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An exploration of peer-mentoring among student teachers' to inform reflective practice within the context of action research

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Abstract

In recent decades, reflective practice and mentoring have become vehicles for endorsing professional development and competency among student teachers during their induction into the teaching profession. This research study aims to explore the extent to which peer-mentoring can inform reflective practice among student teachers within a community of practice. The mentoring concepts illuminated within this study suggest a move away from hierarchical expert-novice approaches towards mentoring, in exchange for more reciprocal endeavour where power dynamics are removed and both participants become equal receivers and disseminators of knowledge regarding teaching and learning.

A qualitative approach was employed through a four-phase, sequential data collection strategy to gather the narrative data collated. Interviews, reflective pro-formas, workshops and open-ended questionnaires were used as instruments to collate narrative data concerning the peer-mentoring experiences of four student teachers. The data was analysed utilising an interpretive phenomenological analysis approach. The student teachers involved in this study were selected from a purposive sample. Importantly, the participants selected demonstrated professional characteristics which resonated with the aims of this study.

A conceptual framework was designed to capture and examine six dimensions of collaborative mentoring in which student teachers could explore aspects of their own teaching practice through action research. The findings generated within the study point towards a range of contexts and challenges concerning peer-mentoring. The findings revealed that the mentoring dimensions used to stimulate meaningful reflection influenced professional development, while the challenges presented issues concerning; trust, power and time. However, the findings also indicate that challenges to peer-mentoring are not insurmountable. This particular study contends that further research is recommended into: firstly, how educational institutions can create supportive, collaborative learning cultures; secondly, how can reflective practice be encouraged throughout professional teaching careers; and finally, how can the challenges of peer-mentoring be minimised in attempting to encourage such endeavour among student teachers.

Keywords: Mentoring, peer-mentoring, reflective practice, collaborative learning, communities of practice, learning communities, collaborative endeavour, student teachers.

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Nelson Mandela

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Noah… Read this one day, and know that Daddy may not have been the most intelligent, but he always tried his absolute best, and that endeavour and will to succeed cannot be measured against anything. Like, your Sister, go on and do great things my friend.

This thesis is testament that with good people, humility, belief and faith, all things are possible. The long road has not ended, it has just began…

For Taylah Naomi, Noah Roman and The Dreamers'

'Let the Dreamers' dream… Excuse me… while I kiss the sky…'

(Jimi Hendrix)

'It's a long way to the top if you wanna rock 'n' roll…'

(AC/DC)

'All for freedom and for pleasure… Nothing ever lasts forever… Everybody wants to rule the world…'

(Tears for Fears)

'You know I've always been a dreamer… Spent my life running 'round… And it's so hard to change… Can't seem to settle down… But the dreams I've seen lately… Keep on turning out and burning out the same… So put me on a highway… And show me a sign… And take it to the limit one more time'

(The Eagles)

Chapter 1: Background and Introduction

1.1 Introduction

A key component of experiential and vocational experiences within education is underpinned by learning, and more specifically, putting this learning into action (Kolb, 1984). In the case of student teachers being initiated into the teacher profession, they do so with the expectation that upon completion of their initial teacher training (ITT), they will be professionally and suitably equipped with the skills and knowledge required to enter the teaching profession as a newly qualified teacher (NQT) and undertake their respective roles proficiently and competently. Navigating student teachers through this period of transition is based on two key components. Firstly, the initial teacher training programme of study should endeavour to provide suitable opportunities and pertinent experiences which aim to improve teaching confidence. Additionally, these experiences should aim to increase the competency of the trainee through positive experiences that utilise reflection as a vehicle for rationalising ideas, values and beliefs situated around teaching and learning and curriculum design. Secondly, the programme of study should facilitate student teachers towards gaining qualified teacher status (QTS). Inherent within this process, such programmes should additionally develop the knowledge, skills and understanding associated with improving pedagogical practices (Department for Education) (DfE, 2012).

The stimulus for the ITT programme of study must reflect the rationale, epistemological stance and vision that have been adopted in designing a particular model of initial teacher education, for the purpose of developing innovative and effective teachers. Secondly, an essential requirement for student teachers' is to actively engage with opportunities and experiences provided within the programme of study. In addition to demonstrating competence and proficiency in their attempt to satisfy benchmarks and achieve the standards required for QTS status. Although, student teachers on one course may experience a common programme, how they engage and learn, will vary dependent upon how they interpret what needs to be learned. Student teachers are unique individuals and differ in their personal biographies and prior experiences, disposition to enquiry, cognitive and perceptive abilities, communication, interpersonal skills, adaptability, values and belief systems. Much of this will be underpinned by their distinctive combination of such qualities, characteristics and personal background experiences, with regards to how they think about teaching and learning.

The emphasis placed on prescribed methods to meet standards and objectives in becoming a teacher has been queried and well documented (Boud, 1999; Berlak and Berlak, 1981; Britzman

1991; Calderhead, 1988, 1989, 1991; Elbaz, 1991; Hammersley and Atkinson, 1983; Hall and Smith, 2006; Loughran, 1996; Maynard, 2001; Stenhouse, 1975; Shulman, 1987; Tabachnick and Zeichner, 1991). However, this particular prescribed view is beginning to be challenged in varying commentaries and discourses concerned with the initiation of student teachers into the teaching profession. Within this context, it is important to acknowledge that teaching is a highly complex activity and the dynamics operating in any given classroom environment will be determined by a range of contextual and situational factors, that characterise every pupil and teacher in varying situations (Moyles, 1995; Pring, 2000; Pollard, 2011).

The development of initial teacher education (ITE) and student teachers within this process is of interest to varying stakeholders, more specifically prospective trainees and teacher trainers who regularly engage in mentoring endeavour (Gray, 2010; Imig et al., 2011; O'Meara 2011). Several contexts have been considered regarding the initiation of beginning teachers, who require various pastoral and learning support needs during their early years within teaching. Mentoring is often the only long-term support provided beyond new teacher orientation sessions (Feiman-Nemser, 2001; Loeb et al., 2005; Sampson and Yeomans, 1994). Additionally, this is also considered as a legal requirement within the teaching profession (DfE, 2012). However, the kind of mentoring support provided to trainees during this critical induction period varies greatly and is a topic of great interest to educators and policy-makers regarding its implementation within professional cultures (Stanulis et al., 2012). Significantly, many educators have assessed whether and how mentoring can lead to increased teaching effectiveness and student learning (Harrison et al., 2006; Hobson et al., 2009; Lofstrom and Eisenschmidt, 2009; Stanulis and Floden, 2009; Sundli, 2007). The utilisation of mentoring in other professions such as nursing, medicine and law adhere to the apprenticeship model of mentoring where experienced practitioners guide and navigate the development of trainees, in affect this is similar to that of teaching (Gardner et al., 2006; Burley and Pomphery, 2011).

The need for universities to satisfy educational league tables, with regards to successfully tracking teacher trainees' means that often, the processes associated with integration and induction are often overlooked in attempting to satisfy government benchmarks (DfE, 2012; Universities UK, 2014). For these reasons, the mentoring process now appears to require more attention (Gray, 2010; O'Meara, 2011). In recent years, a plethora of initiatives and polices (Coaching for teaching and learning (CfBT): a practical guide for schools (CfBT, 2010); Evaluation of the impact of the Department for Education (DFE) investment in initiatives designed to improve teacher workforce skills in relation to SEN and disabilities - 1st interim report; Teachers' Standards

Guidance for school leaders, school staff and governing bodies (DfE, 2012) concerned with educational reform have emerged to ensure that trainee teachers are successfully guided through the induction process during the earlier stages of their professional career. According to Glickman et al., (2007) teachers in the early phases of their development are not supported in ways that enable their professional development. This lack of support affects quality and improvement in teaching, in addition to advancing and promoting trainees to become reflective practitioners.

