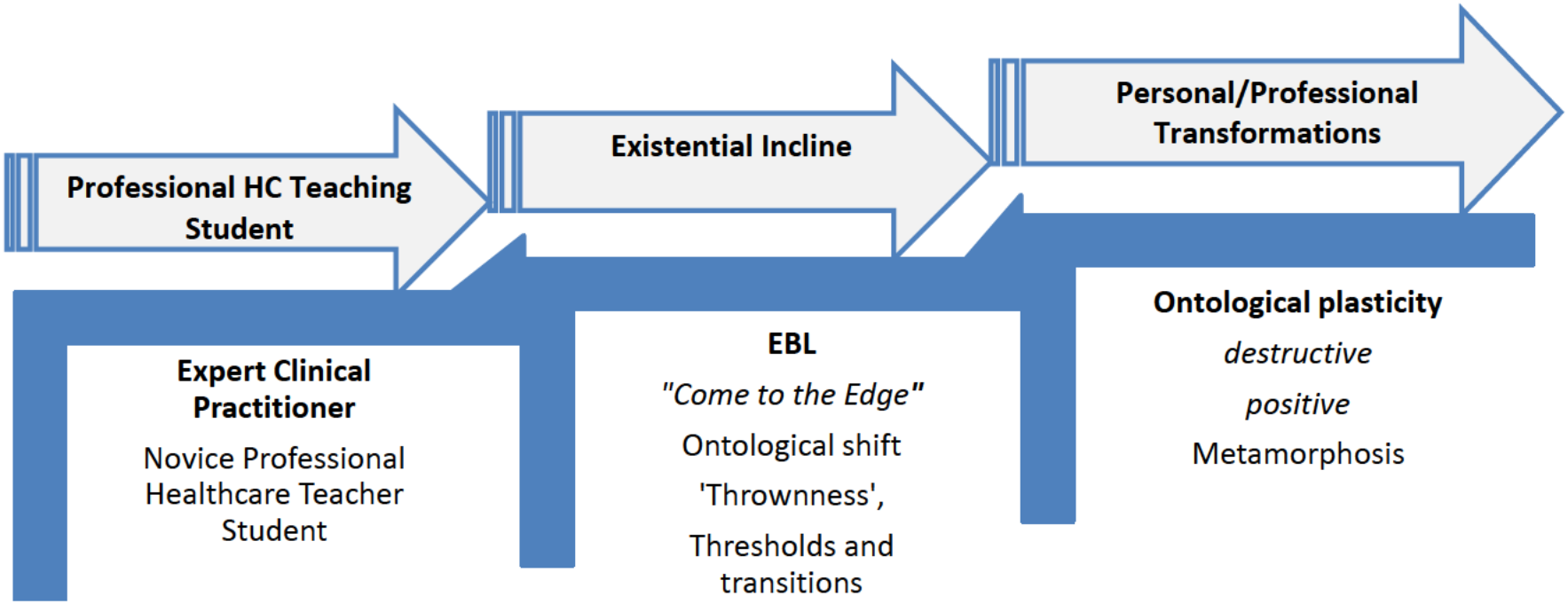
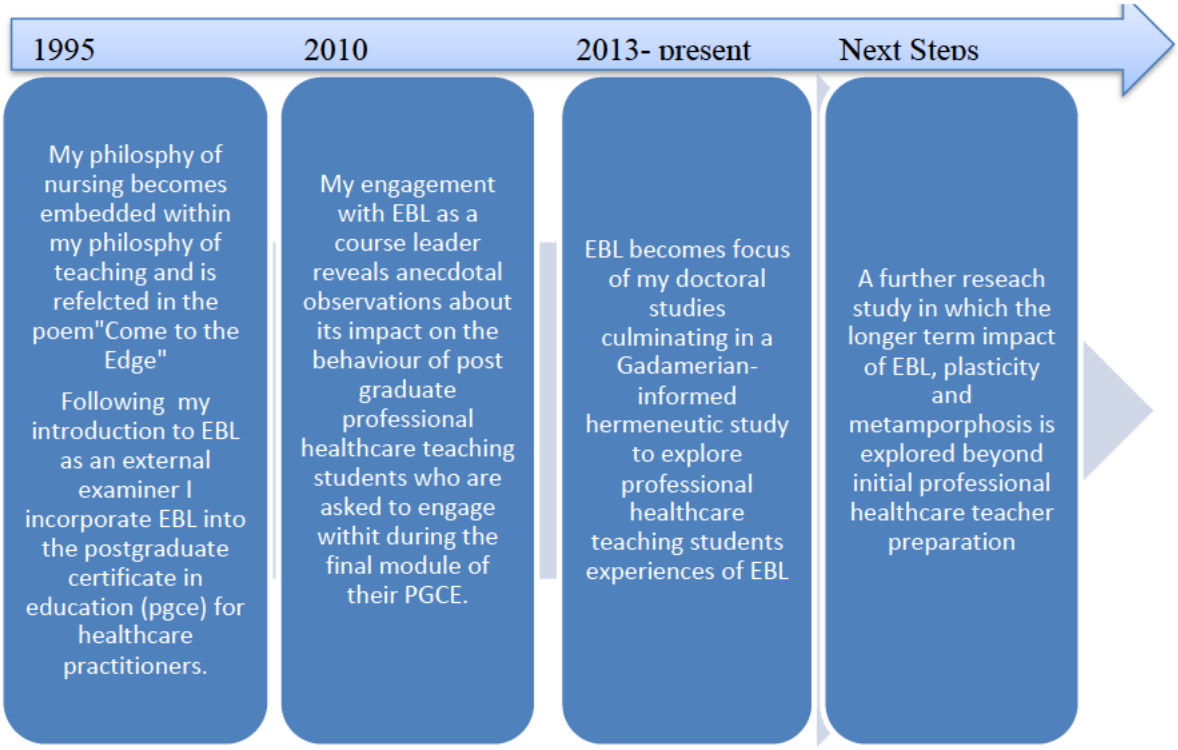


Figure 7. 1 EBL: The Professional Healthcare Teaching Student's Journey as a Transformative Process

It seems then that on one level the findings from this study reflect many findings within literature review where EBL is regarded as a powerful approach with many benefits and challenges that are often inextricably linked. However, none of these studies sought to *explore* EBL experiences, to interpret them as in this study. Rather they were reported factually.