Many mentoring programs focus specifically on emotional, psychological and sociological support or hierarchical mentoring instead of helping early-career teachers understand and improve their practices. Traditionally, this period is a critical juncture within the integrating process of an early-career teacher, as their early experiences are often overwhelmed with issues of survival (Centre for British Teachers (CfBT), 2010; Kempe and Nicholson, 2001; Long et al., 2012; Moyles, 1995; Woods et al., 2000). However, Le Cornu (2005) explains that many mentors are reluctant to see themselves as teacher educators who focus on helping novices continue to learn, with many practitioners adopting a hierarchical approach towards mentoring, instead of a reciprocal one. Yet, targeted feedback and reciprocal processes can assist novices in developing more complex and innovative ways of teaching by attempting specific innovative practices with sustained support (Grossman et al., 2009; Stanulis et al., 2012).

Varying commentaries (Ghaye, 2011; Pollard, 2011; Pring, 2000) support the discourse that beginning teachers can benefit from focusing on developing one practice well, such as behavioural or classroom management, as the catalyst for improving other teaching components. From this position of strength, they are then able to develop and improve other areas of their teaching (Ball et al., 2009; Stanulis et al., 2012). A high-leverage practice is one that is associated with effective teaching, a practice that is adopted often with frequency in teaching across content areas, with increases in complexity over increased periods (Grossman et al., 2009).

Targeted professional development occurs when teachers receive substantive support and preparation over time with a focus on deep, meaningful and challenging content (Bausmith and Barry, 2011). In the case of this study, the targeted content involved preparing student teachers as peer-mentors to support one another in learning and disseminating good classroom practice. The facilitation of high-level discussions that promote critical thinking is recognised as a reflective component that all teachers should be learning to develop and adopt (Grossman et al., 2009). Leading effective discussions within a peer-mentoring context involves creating a stimulus where knowledge and skills are encouraged through engaging in professional inquiry and

problem-solving, which aims to initiate critical thinking and reflection about teaching and learning (Matsumura et al., 2010).

Additionally, the professional landscape of teaching is continuously evolving and ever-changing in an attempt to reflect the changes of a wider society. Within this context, this study investigates mentoring relationships between student-teachers as an aspect of collegial partnership, which encourages them to peer-mentor, each other through their initial teacher training (ITT) programme of study. The study adopts a constructivist approach towards mentoring to explore the mentoring relationships between trainees and how they are able to facilitate each other's learning within a socialised context, in attempting to disseminate knowledge through a reciprocal lens which improves and develops teaching practice.

The phenomenon of mentoring tends to be the catalyst for developing and guiding student teachers' creativity and professional artistry in becoming innovative practitioners within the classroom. Ultimately, learning about how to become an effective teacher is centred on varying complex, interrelated sets of thoughts and actions, which inform teaching practice. This context can be interpreted through demanding tasks, which might be approached in a number of different ways. Pollard (2011) indicates that this tacit learning provides a catalyst for framing pedagogical practices and learning situated around reflecting upon practice. During the developmental process associated with being a student teacher, proficiency is gained in the basic knowledge and skills of teaching; Loughran (1996) argues that the understanding of the relationship between teaching and learning may influence practice. Inevitably, this impacts on teaching constructs and pedagogies, in addition to approaches concerning teaching and learning.

One particular theoretical concept, which permeates throughout teacher training, that heavily underpins this study, is the development of reflective practice. Osterman and Kottkamp (2004: 19) state that reflective practice is viewed as a means by which practitioners can develop 'a greater level of self-awareness about the nature and impact of their performance'. They indicate that this awareness creates opportunities for professional growth and development. The significance of this as a tool for the development of teaching and learning about pedagogical practice cannot be underestimated as it positions the direct, concrete experience of professional practice in the context of the classroom environment (Schon, 1987). The basis for becoming a reflective practitioner is not focused solely on the acquisition or development of a set of prescribed skills and areas of knowledge required for successful teaching, but rather the

particular skills set essential for reflecting constructively upon continuous daily experiences as a way of developing teaching proficiency and effectiveness (Pollard, 2011).

Through engaging in reflexive processes, to attempt to improve teaching proficiency and effectiveness, a range of strategies (workshops) were introduced and progressively built upon throughout the period of teacher training, (one academic year: September 2013 to July 2014) to support the development of reflective practice. This action research paradigm fosters a sense of professional enquiry, which allows trainees' to draw upon the principals which underpin action research to investigate and improve the effectiveness of their own teaching practices. This professional enterprise and autonomy facilitates the improvement and effectiveness of their own teaching.

1.2 Purpose of the thesis

Although a number of pre-requisites and standards serve to identify the knowledge, skills and understanding student teachers must obtain to satisfy the programme of study they are enrolled on, to achieve the award of QTS, this cannot be applied in a purely prescriptive and clinical manner to guide teaching development and practice. There are numerous variables and complexities inherent within classroom environments, which require student teachers to demonstrate the capacity and adaptability to respond effectively to situations of uncertainty by evaluating classroom experiences and modifying this for similar future practical teaching situations.

Within teacher training, significant emphasis is placed on the learning gained from experiential teaching experiences. Programmes of study featured around teacher training tend to implement a variety of strategies, embedded within the courses to help promote higher order learning and thinking which promotes critical thinking and reflectivity (Ghaye, 2011). The concepts implemented within this study centred on peer-mentoring, communities of practice and reflective practice are intended to support the basis for the development of reciprocal mentoring which facilitates constructivist ideals and supports the satisfying of Standards towards gaining QTS status. Practically, Dymoke and Harrison (2008) contend that this should enable practitioners to reflect on their own development and challenge themselves through collaborative professional enquiry, which allows the facilitation of innovative ideas which aim to develop personal ideas and values regarding teaching and learning.

Guided by the research questions, dimensions and themes, this research evaluates the narratives, values and beliefs of the trainees, in evaluating their experiences of being involved in a peer-

mentoring intervention throughout their initial teacher training. The central point for their learned experiential experiences aims to position them on reflecting, about the experience of mentoring each other through a reciprocal construct. Dymoke and Harrision (2008) explain that for trainees to continuously improve, the stimulus for learning should be underpinned by reflection. Admittedly, how this research experience might influence the development of student teachers' reflective practices and ideas concerning peer-mentoring is unknown, however, as highlighted the intervention hopes to promote collaborative learning, critical thinking, and reflective practice, in addition to contributing towards development of professional artistry and teaching practice. Importantly, this may also help towards the student teacher's repositioning their pedagogical practices, values and beliefs upon entering the teaching profession.

The purpose of this study was to explore and synthesise previous theories and commentaries, concerning reflective practice and mentoring, posited by eminent scholars, researchers and practitioners within the field to better comprehend components associated with, reflexive discourses. Primarily, from an informed disposition, a conceptual intervention (dimensions of mentoring) was designed to explore and investigate some concepts which underpin reflective practice and reciprocal learning. This transpired in the form of peer-mentoring, in which student teachers' could demonstrate a propensity for collaborative learning and a commitment to engage in action research to further their own ideals concerning teaching and learning.

The primary focus for this study is to contribute to the existing growing body of research literature and commentaries, which focus on how reflective practices can be conceptualised, for teacher development, and how its effectiveness can be gauged when measured against a mentoring framework. In particular, this study resonates with the concept of practitioner-based research as student teachers' engage in the idea of collaborative study and action research, as a way to disseminate good practice, in their journey towards becoming teaching professionals. The DfE (2012) and CfBT (2010) advocate such practice, particularly among young trainees entering the teaching profession.