However, in recognising the cornerstone of Gadamer's tradition the interpretations presented within this thesis are not regarded as final they are temporal and historically bound. As Gadamer (2013, p603) concluded "It would be a poor hermeneuticist who thought he could have or had to have the last word". There remains an unanswered question concerning plasticity; whether the changes in participants' existential behaviours have become integrated into their history. With this in mind I revisit the timeline of my developing interest presented in chapter one to reflect my future research ambition; to explore the longer-term impact of EBL (Figure 7.1).

Figure 7. 2 Timeline of Developing Interest and Next Steps



This study has illustrated the moves and tensions in 'holding on while letting go' for learner and teacher within EBL's ontology and demonstrates how understanding remains crucial in advancing professional healthcare teaching practice. To that end the study raises fundamental questions about assumptions educationalists make concerning the approaches to learning and

teaching they employ. It is therefore important to reflect on the value of findings from this study within the context of informing professional and higher education practice.

As the conclusions drawn on p143 and p144 suggest findings from this study correspond with some of those in the literature. However, there are fundamentally distinctive findings revealed only by this study that have direct implications for the professional practice and higher education sectors and moreover, curriculum development.

In relation to the professional practice sector findings from this study have implications for any health and allied practitioner with an educational role. As the experiences of participants in this study demonstrate education and professional practice although inextricably linked are two distinct disciplines and clinical expertise does not necessarily equate to teaching expertise. While the principles of EBL correspond with those of professional evidence-based practice in that it fosters a critically enquiring approach which is aligned to professional practice, EBL is also capable of throwing even the very experienced clinician from their habituated being as learners and teachers as the experiences of the participants in this study suggest. EBL should therefore be regarded as a complex pedagogy that requires skilful and effective scaffolding.

In relation to the higher education sector findings from the study also have implications for PGCE course leads who might employ EBL as a way of learning and as a preparatory pedagogy to inform teacher development. Non-professionally validated PGCE courses attract students from a wide range of subject backgrounds but often include professional healthcare teaching students who want to become university lecturers. Given that EBL allows for greater autonomy in learning the PGCE course lead should be cognisant of the potential challenges it might impose particularly on those whose prior experiences of learning reflect a more traditional instructionist approach. In this regard there may be conflict between previous professional leaning as dominated by social and cultural contexts and EBLs ontology. As such EBL should not be regarded as a panacea and should be employed within an inclusive context; one that acknowledges the potentially neglected link between the personal idiosyncratic world of felt reality and world of theories, concepts and models where academics tend to be located.

That EBL raises these complex issues generates questions concerning curriculum development for those with a responsibility for module or course design in higher education. While EBL is aligned with current thinking about developing skills of criticality and learning it has a somewhat ‘Janus-faced’ identity as this study has revealed. While EBL is predicated on using

intellectually challenging tasks and collaborative knowledge construction to foster individual and peer development, it relies heavily upon trusting relationships and a willingness to engage in independent discovery and not all adult learners are equipped to engage in this type kind of learning as this study has revealed. This makes the task of designing a curriculum complex in terms of where to position EBL and moreover, how to facilitate it. However, if students are to respond to the demands of their workplace as independent self-directed critical thinkers then approaches like EBL warrant further research. Within this context findings from this study are therefore of value to the education researcher attempting to understand the impact of EBL.

I intend to disseminate findings from the study through publication.

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Appendix 1 CAT Critical Appraisal Tool (CASP 2013)

		Yes	Can't tell	No
Question 1	Was there a clear statement of the aims of the research?			
Question 2	Is a qualitative methodology appropriate?			
Question 3	Was the research design appropriate to address the aims of the research?			
Question 4	Was the recruitment strategy appropriate to the aims of the research?			
Question 5	Was the data collected in a way that addressed the research issue?			
Question 6	Has the relationship between researcher and participants been adequately considered?			
Question 7	Have ethical issues been taken into consideration?			
Question 8	Was the data analysis sufficiently rigorous?			
Question 9	Is there a clear statement of findings?			
Question 10	How valuable is the research?			

Source: Critical Appraisal Skills Programme (CASP) (2013)
http://media.wix.com/ugd/dded87_29c5b002d99342f788c6ac670e49f274.pdf

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Appendix 2 Categories Emerging from the Review Literature

Increases Motivation	**Rush and Barker (2011)**
	Kirwan and Adams (2008) P448 453
	Ashby et al (2006) p23
	Tully (2010) p255
	Rigby et al (2011) p305
	Gouldsborough and Sheader (2006) p7
	Pearce (2013)
Promotes research skills such as lit searching, review data collection and analysis	Bebb and Pittam (2004)
	Kirwan and Adams (2008) P448
	Pearce (2013)
Able to deliver evidence based care	Kirwan and Adams (2008) P448
	Kirwan & Adams (2008) in Snow & Torney (2015) p894
Helps to link theory to practice	Snow & Torney (2015) p894
	Fisher and Moore (2005) p150/1
	Brown et al (2008) p305
	Stacey et al (2015) p527
	Gouldsborough and Sheader 2006 p7
Promotes Deeper Learning	Rush and Barker (2011)
	Brown et al (2007) p305
	Horne et al (2007) front page
	Pearce (2013)
Enables student voice	Snow and Torney (2015)
	Rush and Barker (2011)
	Rigby et al (2011) p305
Increases Confidence	Snow & Torney (2015) p894