1.3 Motivation for the study

The impetus to conduct this study grew from the researcher's experience as a student teacher and their questioning of the mentoring process as something that resembled an expert-novice hierarchical structure (Gardiner, 2010; Le Cornu, 2005; Kensington-Miller, 2011). Through the researcher's experience, it became clear that student teachers learning while on teaching placement could be strengthened by engaging in a collaborative dialogue with other trainees that

were encountering similar experiences, in the infancy of their professional teaching careers. It became apparent during this period that student teachers required more support than was provided by the teacher trainers and subject mentors. Pollard (2011) states that during initial teacher training placements, subject mentors must provide an adequate level of support for trainee teachers to flourish. This seemed to suggest that support structures for student teachers were problematic. Dymoke and Harrison (2008) contend that historically, support structures for trainees have always been contentious due to the subjective interpretations for what constitutes sufficient support. For example, among student teachers there was a reluctance to challenge some of the more traditional constructs associated with teacher training, with a reoccurring theme among trainees being concerned with the quality of mentoring provision, and the collective feeling of an inability to relate to trainees' problems, with regards to the supporting the problems inherent in developing pedagogical approaches within the classroom.

This problem however is not exclusive towards personal contexts alone as research findings highlight a number of difficulties with support for student teachers (Argyris and Schon, 1974, 1996; Bradbury et al., 2010; Galea, 2012; Kennsington-Miller, 2011). These problems are recognised as having a negative effect, in particular the feelings of isolation that a student teacher may encounter during this period. Such isolation concerning student teachers, explains why collaboration between teachers and more specifically for the purpose of this study is recognised as an important factor in developing professional teaching knowledge (Fieman-Nemsar and Beasley 1997; Lofstrom and Eisenschmidt, 2009).

Specifically, the activity of supporting student teachers has become known as mentoring in most educational spheres, (Whitehead and Fitzgerald, 2006; Burn, 2006) and more recently mentoring has adopted a newer perspective, which facilitates a more reciprocal approach towards mentoring, referred to as peer-mentoring (Le Cornu, 2005). Traditionally, mentoring has been initiated in countries such as United Kingdom (UK), United States of America (USA), Europe and Australia, to enhance learning experience and increase the retention rates of beginning teachers (Furlong and Maynard, 1995; Koballa et al., 2010; Long, 2009; Wang and Odell, 2002).

In the UK, The Centre for the Use of Research and Evidence (CUREE) was established in 1998 with mentoring developed and endorsed as its core activity to support new teachers (Moir, 2005). Similarly, in recognition of collaborative communities of practice (Lave and Wenger, 1991; Wenger, 1998) as a missing dimension to problems affecting teaching and learning, The Centre for British Teachers (CfBT) also advocated mentoring as a central activity to help support new teachers with practical skills (CfBT, 2014). In Scotland, the Scottish Government recognise a

continuous professional development (CPD) framework situated around mentoring practitioners as an effective approach to support teachers professional development. Importantly, the Scottish Government recognise mentoring as an important component, particularly in the context of providing support to newly qualified teachers (Her Majesty's Inspectorate of Education) (HMIE, 2008).

Even though the relevance of collaboration and the use of mentoring are well-documented, scholars and varying commentaries (Kensington-Miller, 2011; Ghaye, 2011; Le Cornu, 2009; Pollard, 2011) posit that more effort is needed to enhance teachers' professional development in mentoring, by utilising less hierarchical constructs of mentoring to increase teaching effectiveness for trainees (Kougioumtzis and Patriksson, 2009). Importantly, Barrera et al., (2010) contend that the benefits of mentoring to teachers' professional development have been reported but its effectiveness within an Initial Teacher Education (ITE) context is still under-examined. Hence, there is a recognition that mentoring initiatives be regularly examined, primarily, in the first instance to determine their effectiveness and secondly, to assess whether the inventions are actually supporting the needs of beginning teachers and ways to improve their teaching and learning. Vermunt and Endedijk (2011) contend that many teacher education reforms have failed in their purpose due to an oversight in teachers' learning and how they should be educated throughout their training. However, Loughran (2010a) contends that pockets of good practice have occurred in the USA, with specific interventions targeted at the developing and maintaining of teachers' pedagogical practices, post-induction into the profession, in attempting to retain early-career teachers in particular. Commentaries (Gardiner, 2010; Kensington-Miller, 2011; Le Cornu, 2005) also now recognise the dominant discourses concerning traditional approaches to teacher education, which are increasingly criticised for the lack of adequate attention paid towards diligently preparing student teachers' to become proficient practitioners. Additionally, the limited scope of these 'traditional' prescriptive approaches in the post-modernised vehicular of teaching, greatly impact the early professional practices and pedagogical approaches utilised among trainee teachers' (Korthagen et al., 2006; Blasé, 2009). Perhaps, this explains why Strong and Baron (2004) report that mentoring in teacher education is complex and may vary due to variations in the design and structures of programmes. Similarly, Perry (2000) highlighted that the major pitfall in mentoring practice is the adoption of a mentoring model from one context to another. This implies that there should be no standardised or prescriptive practices if mentoring is to be considered effective. However, there is some acknowledgement that this may not be realistic, particularly if this is not recognised as a government benchmark or requirement, or prudent to the school culture.

1.4 Purpose and significance of the study

Presently, there is a growing interest regarding the nature and quality of education for beginning teachers globally. As posited earlier, mentoring is gaining more recognition as a strategy to support the development of student teachers' learning at varying stages of their development, with its origins founded in ancient Greece. Interestingly, Allen (2008) argues that many teachers do not really engage actively with student teachers but rather expect trainees to replicate their style of teaching. Conversely, this type of discourse facilitates the notion that student teachers can become somewhat 'processed' and 'manufactured' in the training process, with creativity and innovative practices being stifled. Wang et al., (2008) note that mentors beliefs about what students' learning entails, may vary and may be informed and influenced by theorisations of ITE, school contexts and government priorities at that time. Thus, the main purpose of this study was to examine the concept of redirecting the mentoring construct towards trainees themselves, by initiating a peer-mentoring process between trainee teachers in varying contexts concerned with collaborative learning, and developing a community of practice which was underpinned by reflexive practices. Secondly, this study sought to explore the means by which reciprocal and collaborative learning can be developed to improve classroom practices between student teachers. This study acknowledges that the area for scope needs to be examined in greater depth to unearth new recommendations which can contribute towards existing commentaries, discourse and research (Barrera et al., 2010; Kougioumtzis and Patriksson, 2009; Moir, 2005). Furthermore, this study contends that a considerable proportion of teaching practice is influenced by the mentoring experience encountered by teachers whether positive or negative.

The significance of the study is recognised in that it has specific implications for improving and facilitating collaborative learning in mentoring and reflective practice among student teachers regarding classroom practice (Edwards and Collison, 1996; Lave and Wenger, 1991; Wenger, 1998). For instance, the study posits that collaborative learning in the form of peer-mentoring during an ITT programme of study and within teaching and learning contexts promotes autonomy and stimulates reflection. In addition to encouraging reciprocity and eliminating a hierarchical, expert-novice approach towards mentoring which often restricts innovation in teaching practice and promotes an imbalance of power dynamics between participants within the mentoring construct. Importantly, for the context considered this resonates with Kahn (1964) who emphasised that the expression of differences depends on reciprocal power; the less powerful party is unlikely to confront differences with the more powerful. Further, the issue of power dynamics in such relationships is highlighted by Chesler and Lohman (1971) who suggest

that practitioners are better able to negotiate and adjudicate conflicting interests when they have relatively equal power. Such notions are consistent with consistent with Walton's (1969) emphasis on maintaining a 'balance of situational power' within interpersonal collaborations. In utilising a more reciprocal approach towards mentoring, which promotes even distribution of power, as a means to enhanced dissemination of practices and experiences, among trainees' as suggested in this study, it is hoped that peer-mentoring in a more formal and structured context can be embedded within initial teacher education (ITE) programmes as a process for developing teaching competency, reflectivity, and collaborative learning among student teachers (Pollard, 2011).

This study hopes to contribute to the developing and existing body of knowledge, with regards to mentoring practice at the initial teacher education level. As documented within the literature, mentoring is mostly believed to be influenced by a traditional, expert-novice hierarchical approach to learning, where knowledge is distributed to mentees by mentors, considered to be vastly experienced to dispense this knowledge (Le Cornu, 2005). Kafai et al., (2008) report that studies concerning mentoring, where a collaborative philosophy underpins the concept, additionally endorse the idea that student teachers contribute new ideas towards the mentoring phenomenon, almost from an ethnographic disposition as they are immersed within the experience. This study is therefore significant in that it adopts a constructivist paradigm to explore the peer-mentoring relationships and how they impacted upon the development of reflexive processes and teaching practices enacted within this study. Rather than condemning the traditional approach to mentoring, the constructivist perspective adopted aims to explore less hierarchical structures of mentoring in favour for a framework that advocates student teachers' as autonomous stakeholders in the infancy of their induction into the teaching profession (Burley and Pomphery, 2011; Gardiner, 2010; Le Cornu, 2009). The mentoring initiative implemented aims to provide a context for examining the apprenticeship, socio-cultural dimensions, reflective aspects and mutual participation between participants (student teachers). Importantly, within this study, mentoring is conceptualised and characterised by a progression of collaborative (peer) workshop activities, with reciprocal guidance underpinning equal participation and dialogue among the student teachers. Findings from this study can provide insights on the conception of mentoring as a collaborative endeavour among student teachers in developing as part of a collective. Universities UK (2014) contend that trainees' teachers and higher education teacher education providers should engage in activities and cultures that enable developing as part of a collective. Further, they state that trainees and university teacher training providers should act with honesty and integrity; encourage the development of strong subject knowledge; maintain

professional knowledge and skills as teacher educators and teachers, engage in self-criticality, and forge positive collegial professional relationships.

Within this exploration of mentoring a qualitative research paradigm was implemented. In attempting to study and explore the (mostly) complex nature of mentoring, Cochran-Smith (2010: 274) argues that qualitative data collection strategies such as narrative approaches open up the 'black box of teacher education' and expose knowledge on salient areas of teacher education. The use of an action research paradigm, instrumental case study and narrative inquiry approach as part of a qualitative methodological schematic through a four-phase, sequential data collection strategy provides opportunities to observe and critique peer-mentoring in practice. Moreover, there are opportunities to explore challenges and necessary conditions for the enactment of mentoring practice informed by a collaborative agenda. Vermunt and Endedijk (2011) report that different approaches have been expressed on how teachers' practice should be improved, however, there still remains a dearth of empirical evidence regarding the effectiveness of the such approaches.

Vermunt and Endedijk (2011) also report that some teacher education reforms have failed because the learning needs of student teachers had not been considered. Further, Zeichner and Ndimande (2008) explain that it may be difficult to effect classroom reform if teachers are not well-disposed to new ideas. In this study, the views of teacher trainers, student teachers and university tutors were considered as pertinent and necessary to better understand the mentoring context and also to explore ideas concerning mutual learning. Additionally, Linley (2006) asserts that conducting reflexive studies on pedagogical development provides relevant and informative insights which can be used to enhance existing teaching practices. Thus, this study reflects and resonates with the commentaries of Cochran-Smith (2010) and Barrera et al., (2010), in which they posit that the mentoring processes need to be considered in order to achieve mentoring goals, and improve pedagogical and collegiate practices.

In relation to the programme of study (Postgraduate Certificate in Education in Physical Education: PGCE PE), where the participants were based, the programme is underpinned by socio-constructivism as a theoretical framework for effective student learning and professional development. The socio-constructivist theory offers student teachers the opportunity to make sense of learning through active engagements with university tutors and supporter teachers within school contexts and environments. The student teachers (four participants) involved in this study were selected from a purposive sample, with the selected trainee teachers' demonstrating professional characteristics and a commitment to improve and challenges values,

assumptions and beliefs concerning teaching and learning which resonated with the aims of this study. This research also resonates with the inquiry model of practicum discourse which sees teaching as a research process and teachers as reflective professionals (Zeichner, 1996). As explained by Zeichner (1996), this particular model of inquiry aims to assist student and beginning teachers to develop a sense of responsibility for their professional developments.

1.5 The Peer-Mentoring Intervention and Key Findings

This study provides an exploration into peer-mentoring through action research, with specific consideration given towards how this informed reflective practice. The peer-mentoring intervention utilised aimed to inform reflexive processes through the use of reflective and evaluative dialogue and student teacher-led themed workshops, with specific content dedicated towards the consideration of varying pedagogical components. The key findings indicate that collaborative and collegial processes associated with the professional development of student teachers are integral towards creating a spiral of reflexivity, which allow trainees to systematically challenge their beliefs and values about pedagogy, teaching and learning, and provide solutions regarding best practice within a community of practice. Additionally, this process allowed for the dissemination of ideas concerning teaching practice with other trainee practitioners. Key findings illuminated posit that there are also several challenges inherent in the enactment of peer-mentoring, more specifically trust, power and time. While these challenges are not insurmountable it is imperative that they are acknowledged in attempting to improve the mentoring instrument.

1.6 Structure of the thesis

The thesis is divided into seven chapters. The present chapter provides an overview for the rationale and professional landscape that has guided the direction and purpose of this study.

Chapter 2: Review of Literature on Reflective Practice within Education

This chapter identifies key characteristics attributed to reflective practice by commentators, eminent scholars, teacher educators, and researchers in the field of teacher education by examining the concept as: a discourse, involving processes of thinking, distinguishable from routine practice and underpinned by the development of practice which informs knowledge. This consideration acts as a prelude to reflective interests regarding; a disposition to enquiry, and generating an epistemology of professional practice, which significantly forms the basis for action research; and is considered to be a core component of professional development.

Subsequently, following this exploration of concepts attributed to reflection, a practical definition of reflective practice is introduced, which aims to capture the constituent components of this phenomenon, in attempting to navigate the direction of this research study. This is followed by an exploration of how reflective practice has been developed and researched within initial teacher education programmes and discourse, particularly with regards to the variances of how this phenomenon is implemented within pedagogical constructs.

Chapter 3: Review of Literature on Mentoring Practice within Education

This chapter provides an overview of eminent and seminal literature related to mentoring in initial teacher education. This section focuses on the concept of mentoring, with some comparisons explored between mentoring and coaching discourse. Additionally, some of the benefits of mentoring within an initial teacher education (ITE) context will also be explored. Consideration is then given towards some of the roles and skills required for mentoring, aligned with the characteristics required for effective mentoring from empirical perspectives. The chapter concludes by exploring models and theoretical approaches towards mentoring within an ITE context from which a set of research themes and questions are derived to inform the two main research questions. This stage also presents the research questions and themed explorations, which navigate the direction and purpose of this study.

Chapter 4: Research methodology and design of this study

This chapter details the methodological framework that informed the design of the research study. Specifically, this section examines the schematic for the data collection protocols, with considerations given towards the research design and the integrative phases for data collection. A justification for the adoption of an interpretivist paradigm for this study is provided, with a rationale provided for the sampling frame and selection of participants for this study. Further explanations are provided regarding the use of an interpretive phenomenological analysis approach to analyse data. A rationale and summary is provided for each research phase detailing why this casestudy was built around a four-phase, sequential data collection strategy. The format, content and structure of the peer-mentoring intervention will be detailed, which was facilitated through twelve student teacher-led themed workshops. Lastly, issues concerning the notion of power and validity and reliability are acknowledged.