	Hamilton (2012) p133
	Fisher and Moore (2005) p150
	Brown et al (2007) p303
	Pearce (2103)
Enjoyed being challenged	Fisher & Moore (2005) p150
More likely to question practice	Tully (2010) p255
Increases collaboration and team working skills	Snow & Torney (2015) p897/8
	Rush and barker
	Ashby et al (2006) p23
	Fisher and Moore (2005) p150/1
	Brown et al 2007 p303
	Gouldsborough and Sheader (2006) p7
	Horne et al (2007) p107
Increases critical thinking skills	Snow and Torney
	Ashby et al (2006) p23
	Fisher and Moore (2005) p151
	Nallen (2016)
Brings about changes in self	Rush and Barker (2011)
	Kirwan and Adams (2009) p451
	Fisher and Moore (2005) p151
Broadens perspectives / wider reading /changes perceptions, perspectives and beliefs	Kirwan and Adams (2008) p453
	Fisher and Moore (2005) p151
	Brown et al (2007) p303
	Stacey et al (2015) p527
	Horne et al (2007) p107
Improves memory retention	Snow & Torney (2015) p894
	Snow & Torney (2015) p898
Relevant to the real world	Ashby et al (2006) p23

	Bebb and Pittam (2004)
Increases self-direction and independent learning	Bebb and Pittam (2004)
	Kirwan and Adams (2008)
	Tully (2010) p255
	Horne et al (2007) p107
Enjoyed the flexibility and freedom that EBL afforded	Fisher & Moore (2005) p150
Increased leadership skills for some	Fisher & Moore (2005) p150
Should be extended to other modules	Fisher and Moore (2005) p150
Increases lifelong learning	Fisher and Moore(2005) p151
	Gouldsborough and Sheader (2006) p9
Sharing of information	Gouldsborough and Sheader (2006) p7
Promotes discussion	Gouldsborough and Sheader (2006) p7
Enhances understanding	Gouldsborough and Sheader (2006) p7
Transferrable skills gained (communication, time management, presentation skills, team work)	Gouldsborough and Sheader (2006) p9
	Horne et al (2007) p107
Produces independent learners with transferrable skills	Deignan (2009) p19
Difficulty in making transition from teacher-led to student-led way of learning	Biley (1999) (PBL) cited by Ashby et al (2006) p23
	Ashby et al (2006) in Snow & Torney (2015) p894
Feeling unsupported	Kirwan and Adams (2008) p452
Importance of facilitator as learners felt lost and unsure	Hamilton (2012) p132
	Fisher and Moore (2005) p151

	Rigby et al (2011) p306
	Horne et al (2007) p107
Inconsistencies re facilitator	Hamilton 2012 p132
	Horne et al 2007 p108
Needed to understand more about EBL	Kirwan and Adams (2008) p452
	Fisher and Moore (2005) p151
	Horne et al (2007) p108
Resource and Time allocation (time consuming)	Kirwan and Adams (2008) p452
	Horne et al (2007) p108
Stress and insecurity associated with self-directed learning	Morris & Turnbull (2004) p140
	Fisher & Moore (2005) p150
	Gouldsborough and Sheader (2006) p8
Workload heavier than anticipated	Fisher & Moore (2005) p150
	Gouldsborough and Sheader (2006) p8
Group Dynamics: relying on others to research topics and some peers not pulling their weight in collaborative activities	Tully (2010) p255
	Gouldsborough and Sheader (2006) p8
	Horne et al (2007) p108
	Fisher and Moore (2005) p150
Assessment (pressures of)	Horne et al (2007) p108
Motivation difficult if not summatively assessed	Tully (2010)p255
Knowing less than peers	Gouldsborough and Sheader (2006) p8
Lack of confidence to contribute /communication challenges	Gouldsborough and Sheader (2006) p7
	Horne et al (2007) p108
Personal development like skills in IT	Horne et al (2007) p108

Appendix 3: Themes Emerging from the Review Categories

Experiences Perceived as Beneficial	
Increases Motivation	Rush and Barker (2006) Kirwan and Adams (2008) P448 453 Ashby et al (2006) p23 Tully (2010)p255 Rigby et al (2011) p305 Gouldsborough and Sheader (2006) p7 Pearce (2013)
Promotes research skills such as lit searching, review data collection and analysis	Bebb and Pittam (2004) Kirwan and Adams (2008) P448
Able to deliver evidence based care	Kirwan and Adams (2008) P448 Kirwan & Adams (2009) in Snow & Torney (2015) p894
Helps to link theory to practice	Snow & Torney (2015) p894 Fisher and Moore 2005 p150/1 Brown et al 2007 p305 Stacey et al 2015 p527 Gouldsborough and Sheader (2006) p7
Promotes Deeper Learning	Rush and Barker (date) Brown et al 2007 p305 Horne et al 2007 front page Pearce (2013)
Enables student voice	Snow and Torney (date) Rush and Barker (date) Rigby et al 2011 p305
Increases Confidence	Snow & Torney (2015) p894 Hamilton 2012 p133 Fisher and Moore 2005 p150 Brown et al 2007 p303 Pearce (2013)