Chapter 5: Research findings

This chapter presents the study's findings and is organised in relation to directive themes and dimensions situated around mentoring and reflective practices. The key findings are summarised at the beginning of the chapter. The narratives posited within this section illuminate the peer-mentoring practice which occurred and how this informed reflective practices among the student teachers. The narratives within this section demonstrate the impact of the peer-mentoring intervention in relation to improving the student teachers commitment to improve their own teaching practice throughout the duration of the intervention. Evidence gathered to inform the research questions is presented within the contexts of mentoring and reflective practice. The main findings of this study are explored and summarised through narrative and themed components (dimensions of mentoring), evaluation and discussion.

Chapter 6: Discussion and implications of research findings

This chapter highlights and considers the main results of the research study undertaken, with consideration given towards how this relates to previous research and theoretical literature based on reflexive discourse and mentoring to better inform teaching practice. Through exploring some of the implications for mentoring, ideas concerning potential new practices for teacher educators are examined and revealed through the student teachers' engagement in action research. Additionally, this section also attempts to provide a prelude to the final chapter, by exploring the key research findings from this study, which aims to contribute new knowledge to the existing academic commentaries on the field/discipline. The discussion is then summarised for final considerations to be drawn regarding peer-mentoring and reflective practice among student teachers.

Chapter 7: Conclusions and Recommendations

This chapter concludes the study with conclusions drawn regarding the potential for peer-mentoring to inform reflective practice. Additionally, recommendations are provided for practitioners (teacher trainers and supporter teachers) and stakeholders (policy-makers) involved within the initial teacher training process. Various implications are considered, with a view to providing endorsements for effective mentoring practice with regards to supporting student teachers' through their initiation into the teaching profession. This study then concludes with some suggestions proposed for the development of peer-mentoring and reflective practice among student teachers. Additionally, limitations of this study are identified and recommendations are presented for further areas of exploration within the research and subject

area, with particular regards to the potential and capacity for developing collaborative learning cultures within education.

References

Appendices

Importantly, the aim of this study is to explore the extent to which peer-mentoring can inform reflective practice among student teachers within a community of practice (collaborative learning). The concepts illuminated within this study suggest a move away from hierarchical expert-novice approaches and orthodoxies towards mentoring, in exchange for more reciprocal endeavour where power dynamics are removed and both participants become equal receivers and disseminators of knowledge regarding teaching and learning.

Such conceptualisations of mentoring challenge traditional and existing orthodoxies of this practice, particularly in contrast to newer approaches towards teacher professional development which actively encourage practitioners to engage in learning communities. Through an action research paradigm, this study also aims to examine some the challenges that affect the implementation of peer-mentoring within a practical context in education.

The exploration of these contexts is framed by two main research questions:

1.) *How can peer-mentoring and reflective practice contribute towards developing more collaborative learning with regards to student teachers' supporting one another through their teacher training?*

2.) *What are some of the challenges of peer-mentoring within a practical context during teacher training?*

Theoretical and conceptual framework used for guiding this study

The theoretical framework employed in this study, resonates specifically with the professional development of teachers. Essentially, these frameworks (models and theories) identify with practitioners working in social and collaborative learning capacities to challenge and disseminate contexts about teaching and learning. The theoretical framework for this study was based on selected, relevant theories underpinning reflection and mentoring (*Routinised action,* Dewey, 1993; *Reflection on practice*, Schon, 1987), collaborative learning (*Communities of Practice,* Lave and Wenger, 1991; Edwards and Collison, 1996), mentoring (*Staged Model of Mentoring,* Furlong and Maynard, 1995; *Model of mentoring,* Anderson and Shannon, 1995); teachers as researchers' (*Action Research,* Lewin, 1946; McNiff, 2002; Schon, 1983; 1987) and constructivist and social learning theories (*Learning theory,* Bruner, 1983; *Social cognitive theory,* Bandura, 1977; *Situated learning theory,* Lave and Wenger, 1991; *Social Learning Theory,* Vygotsky, 1978).

The rationale for using these specific theories derives from their purposefulness in helping to provide research questions which help to determine the effectiveness of peer-mentoring, with regards to informing reflective practice. Importantly, these theories/ frameworks help to provide a stimulus for ideas and conceptions concerning peer-mentoring and reflective thinking. By aligning the research findings with these constructs, the study adopts a sound theoretical basis from which to draw conclusions and provide recommendations based upon, the conceptualisations that underpin these theoretical discourses.

What is the main theoretical perspective of the researcher?

The main theoretical perspective of the researcher is aligned to reflective practice, specifically the concepts associated with the work of Dewey and Schon, and constructivist learning, perhaps more significantly the discourse advanced by Vygotsky, Bandura, Bruner, Lave and Wenger and Piaget. The main theoretical perspective aligned to the researcher resonates with active learning, and reflection through lived experiences and narratives. The theoretical perspective of the researcher greatly underpinned and permeated every aspect of the research, as the ideas generated for research were based heavily on these theoretical perspectives and concepts. The researcher's personal theoretical perspective endorses and advocates providing student teachers with autonomy to professionally and collaboratively evaluate aspects of their own teaching through action research, by reflecting within a community of practice on how these aspects can be strengthened or further improved for pedagogical practice. The alignment of collaborative processes provides the opportunity to challenge belief and value systems which influence teaching and learning, in addition to resembling a model that facilitates a spiral of continuous reflection and reciprocity.

The influence of Dewey on this study: How does Dewey's discourse affect reflective practice?

The perspective of Dewey regarding reflective practice has permeated educational discourse for decades, his articulations around routinised action have provided the stimulus for reflective practice to be redefined and acknowledged from Schon's viewpoint as we currently observe. Dewey's discourse affects reflective practice from the premise of acknowledging that as practitioners we can often repeat the same practices without reflecting on what can be improved or developed. A consideration from Dewey's perspective that resonates with this study is that of repetitive processes and the effect that this may have on reflection and developing pedagogical

practices. Thus, this study recognises that Dewey's discourse concerning reflection provides an important catalyst for considering how this discourse should be considered. Importantly, and perhaps a very pertinent requirement, should be for all educational practitioners to share a commitment towards disabling routinised action, by challenging their own teaching values and beliefs, by engaging in evaluative and reflective actions, associated with dismantling routinised practices.

Chapter 2: Review of Literature on Reflective Practice in Education

2.1 Introduction

This chapter provides a review of the literature on reflective practice which forms the basis for the conceptual framework of this thesis. It examines selected, relevant reflective models utilised within education for the development of professional teaching practices. Additionally, aspects of this review of literature explore reflexive discourse in education and related factors associated with the reflexive process. Research examining the theoretical grounding of reflective practice remains problematic and empirical approaches vary, this will also be considered. Many of the ideas presented on reflexive processes within education are based on the perspectives of teacher educators, teacher training providers, eminent researchers and authors who engage with the principles and ideals that underpin this area, for example, Schon (1983, 1987), Pollard (2002, 2011) and Ghaye (2011). The literature presented explores concepts associated with reflection-in and reflection-on professional practice, with particular reference towards how professional artistry and competence is developed within teaching among practitioners. Importantly, the purpose of this chapter is to examine the key characteristics that practitioners, theorists, commentators and researchers within education and initial teacher education align with reflective practice. The proliferation of literature within this context since the 1980s has expanded with rapidity and thus, the educationalists drawn upon within this review are by no means exhaustive.

2.2 Defining Reflective Practice

Reflective practice can be described as phenomenological, in that a given phenomenon is studied through direct experience, where interpretations are drawn, with the insights gained used to further understanding and modify pedagogical actions (Zwozdiak-Myers, 2012). Reflective practice has been widely considered as an integral component in the professional development of student teachers and professional educators (Bolton, 2010; Cole and Knowles, 2000; Collin et al., 2013; Ghaye, 2011; Leigh and Bailey, 2013; Nelson and Sadler, 2013). While the necessity of developing reflective practices among students teachers is well documented, and commentated upon within reflexive discourse (Petty, 2006; Hayden and Chiu, 2012; Darling-Hammond, 2006; Hammerness et al., 2005; Garet et al., 2001), reflection as a part of practice once a teaching career has begun provides more salient complexities (Loughran, 2010; Johns, 2009; Ostorga, 2006). Student teachers receive guidance in using reflection as an analytic tool, (Korthagen et al., 2001; Korthagen and Vasalos, 2005; Loughran, 2010) however, this guidance alone is not sufficient for transfer to practice. Signifcantly, Hayden et al., (2013) states that both teacher

education and facilitators of professional development must prepare teachers to reflect on their own, once they are in practice.

Historically, the terms associated with reflective practice encompass the following: the reflective practitioner (Schon, 1983, 1987), teacher as researcher (Hopkins, 2002; McKernan, 1996; Ruddock and Hopkins, 1985; Stenhouse, 1975) and reflective teaching (Calderhead, 1989; Cruickshank, 1987; Dewey, 1910, 1933; Grimmett et al., 1990; Smith, 1980; Van Manen, 1977; Zeichner and Liston, 1996). Contextually, this concept underpins many ideas focused around teacher development within initial teacher education and classroom contexts, configured on the hypothesis that acquiring skills associated with reflective practice should in theory lead student teachers towards becoming more effective practitioners (Burn, 2006; Feiman-Nemser, 1990; Gore, 1993; Loughran, 2005; Pollard, 2008; Pollard, 2011; Richert, 1991; Rodgers, 2002).

Engagement and exploration of concepts within reflection indicate a plethora of variations within the reflective vehicular which underpin this concept (Loughran, 2010). Commentaries and debates highlight difference regarding claims presented about the benefits of reflective practice in the professional development of student teachers (Galea, 2012; Pollard, 2011). Varying commentaries sight a dearth of rigorous, systematic research to substantiate the claims attributed towards reflection, given the absent of an agreed definition (Korthagen and Kessels, 1999, 2005; Rodgers, 2002; Zeichner, 1994). However, an exploration of conceptual and theoretical underpinnings of these terms reveals a number of variations (Calderhead, 1989; Furlong and Maynard, 1995). Thorsen and DeVore (2013) highlight that besides rhetoric; there is a lack of systematic research to substantiate the idea that reflective practice has the capacity to improve professional practices. Importantly, they query how this practice can be measured. Given this position it is hard to quantify an agreed definition of reflection (Pollard, 2011). In attempting to define and contextualise reflective practice it is important to acknowledge the context in which this phenomena is considered. In recent years, reflective teaching has developed as an important aspect in the field of teaching in challenging the positivistic, technicist approach to teaching and learning that has historically overwhelmed the educational sector (Zeichner, 1994). This practice has been embraced rather than following and maintaining a standardised or prescribed model which restricts teachers to a functional role that reproduces existing cultures, and that subjects them to hierarchical mechanisms.

Within this context, Galea (2012) considers reflective teaching to be an effective tool in democratizing the teaching and learning processes. The line of thought that pervades the reflective thinking movement acknowledges that if teachers can develop their own thinking

about their own practice with the aim of changing it according to students' needs, educational transformations would not have to necessarily adhere to a linear pre-determined structure (Galea, 2012). Loughran (2010) suggests that such thinking also resonates with the development of professional learning which could illuminate new pedagogical and educational possibilities for teachers. Importantly, this compliments much of the seminal work conducted by (Schon, 1983, 1987, 1992), who acknowledged and categorised three types of reflective practices; reflection-in-action, refection-on-action, and refection-for-action. Importantly, this conception posits that there is some capital to be gained for practitioners that reflect on their professional practices, internally and externally of the classroom context (Galea, 2012).

Regular, purposeful reflective practice, which evaluates practice and professional identity, is a key characteristic of excellent teachers in all tiers of education (Kane et al., 2004). Researchers (Chien, 2013; Edwards and Thomas, 2010, Pollard and Collins, 2005; Pollard and Pollard, 2014) have proposed that reflective practice is the process through which progressive teachers integrate the various dimensions of teaching. Universally, reflective practice is recognised has having many potential benefits for academic development such as: enhanced overall effectiveness; increased capacity for change; transformation of practice; development of personal qualities (such as increased self-confidence); and establishment of supportive relationships between those involved in the reflective processes (Kahn et al., 2006; Rogers, 2001). Reflective practice can also support practitioners' capacity to peer-mentor others in the developmental and inductive phases of a practitioner's professional journey (Bell and Mladenovic, 2013).

The development of reflective practitioners has been the conrnerstone of professional education programmes in a number of fields (Williams and Grudnoff, 2011). Teacher education has presented varying conceptions of reflective practice (Edwards and Thomas, 2010). Through these varying conceptions and juxtapositions the notion of reflection has taken on somewhat varying dimensions and meanings. Academic commentaries (El-Dib, 2007; Leijen et al., 2012; Roberts, 2009) on reflective practice abounds advocating for the cognitive development of both student teachers and experienced teachers as reflective practitioners (for example, Calderhead and Gates, 1993; Ramsey, 2010). An equally large body of literature exists that claims the success of various initiatives in achieving this particular aim (for example, Jindal-Snape and Holmes, 2009; Nolan, 2008, Zeichner, 1987).

It is widely acknowledged that the promotion of reflective practices in teacher education programmes must be considered an essential curriculum component, particularly in the development of student teachers pedagogical practices (Alsup, 2005; Halquist and Novinger, 2009; Zeichner, 1996). Researchers and advocates of school reform promote critical reflection as an integral part of teacher education (Ward and McCotter, 2004) and analyse the extent to which practitioners and student teachers consider reflective thinking as an integral part of teaching (Conderman and Johnston-Rodriguez, 2009; Hayden et al., 2013; Morin and Conderman, 2003). Evaluation upon teaching practices through reflective engagement provides opportunities to revise teaching practice and explicitly engage in reflecting-on and for action (Etscheidt et al., 2012; Klassen and Chiu, 2010).

Evaluation of teaching practice through continuous professional development is acknowledged as a crucial criterion of effective and competent teaching practice (Pollard, 2011). It is widely acknowledged that Professional, state, and National Education accreditation standards include or endorse reflection as a developmental and performance competency (Etscheidt et al., 2012). Importantly, this expectation emphasises the importance attributed to student teachers entering the teaching profession as proficient reflectors (DfE, 2012; Etscheidt et al., 2012; Galea, 2012; Russell, 2005; Watts and Lawson, 2009).

Within this context, reflection is acknowledged as effective and purposeful self-evaluation which involves the integration of content knowledge, analysing of teaching skills, openness to change, enquiry and learning, as well as a wholehearted commitment towards developing pedagogical practices (Dewey, 1933, 1938). Thorsen and DeVore (2013) state that reflective practices are complex as teachers need to reflect on aspects of teaching and the content knowledge, skills, and teaching methods they employ daily; such as planning and executing effective and relevant lessons. Further, other commentaries suggest that practitioners are required to understand their cultural identity and that of their students, in addition to processing a sound comprehension of the policies and politics of their local and state education agencies (Hatton and Smith, 1995; Kidd et al., 2008). Importantly, reflective practice is also considered an integral part of evaluating one's own teaching performance and preparation, learner outcomes, and the ability to promote learning, social interaction, and self-actualisation in learners (Kidd et al., 2008). LaBoskey (1994) and Thorsen and DeVore (2013) both indicate that teacher educators are faced with the complexity of knowing the essential characteristics of a reflective practitioner, choosing effective

methods for promoting reflection, and implementing meaningful analysis of outcomes that result from reflection on and for action.