Enjoyed being challenged	Fisher & Moore 2005 p150
More likely to question practice	Tully (2010) p255 Nallen (2016)
Increases skills of collaboration and team working skills	Snow & Torney (2015) p897/8 Rush and barker Ashby et al ((2006)) p23 Fisher and Moore 2005 p150/1 Brown et al 2007 p303 Gouldsborough and Sheader (2006) p7 Horne et al 2007 p107 Pearce (2013)
Increases critical thinking skills	Snow and Torney Ashby et al ((2006)) p23 Fisher and Moore 2005 p151 Nallen (2016)
Brings about changes in self	Rush and Barker Kirwan and Adams (2008) p451 Fisher and Moore 2005 p151
Broadens perspectives / wider reading /changes perceptions, perspectives and beliefs	Kirwan and Adams (2008) p453 Fisher and Moore 2005 p151 Brown et al 2007 p303 Stacey et al 2015 p527 Horne et al 2007 p107
Improves memory retention	Levett-Jones (2005) in Snow & Torney (2015) p894 Snow & Torney (2015) p898
Relevant to the real world	Ashby et al ((2006)) p23 Bebb and Pittam (2004)
Increases self-direction and independent learning	Bebb and Pittam (2004) Kirwan and Adams (2008) Tully (2010) p255 Horne et al 2007 p107

Enjoyed the flexibility and freedom that EBL afforded	Fisher & Moore 2005 p150
Increased leadership skills for some	Fisher & Moore 2005 p150
Should be extended to other modules	Fisher and Moore 2005 p150
Increases lifelong learning	Fisher and Moore 2005 p151 Gouldsborough and Sheader (2006) p9
Sharing of information	Gouldsborough and Sheader (2006) p7 Friedman et al 2009 2009 (USA) p768 public health stds
Promotes discussion	Gouldsborough and Sheader (2006) p7 Friedman et al 2009 2009 (USA) p768 public health stds
Enhances understanding	Gouldsborough and Sheader (2006) p7 Friedman et al 2009 2009 (USA) p768 public health stds
Transferrable skills gained (communication, time management, presentation skills, team work)	Gouldsborough and Sheader (2006) p9 Horne et al 2007 p107
Experiences Perceived as Challenging	
Difficulty in making transition from teacher-led to student-led way of learning	Biley (1999) (PBL) cited by Ashby et al (2006) p23 Ashby et al (2006) in Snow & Torney (2015) p894
Feeling unsupported	Kirwan and Adams (2008) p452
Importance of facilitator as learners felt lost and unsure	Hamilton 2012 p132 Fisher and Moore 2005 p151 Rigby et al 2011 p306 Horne et al (2007) p107
Inconsistencies re facilitator	Hamilton 2012 p132 Horne et al 2007 p108
Needed to understand more about EBL	Kirwan and Adams (2008) p452 Fisher and Moore 2005 p151

	Horne et al 2007 p108
Resource and Time allocation (time consuming)	Kirwan and Adams (2008) p452 Horne et al 2007 p108
Stress and insecurity associated with self-directed learning	Morris & Turnbull (2004) p140 Fisher & Moore 2005 p150 Gouldsborough and Sheader (2006) p8
Workload heavier than anticipated	Fisher & Moore 2005 p150 Gouldsborough and Sheader (2006) p8
Group Dynamics: relying on others to research topics and some peers not pulling their weight in collaborative activities	Tully (2010)p255 Gouldsborough and Sheader (2006) p8 Horne et al 2007 p108 Fisher and Moore 2005 p150
Assessment (pressures of) but then see below re motivation!	Horne et al 2007 p108
Motivation difficult if not summatively assessed	Tully (2010)p255
Knowing less than peers	Gouldsborough and Sheader (2006) p8
Lack of confidence to contribute /communication challenges	Gouldsborough and Sheader (2006) p7 Horne et al 2007 p108
Personal development like skills in IT	Horne et al 2007 p108

Appendix 4: Ethical Approval Application Form

UNIVERSITY OF BIRMINGHAM

APPLICATION FOR ETHICAL REVIEW

This form is to be completed by PIs or supervisors (for PGR student research) who have completed the University of Birmingham's Ethical Review of Research Self-Assessment Form (SAF) and have decided that further ethical review and approval is required before the commencement of a given Research Project.

Please be aware that all new research projects undertaken by postgraduate research (PGR) students first registered as from 1st September 2008 will be subject to the University's Ethical Review Process. PGR students first registered before 1st September 2008 should refer to their Department/School/College for further advice.

Researchers in the following categories are to use this form:

1. The project is to be conducted by:
    - staff of the University of Birmingham; or
    - postgraduate research (PGR) students enrolled at the University of Birmingham (to be completed by the student's supervisor);
2. The project is to be conducted at the University of Birmingham by visiting researchers.

Students undertaking undergraduate projects and taught postgraduate (PGT) students should refer to their Department/School for advice.

NOTES:

- An electronic version of the completed form should be submitted to the Research Ethics Officer, at the following email address: aer-ethics@contacts.bham.ac.uk. Please **do not** submit paper copies.

- If, in any section, you find that you have insufficient space, or you wish to supply additional material not specifically requested by the form, please it in a separate file, clearly marked and attached to the submission email.
- If you have any queries about the form, please address them to the Research Ethics Team.

- ✓☐ Before submitting, please tick this box to confirm that you have consulted and understood the following information and guidance and that you have taken it into account when completing your application:

  - **The information and guidance provided on the University's ethics webpages (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-of-Research.aspx)**

  - The University's Code of Practice for Research (**http://www.as.bham.ac.uk/legislation/docs/COP_Research.pdf**)

1. TITLE OF PROJECT

Enquiry Based Learning: Transformative Learning, Plasticity and Metamorphosis

2. THIS PROJECT IS:
University of Birmingham Staff Research project ☐
University of Birmingham Postgraduate Research (PGR) Student project ✓☐
Other ☐ (Please specify):

3. INVESTIGATORS

a) PLEASE GIVE DETAILS OF THE PRINCIPAL INVESTIGATORS OR SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family	Dr Nick Peim (Primary Supervisor)
Highest qualification & position held:	Senior Lecturer
School/Department	School of Education
Telephone:	
Email address:	

Name: Title / first name / family	
Highest qualification & position held:	
School/Department	
Telephone:	
Email address:	

b) PLEASE GIVE DETAILS OF ANY CO-INVESTIGATORS OR CO-SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family	
Highest qualification & position	
School/Department	
Telephone:	
Email address:	

c) In the case of PGR student projects, please give details of the student

Name of student:	Elizabeth Ann Stevenson	Student	
Course of study:	EdD Learning & Learning Contexts	Email	
Principal	Dr Nick Peim		

Name of student:		Student No:	
Course of study:		Email	
Principal			

4. ESTIMATED START OF PROJECT Date: November 2015

ESTIMATED END OF PROJECT Date: August 2016

5. FUNDING

List the funding sources (including internal sources) and give the status of each source.

Funding Body	Approved/Pending /To be submitted
University of Wolverhampton	Approved

If you are requesting a quick turnaround on your application, please explain the reasons below (including funding-related deadlines). You should be aware that whilst effort will be made in cases of genuine urgency, it will not always be possible for the Ethics Committees to meet such requests.

I would like to request a quick turnaround since it seems my original forms did not reach you when completed online by my supervisor in August 2015. Moreover, the participants I will be inviting to take part in my research project begin their studies in October 2015 and I would like to begin collecting data shortly after their commencement continuing through until their completion in August 2016.

6. SUMMARY OF PROJECT

Describe the purpose, background rationale for the proposed project, as well as the hypotheses/research questions to be examined and expected outcomes. This description should be in everyday language that is free from jargon. Please explain any technical terms or discipline-specific phrases.

The purpose of the project is to enable in-depth exploration of post graduate professional teaching students' experiences of using enquiry based learning (EBL) as a potentially transformative learning and teaching strategy.

There is no singularly agreed definition of EBL within the literature; rather EBL is used to describe a set of underlying principles that involves a process of enquiry within a supportive environment intended to promote learner engagement and collaboration where learning becomes more effective when learners are actively involved in the learning process (Cleaver, Lintern and McLinden, 2014); University of Birmingham, 2010; Spronken-Smith, 2008; Hutchings, 2007; Kahn and O Rourke, 2005; Price, 2003). EBL has long been recognised as an effective way of engaging students in the learning process and its origins can be traced to McMaster University, Canada where it evolved from research undertaken by Barrows and Tamblyn (1980) under the label of PBL (problem based learning). PBL was employed in educating medical students. EBL has since evolved and is described as more heuristic in nature since it deviates from more traditional methods of learning and teaching.

Because learning can be life changing the rationale for undertaking this project is to examine EBL's potential transformative properties. The purpose of this project is to generate a broad range of data that captures the nature of the relationship between post graduate professional teaching students' experiences of using EBL and what is known about transformative learning. The work of Jack Mezirow whose research on transformative learning dates back to 1978, and latterly that of Knud Illeris, who continues to examine transformational learning, will be employed. The fulcrum to the project however, is the work of Catherine Malabou, French philosopher whose work on plasticity and metamorphosis will be central to my examination of EBL as a transformative learning and teaching strategy.

The participants invited to take part in this project will be professional teaching students who commence their studies in October 2015 within my employing university and faculty and I will be their course leader. With their consent It is my intention to generate data in relation to their experiences of using EBL using a variety of different methods.

My questions at this stage of the project are therefore as follows:

7. CONDUCT OF PROJECT

Please give a description of the research methodology that will be used

The research methodology for this study is interpretivist and qualitative. As course leader and EBL facilitator I will be immersed in the context of EBL and the participants' experiences of using it. I am therefore also a participant in my own research, I am a researcher insider. My positionality is such that I share the same professional background as the participants and I will be using my relationship and situated knowledge of the participants' worlds to generate thick description of their experiences. To this end the project has been designed to afford a range of data collection methods that are consistent with interpretivist and qualitative methodology and from which an inductive approach to data analysis can be taken. Proposed data collection methods are as follows:

Participants will be asked to

1. Write an individual 500 word written account at the onset of their studies about how they think EBL might help or hinder their learning.
2. Maintain an Individual blog to capture their personal experiences of using EBL.
3. Maintain a group blog to capture their collective experiences of using EBL.
4. Undergo individual interview to determine their particular perspectives on using EBL as a learning strategy once their EBL period is complete. This interview will be unstructured and will utilise one question as follows: "Tell me about your experiences of using EBL".
5. Write a 500 word account about their actual experience of using EBL on completion of the course.

8. DOES THE PROJECT INVOLVE PARTICIPATION OF PEOPLE OTHER THAN THE RESEARCHERS AND SUPERVISORS?

Yes ☐ ✓

Note: 'Participation' includes both active participation (such as when participants take part in an interview) and cases where participants take part in the study without their knowledge and consent at the time (for example, in crowd behaviour research).

If you have answered NO please go to Section 18. If you have answered YES to this question please complete all the following sections.

9. PARTICIPANTS AS THE SUBJECTS OF THE RESEARCH

Describe the number of participants and important characteristics (such as age, gender, location, affiliation, level of fitness, intellectual ability etc.). Specify any inclusion/exclusion criteria to be used.

The number of participants will be between six and ten. The precise number will be determined by the number of students who embark upon this particular course for the next academic year. All participants will be health care professionals of mixed gender and will be studying within my employing institution of higher education. Participants will be known to be. I am there course leader and lecturer. I believe that sharing the same professional backgrounds as participants (as a health care professional and a professional teacher) will put me in a strong position to understand their experiences.

10. RECRUITMENT

Please state clearly how the participants will be identified, approached and recruited. Include any relationship between the investigator(s) and participant(s) (e.g. instructor-student).

Note: Attach a copy of any poster(s), advertisement(s) or letter(s) to be used for recruitment.