Both Dewey and Schon contended that the bulk of teachers' learning comes through continuous reflection and action on everyday problems. Schon made the distinction between experiential knowledge (knowledge that is developed through professional experience), and technical rationality (or abstract knowledge learned from sources outside of the individual), and also between 'reflection-in-action' and 'on-action'. Eraut (1995), foremost of the critics of the notion of reflection in action, questioned its feasibility because the complexity of classrooms often requires on-the-spot decision making by teachers. Eraut (1995) contributed to the academic debate posited on reflection by introducing the concept of reflection 'for-action'. In a similar vein to Schon, more recently, Hickson (2011) has argued that reflection is an essential component if teachers are to understand the complex nature of the classroom environment, in attempting to solve problems inherent in their professional practice. Like Schon (1983, 1987), Zeichner (1996) is convinced that reflection should be grounded in knowledge wider than personal experience. Academic commentaries (Collin et al., 2013; Edwards and Thomas, 2010; Leigh and Bailey, 2013) are varied in their acceptance of this position; with several citing in their arguments that past experience itself cannot create the ability to identify significant features which may impede teaching practice, or contribute towards illumining possibilities for improved action in evaluating the appropriateness of those actions.

Notwithstanding the numerous studies (Baumi, 2009; Bell and Mladenovic, 2013; Black and Plowright, 2010; Pollard 2011) claiming the successes of various teacher education programmes in developing the reflective capacities of student and beginning teachers, the work of Pollard and Pollard (2014) argues that reflection is a much more powerful means of learning for experienced teachers than for student teachers. They contend that experienced teachers are more able to learn through reflection because they have an extensive repertoire, or tacit knowledge, on which to draw on in attempting to diagnose problems inherent in teaching practice. For trainees however, their repertoire is dependent on external sources of knowledge facilitated through limited teaching experiences. Pollard and Pollard (2014) claim that the ability of experienced teachers to reflect is dependent on them bringing their tacit knowledge and taken-for-granted beliefs into their consciousness and then examining the assumptions that guide their teaching practice. Contrastingly, they contend that novice teachers follow a deliberate and planned practice which remains constantly in their consciousness when deliberating over reflection as

part of the trainee process (Pollard and Pollard, 2014). Thus, in Pollard and Pollard's opinion, beginning teachers are more able to learn through reflecting on the nature of the practice they want to develop, rather than on their limited experience.

Miller's (1990) approach encourages the student teacher to utilise experiential experiences to reflect on components of teaching practice and devise a set of strategies designed to support a trainee through a particular situation that they may encounter during teaching. This approach encourages student teachers' to convey justifications for chosen practices (Miller, 1990; Poom-Valickis and Matthews, 2013). The evaluation of these methods creates a platform for developmental areas which can be supported through reflective mechanisms. The effectiveness of this approach is also reflected in the role of assuming a critical friend that affirms and encourages the self-evaluation of the student teacher (Gore, 1990; Lave and Wenger, 1991). Thorsen and DeVore (2013) suggest that this process must be underpinned by an endeavour to enhance understanding regarding what the student teacher claims to know. For some student teachers this may be perceived as a daunting experience, particularly in situations that challenge and disrupt mindsets, beliefs and core values (Korthagen and Vasalos, 2005). Guiding student teachers' through such a process incorporates a component of Freire's (1972) reflective disposition in that, conversations concerning reflection, should not be isolated only towards previous experience, but should additionally encompass opportunities for considering and improving future practice.

One aspect heavily embedded within reflexive discourse are the meanings that can be associated to any specific classroom context (Hickson, 2012; Zeichner and Tabachnick, 1991). Thus, an important characteristic of the reflective conversation is making sense of specific situations. Contexts considered must be recognised as processes that enable and encourage by utilising interactions and making practitioners active participants in a social world (Bradbury et al., 2010). Essentially, Bradbury et al., (2010) highlight that the social constructivist perspective, recognises that student teachers play a significant role in contributing to the decision-making process, which also facilities reflective praxis. Importantly, this forms a critical part of values, interests and actions held by student teachers as they begin to construct their professional identities, narratives and practices (Mezirow, 1990a; Parker, 1997).

Significantly, however, this review of literature does acknowledge that there is a dearth of new reflective approaches and consensus about effective strategies for teaching and analysing

reflection (Etscheidt et al., 2012). In order to help teacher educators with the complex task of analysing reflection skills among student teachers, more recently, newer approaches (Thorsen and DeVore, 2013) have attempted to identify a theoretical framework that incorporates dimensions of reflection on and for action including reflective communication (Hatton & Smith, 1995; Sparks-Langer and Colton, 1991), characteristics of reflective thinking (Van Manen, 1977), cognitive processes (Bloom et al., 1956; Anderson et al., 2001), and overall developmental levels of reflective responses (LaBoskey, 1993). In attempting to reconceptualise reflection, Thorsen and DeVore (2013) utilise and select these theories and approaches to incorporate into a theoretical framework, for hypothesising reflection. Importantly, the theories selected, in attempting to reframe reflection are utilised by contemporary teacher educators (Alsup, 2006; Etscheidt et al., 2012; Griffin, 2003; Halquist and Novinger, 2009; Ward and McCotter, 2004).

Notwithstanding the popularity of the concept of reflection, Williams and Grudnoff (2011) suggest that there is no consistency among theorists, researchers or teacher educators as to its precise meaning or application (Black and Plowright, 2010; Dimova and Loughran, 2009; Parsons and Stephenson, 2005). As Calderhead (1989: 44) observed in his review of literature on reflection, 'the term disguises a vast number of conceptual variations'. In essence, the concept has a number of definitions. The ideas which underpin these definitions are used somewhat loosely to embrace a wide range of concepts and strategies, which is informed by diverse theoretical and philosophical orientations (Williams and Grudnoff, 2011). Indeed, Thorsen and DeVore (2013) and Hickson (2011), in their analysis and critique of the 'reflection', concluded that reflection is a concept that is difficult to quantify, with regards to everyday application in the professional workplace.

Despite the lack of consensus concerning definition and conception, its proponents remain committed to the notion of reflection as a critical element in teachers' professional learning (Calderhead and Gates, 1993), and understanding of the complex and often unpredictable world of the classroom landscape (Zeichner, 1996). Embedded in the need for teachers to become reflective practitioners is the assumption that teachers who are reflective will automatically be better teachers. However, as Calderhead and Gates (1993) have posited, such claims have seldom been exposed to detailed scrutiny. Two of the most influential theorists in the area of reflection, Dewey (1933) and more recently Schon (1983, 1987), have provided a foundation for many current theories about, and investigations into, the notion of reflection. Dewey made the distinction between routine action- action guided by tradition and authority within a social

setting, and reflective action- action that involves 'active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further consequences to which it leads' (Dewey, 1933: 9). This expansive range of meanings makes it difficult to decipher research findings and has led to varying definitions of reflection (Bell and Mladenovic, 2013). References to numerous levels, stages, dimensions, or types of reflection are indicative that reflection is generally viewed as an incremental process (Lee, 2005). Currently, Larrivee (2008) suggests that there is no generally accepted terminology used to define the various levels in the development of reflective practice, with collective consensus leaning towards a need for a universal, common language.

Historical Influences and Political Reverberations

Generally, although reflective practice is considered to be an accessible notion, which achieved significant status as the benchmark for synthesizing thinking regarding teaching, it is contested in terms of its conceptualisation and application; in addition, to lack of objectivity, it is not neutral and value free, but affected by personal, political and professional factors that impact upon practitioners (Issitt, 2003). For example, Hatton and Smith (1995) point out that the concept of critical reflection implies the acceptance of a particular 'ideology'. This view of critical reflection in teaching resonates with considerations for the moral and ethical problems associated with such internalised and in some cases individualistic practice (Adler, 1991; Gore and Zeichner, 1991; Van Manen, 1977). Additionally, such processes also involve making judgments about whether professional activity is equitable and purposeful (Adler, 1991). Therefore, the wider socio-historical and political-cultural contexts can also be included for consideration when engaging in critical reflection (Mezirow, 1990b; Zeichner and Liston, 1987; Schon, 1983, 1987).