Participants will be identified by their course membership to the post graduate certificate in education for health social care and allied professionals. Annual student intake is always ten or less. Professional teacher preparation is a mandatory requirement for health professionals particularly if they are nurses or midwives wishing to teach other nurses or midwives on professionally approved programmed within the higher education setting (Nursing and Midwifery Council, 2008)

11. CONSENT

a) Describe the process that the investigator(s) will be using to obtain valid consent. If consent is not to be obtained explain why**.** If the participants are minors or for other reasons are not competent to consent, describe the proposed alternate source of consent, including any permission / information letter to be provided to the person(s) providing the consent.

A letter / participant information sheet and consent form will be issued to each course member at commencement of their studies. Please see attachment.

Note: Attach a copy of the Participant Information Sheet (if applicable), the Consent Form (if applicable), the content of any telephone script (if applicable) and any other material that will be used in the consent process.

b) Will the participants be deceived in any way about the purpose of the study?

No ☐✓

If yes, please describe the nature and extent of the deception involved. Include how and when the deception will be revealed, and who will administer this feedback.

NA

PARTICIPANT FEEDBACK

Explain what feedback/ information will be provided to the participants after participation in the research. (For example, a more complete description of the purpose of the research, or access to the results of the research).

Participants will be provided with a more complete description of the research following the project. The results of the project will be shared with the group at a continuing development meeting specifically developed for this purpose.

12. PARTICIPANT WITHDRAWAL

a) Describe how the participants will be informed of their right to withdraw from the project.

This has been made explicit within the letter seeking their consent (see attachment)

b) Explain any consequences for the participant of withdrawing from the study and indicate what will be done with the participant's data if they withdraw.

Should any participant withdraw they will be asked if data generated by them can still be used to inform the study.

13. COMPENSATION

Will participants receive compensation for participation?

i) Financial **No** ☐✓

ii) Non-financial **No** ☐✓

If **Yes** to **either** i) or ii) above, please provide details.

NA

If participants choose to withdraw, how will you deal with compensation?

NA

14. CONFIDENTIALITY

a) Will all participants be anonymous? **No** ☐✓

b) Will all data be treated as confidential? **Yes** ☐✓

Note: Participants' identity/data will be confidential if an assigned ID code or number is used, but it will not be anonymous. Anonymous data cannot be traced back to an individual participant.

Describe the procedures to be used to ensure anonymity of participants and/or confidentiality of data both during the conduct of the research and in the release of its findings.

Participants will be known to me since I am their course leader, however, data sought does not ask for participant identity. The exception to this will be individual interviews but no names will be assigned to notes taken during these interviews.

If participant anonymity or confidentiality is not appropriate to this research project, explain, providing details of how all participants will be advised of the fact that data will not be anonymous or confidential.

Anonymity is not possible given the nature of the relationship between the participants and I. However, their confidentiality will be assured.

15. STORAGE, ACCESS AND DISPOSAL OF DATA

Describe what research data will be stored, where, for what period of time, the measures that will be put in place to ensure security of the data, who will have access to the data, and the method and timing of disposal of the data.

Data generated will be anonymous and collected electronically via a lap top computer. The computer will be locked away when not in use. Data will be destroyed once the project and write up is complete.

OTHER APPROVALS REQUIRED? E.G. CRIMINAL RECORDS BUREAU (CRB) CHECKS OR NHS R&D APPROVALS.

☐ NOT APPLICABLE✓

If yes, please specify.

NA

16. SIGNIFICANCE/BENEFITS

Outline the potential significance and/or benefits of the research This research has significant given the changing landscape of higher education in meeting the needs of students and employers alike. Traditionally we have learned in a passive way but EBL continues to gather increasing momentum at HE level globally (Cleaver, Lintern and McLinden, 2014). And this may be due to its inquiry basis that hinges so heavily on learners questioning 'truths', gathering and analysing data and generating numerous perspectives. Such a basis is arguably desirable not only within HE but in the prospective world of employment where these aptitudes are valued highly.

17. RISKS

a) Outline any potential risks to **INDIVIDUALS**, including research staff, research participants, other individuals not involved in the research and the measures that will be taken to minimise any risks and the procedures to be adopted in the event of mishap

NONE

b) Outline any potential risks to **THE ENVIRONMENT and/or SOCIETY** and the measures that will be taken to minimise any risks and the procedures to be adopted in the event of mishap.

NONE

18. ARE THERE ANY OTHER ETHICAL ISSUES RAISED BY THE RESEARCH?

No ☐✓

If yes, please specify

NA

EXPERT REVIEWER/OPINION

You may be asked to nominate an expert reviewer for certain types of project, including those of an interventional nature or those involving significant risks. If you anticipate that this may apply to your work and you would like to nominate an expert reviewer at this stage, please provide details below.

Name
Contact details (including email address)
Brief explanation of reasons for nominating and/or nominee's suitability

19. CHECKLIST

Please mark if the study involves any of the following:

- Vulnerable groups, such as children and young people aged under 18 years, those with learning disability, or cognitive impairments ☐

- Research that induces or results in or causes anxiety, stress, pain or physical discomfort, or poses a risk of harm to participants (which is more than is expected from everyday life) ☐

- Risk to the personal safety of the researcher ☐

- Deception or research that is conducted without full and informed consent of the participants at time study is carried out ☐

- Administration of a chemical agent or vaccines or other substances (including vitamins or food substances) to human participants. ☐

- Production and/or use of genetically modified plants or microbes ☐

- Results that may have an adverse impact on the environment or food safety ☐

- Results that may be used to develop chemical or biological weapons ☐

Please check that the following documents are attached to your application.

	ATTACHED	NOT APPLICABLE
Recruitment advertisement	☐	☐✓
Participant information sheet	☐✓	☐
Consent form	☐✓	☐
Questionnaire	☐	☐✓
Interview Schedule	☐	☐✓

20. DECLARATION BY APPLICANTS

I submit this application on the basis that the information it contains is confidential and will be used by the

University of Birmingham for the purposes of ethical review and monitoring of the research project described

herein, and to satisfy reporting requirements to regulatory bodies. The information will not be used for any

other purpose without my prior consent.

I declare that:

- The information in this form together with any accompanying information is complete and correct to the best of my knowledge and belief and I take full responsibility for it.
- I undertake to abide by University Code of Practice for Research (http://www.as.bham.ac.uk/legislation/docs/COP_Research.pdf) alongside any other relevant professional bodies' codes of conduct and/or ethical guidelines.
- I will report any changes affecting the ethical aspects of the project to the University of Birmingham Research Ethics Officer.
- I will report any adverse or unforeseen events which occur to the relevant Ethics Committee via the University of Birmingham Research Ethics Officer.

Name of the principal investigator/project supervisor:	Dr Nick Peim
Date:	24/09/2015

Please now save your completed form, print a copy for your records, and then email a copy to the Research Ethics Officer, at aer-ethics@contacts.bham.ac.uk. As noted above, please do not submit a paper copy.

Appendix 5: Ethical Approval Confirmation

23/11/2015

Dear Dr Peim

Re: "Enquiry Based Learning: Transformative Learning, Plasticity and Metamorphosis"

Application for Ethical Review ERN_15-1176

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I can confirm the conditions of approval for the study have been met and this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly bought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards

Susan **Cottam**

Research Ethics Officer

Research Support Group

C Block Dome, Aston Webb Building, University of Birmingham, Edgbaston B15 2TT.

Email:

Web: https://intranet.birmingham.ac.uk/finance/accounting/research-support-group/Research-Ethics

Please remember to submit a new Self-Assessment Form for each new project.

Click Ethical Review Process for further details regarding the University's Ethical Review process, or email ethics-queries@contacts.bham.ac.uk with any queries.

Click Research Governance for further details regarding the University's Research Governance and Clinical Trials Insurance processes, or email researchgovernance@contacts.bham.ac.uk with any queries

Notice of Confidentiality:

The contents of this email may be privileged and are confidential. It may not be disclosed to or used by anyone other than the addressee, nor copied in any way. If received in error please notify the sender and then delete it from your system. Should you communicate with me by email, you consent to the University of Birmingham monitoring and reading any such correspondence.



Appendix 6: Participant Consent Letter

All Students Group X

Post Graduate Certificate in Education for Health Social Care and Allied Professions

January 2017

Dear Post Graduate Certificate in Education (PG Cert Ed) for Health Social Care and Allied Professions student.

Consent to participate in doctoral research project

The purpose of this letter is to seek your consent to participate in my doctoral research project. I am currently undertaking doctoral studies at the University of Birmingham. My particular research interest is that of enquiry based learning (EBL), a learning strategy that you will be using within your studies on the above course here at the University of Wolverhampton.

The aim of the project is to examine your experiences of using EBL as a post graduate professional teaching student. I will of course provide you with a full account of my findings when my research is complete. Your confidentiality will be assured throughout the project and you may withdraw from the project at any point up until July 1st 2017. Your participation is entirely voluntary, and your withdrawal will incur no negative repercussions of any kind.

With your consent I would like you to use a range of different methods to enable me to record and analyse your experiences of using EBL: I would like you to:

1. Write an individual 500 word written account at the onset of the course about how you think EBL might help or hinder your learning.
2. Maintain an Individual blog to capture your personal and collective experiences of using EBL. .
3. Undergo an individual interview with me to gain your own particular perspectives on using EBL as a learning strategy once your EBL period is complete.

4. Write a 500 word account about your actual experience of using EBL on completion of the course.

If you have any questions about this project or the interventions I would like to use then please do not hesitate to ask.

If you are willing to take part in this research project then please complete the form overleaf

Yours sincerely

Elizabeth A Stevenson

PGCE Course Leader & Doctoral Student

CONSENT TO TAKE PART IN DOCTORAL RESEARCH PROJECT

Ed D Learning and Learning Contexts

University of Birmingham

School of Education

I (please print your name)……student of the Post Graduate Certificate in Education for Health Social Care and Allied Professionals (PG Cert Ed) Group 5 2016/17 consent to take part in the appended doctoral research project. I understand that my confidentiality will be protected at all times throughout the project and that I may withdraw from the project at any time up until 1st July 2017. I also understand that my participation is entirely voluntary, and that my withdrawal will incur no negative repercussions of any kind.

Name (please print)……

Signature……

Date……..

Appendix 7: Participant Guidelines

Post Graduate Certificate in Education for Health,

Social Care and Allied Professionals

MODULE X

Facilitating the Learning Journey

Group

EBL Research Project: Participation Guidance

You have consented to participate in my doctoral research project the purpose of which is to examine your experiences of using enquiry based learning (EBL) as a post graduate professional teaching student.

This guide should help you to prepare for the following:

1. **A written account** about how you think Enquiry Based Learning (EBL) might help or hinder your learning.
2. **An individual 'blog'** which captures your ongoing personal feelings and experiences of using EBL.
3. **An interview with Liz** about your experience of EBL at the end of the module.
4. **A Reflective account** to be written at the end of the EBL journey

Pre- EBL Written Account: How you think EBL might help or hinder your learning.

The purpose of asking to you to write this short account is to enable me to get a feel for how you think you might engage with EBL on a personal level and why. It is not an academic piece of work and I am not 'testing your knowledge' about EBL. Rather I am asking you to write an open and honest account of what you think EBL might look like, what it might involve and

how it might help or hinder your own learning style during module 7HW010. You were given an EBL guide at the onset of your course; this contains some information that may help you to get started on this but what I don't want is an essay with references! I want your personal opinions.

Personal Blog to be kept during your EBL journey

As the name implies the personal blog is a document containing your personal observations during the period when you are engaged with EBL (ie. during module 7HW010). Blogs are often developed as an ongoing diary or journal. They are also usually published on the web but I am asking you to maintain your blog on your pc in a word document in order to be able to submit it to me at the end of the module. To develop your personal blog I would like you to reflect after each EBL study group session and write down your thoughts about how you felt it all went but from your own personal perspective. Think about your personal experience of the EBL session. Think back to your initial written word account for reminders on what EBL might look like and how it is evolving in reality. I am interested in your own experience and what I don't want is a description of what happened each week, rather I want your honest opinion about whether you find EBL challenging, if so why, whether you find it stimulating, if so why and whether you think EBL is changing the way to approach your own learning. You may wish to make observations on group dynamics and this is fine. No one will read this other than you and I and your identity will be protected at all times throughout the study.

Interview with Liz – looking back at your experience of EBL

The purpose of the interview is to provide you with a face to face opportunity to talk freely about your experiences of using EBL. Again I ask you to reflect back on your initial thoughts about how you anticipated EBL might help or hinder your own ways of learning. Your voice will be recorded during the interview to enable me to transcribe it afterwards. I want you to think carefully about how you feel about EBL, has it changed the way you learn in any way or has it not made any difference to your particular learning style? Has EBL influenced the way you might learn in the future? Might it be instrumental in choosing future courses of study why? These are just some of the things I would like you to consider in contemplating your experiences of EBL during your final module.

Reflective Account

The purpose of asking you to reflect on your EBL journey is to provide you with an opportunity to think back on your whole experience. Any highs, lows or points where you felt you observed anything in particular about the journey. You may wish to look back at your pre-ebl account and compare your anticipated journey with the lived one for example.

Important Point to Note

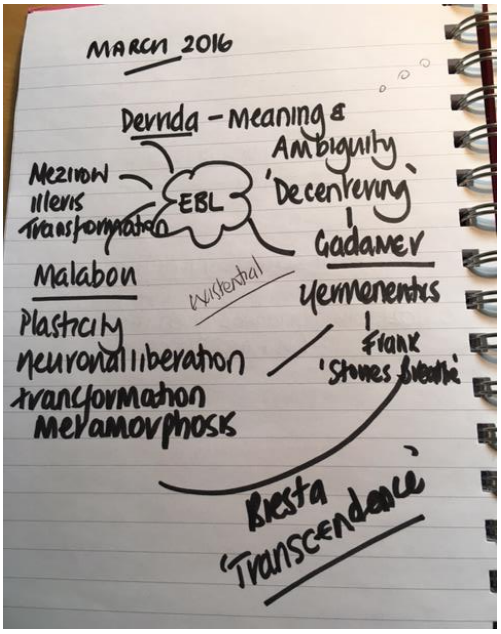
Any information disclosed to me will remain anonymous in the presentation of data – your confidentiality will be protected throughout. I am wearing my researcher's hat in this process not my course leader's hat.

Liz

Appendix 8: Extracts from Researcher's Reflexive Journal

March 2016

Thoughts



My questions / anxieties in relation to this thinking:

1. How can I further refine my thinking about this?
2. How can I command with validity the reality of my thinking?
3. What is the basis of my thinking and is that valid and reliable?

25th October 2016 Why EBL and not PBL?

I have been in the study now for two solid days thinking through my project systematically extracting papers relevant to my research questions. While walking this afternoon it occurred to me that an obvious question posed of my review might be – why did you ignore the body of literature about PBL given that EBL and PBL are so closely related and the terms are often used interchangeably within the literature and by many authors and researchers (see Sharpe and Savin-Baden 2006 for example whose lit review on supported enquiry is underpinned by a mixture of PBL and EBL literature).My understanding and perspective of EBL is that it is not PBL. Rather, PBL is about problem solving whereas EBL addresses a much broader enquiry to which there is no solution. PBL tends to be used at undergraduate level since

problem solving arguably involves knowledge, comprehension and analysis but not synthesis (using Blooms taxonomy in the cognitive domain to illustrate my thinking) Conversely EBL requires synthesis in deconstructing ideas in order to make sense of them and bring them to the broader picture of what is being investigated. I therefore see them as different despite often being clumped together under the same roof. Moreover there is no accepted definition but many hybrid models of EBL. My argument is that PBL has been conveniently 'housed' under the broad umbrella of EBL because it has no final condition. Bebb and Pittam (2004) argue that "although there are many similarities IBL differs from pure PBL…Sharpe and Savin Baden argue that much of what is often argued is in relation to a shift in conceptualisation– yes –See Price (2003) distinctions between EBL and PBL – both share a number of philosophical premises – active study – inductive and deductive thinking working closely with others making sense of the practice environment but EBL is NOT shaped by topics or traditional divisions of learning but by means of enquiry and the ethos of discovering information.

July 2020 –While I have a strong sense of familiarity with the thesis layout now I realise I need a plan. I spoke to Mike about this. He suggested developing a timeline with specific outcomes for each week. I also need to develop a master document to enhance this sense of cohesiveness. I need to think of the thesis as a story of my research that has a logical flow.

Analysis is hard – I feel I really know Gadamer to the extent that I've developed a model for interpretation but knowing where to start is another thing completely. Ill revisit others studies to see if they experience this – highlights I guess that Gadamer didn't write a research methodology!

Jan 2021 Malabou

Bringing Malabou to the table has made me think about identity – for both EBL students and me – we have both experienced a sense of plasticity and I find that quite dramatic - something different that demonstrates how we have both become strangers to ourselves!