Within a similar context, Fendler (2003) argues that, although recent literature portrays reflection as a wholly beneficial practice for teachers (Artzt and Armour-Thomas, 2002; Margolis, 2002; Mayes, 2001; Moore, 2000; Rock and Levin, 2002; Smyth, 1992; Zeichner, 1996), significant critique of reflection, has emerged from varying commentaries (Hickson, 2011; Smyth, 1992; Zeichner, 1996). For example, Zeichner's (1996) critique of reflection suggests four themes that signify that some reflective practices tend to undermine their intended purposes for teachers, i.e. (1) the privilege of university research over teacher research, (2) an emphasis on teaching techniques (3) classroom management, a disregard of the social and institutional context of teaching, and (4) individual reflection as opposed to collaborative dissemination.

Zeichner (1992) attempts to conceptualise this by suggesting:

> 'The term reflection has become a slogan around which teacher education all over the world have rallied in the name of teacher education reform … one of the most notable characteristics of this emerging literature on reflective inquiry in teaching and teacher education is it's 'ahistorical' nature' (Zeichner, 1992: 161-162).

Further he suggests:

> 'Despite the lofty rhetoric surrounding efforts to help teachers become more reflective, in reality, teacher education has done very little to foster genuine teacher development and to enhance teachers' roles in school reforms' (Zeichner, 1996: 201).

Another criticism refers to the degree to which reflective practices serve to reinforce existing beliefs and values rather than challenge assumptions (Pollard, 2011). Importantly, Galea (2012) asserts that some reflective practices may simply be reconfirming, justifying or rationalising preconceived ideas about practice. Similarly, Loughran (2002) contends that the rationalisation of practice may masquerade as 'reflection'. In a similar vein, Korthagen and Wubbels (1995) have argued that, in a comparative study they conducted that, they found no indication between reflexivity and inclination towards innovation.

More recent discourse by Ottesen (2007) has argued that the ideals or purposes of reflection in education are as manifold as the term itself, with a proliferation of terminology employed such as the development of self-monitoring teachers, teachers as experimenters, teachers as researchers, teachers as inquirers, or teachers as activists. Additionally, Ottesen (2007) emphasises that there is sometimes uncertainty regarding the way reflection is conceptualised as an exclusively cognitive activity (as a special case of thinking, or pondering), or what exactly constitutes self-evaluation of teaching practice. As Ecclestone (1996) notes, there is a need for communities within education to denote much clearer conceptions of the varying interpretations and values attributed to reflection, with consideration signposted towards structure, with regards to focusing on present practices, rather than retrospective ones. Contrastingly, Fendler (2003) argues that the meaning of professional reflection is aligned with tensions between Schon's notion of practitioner-based intuition, and Dewey's notion of rational and scientific thinking, with specific

reference to the tensions between intuition and science combined with Cartesian impulses toward self-awareness and feminist interventions.

Knowledge base about teaching and the role of reflection

Critical and in-depth reflection requires some competent level of deciphering areas of development and understanding the components of professional artistry; in particular the conception structuring knowledge and reconstructing knowledge, which appears to underpin aspects, associated with deep and meaningful reflection (Moon, 2004: 100). LaBoskey (1995: 26) suggested that if an aim of reflective teacher education programmes is to assist student teachers in becoming reflective teachers, then one objective of the activities should be to encourage and enable the trainees what it means to be reflective and how to undertake purposeful reflection. Thus, understanding the role of reflection and possessing the skills and abilities of reflection become important aspects of teachers' knowledge bases (Poom-Valickis and Mathews, 2013). In the context of teacher training it is necessary to support student teachers in developing internal purposes for reflection and learning to consider underlying causes for classroom outcomes and teaching practice (Poom-Valickis and Mathews, 2013).

The ability to reflect purposefully creates a disposition for reflection, and intrigues the skills of student teachers; this has been associated with positive outcomes related to professional development and improved classroom practices (Darling-Hammond and Richardson, 2009). Importantly, Poom-Valickis and Matthews (2013) suggest that this realisation has led to many teacher education programmes adapting their curricula and practices to prepare inquiring, reflective teachers and ultimately, high quality professionals. Further, they suggest that a teacher's ability and skill set to analyse and plan aspects of their professional development are considered to be key teacher competences in research on teacher education (Poom-Valickis and Mathews, 2013).

Reflection: a holistic, social process

The social aspect of learning greatly impacts reflexive processes (Bandura, 1977; Bruner, 1983; Lave and Wenger, 1991; Vygotsky, 1978). Edwards and Thomas (2010) state that reflective practice is often contrasted favourably with mere routine action guided by social tradition, on the assumption that the latter can stifle development. They contend that reflection is inherently

social and attempts to resist this notion, surpress the potential for developing pedagogically and professionally. Importantly, Taylor (2003) highlights that propositional knowledge resonates with teacher's because it is situated within the teaching landscape. Taylor (2003: 247) refers to this from a social learning process as a 'locus of shared understanding organised by social engagement and practice'. In this sense, knowing is never entirely propositional; rather it is an exercise of our ability to cope, something we acquire based on how we situate ourselves socially within the teaching paradigm (Taylor, 2003). The conditions of inquiry, criticality or intentionality, as Heidegger noted, are inescapably social (Blattner, 2006). This context is possible only within social structures because to inquire requires socialisation into a community of practice with its particular purposes and evidentiary criteria for collaborative endeavour (Edwards and Thomas, 2010). Importantly, Edwards and Thomas (2010) declare that the self is not therefore, as representational epistemology assumes a questioner prior to the social world; but rather the very concept of self (as well as those of knowledge, truth, language and thought) arises only within a pre-existent framework of social interests.

Within this context, a teacher is then, by virtue of their initiation into a living practice of teaching, a thoughtful practitioner (Pollard, 2011). Pollard (2011) suggests that to believe otherwise is to ignore the necessary tacit component. Edwards and Thomas (2010) recognise that the practitioner can indeed choose but the act of conscious choosing itself is possible only within an already assumed social structure of wants or problematics. They contend that teachers are born with tacit commitments which are historical and it is only through immersion in them that they can come to critique and change them within a communal construct. To be so socialised is not to be the passive victim of conventionality, as some work in the field of teacher education has claimed (e.g. Hoy and Rees 1977; Lortie 1975). Therefore, a teacher's reflection is possible only because of their socialisation into the practice of teaching something worthwhile for student teachers embarking on their induction into professional teaching (Lave and Wenger, 1991; Poom-Valickis and Mathews, 2013; Wenger, 1998). Foregrounding that which is significant is possible only because of the importance attributed to learning collaboratively and sharing ideas inherent in teaching practice with other practitioners within a community of practice, which embraces social learning (Galea, 2012; Bradbury, 2010).

Theoretical framework of reflective practice

Educational thinkers of the twentieth century have written extensively about the process of reflection and its impact on teaching and social justice (Thorsen and DeVore, 2013). This discourse suggests that reflection influences teacher effectiveness by bridging the gap between theory and practice (praxis), integrating prior beliefs with theory and practice, and reconstructing professional knowledge from experiential knowledge, in particular for student teachers navigating their way into professional teaching (Seng, 2001). In attempting to frame the discourse of reflection, Hickson (2011) identifies that in order for teacher educators to understand and develop methods for promoting and assessing reflection, they must facilitate conversations about desired learning outcomes; help candidates analyse personal, moral, and ethical practices; and evaluate educational policy or political outcomes that may be desired as a result of reflection. Furthermore, Thorsen and DeVore, (2013) indicate that teacher educators must be able to identify and analyse the reflective elements present or absent in artefacts and know how to nurture more sophisticated and purposeful reflection.

When reflective practice is characterised as a discourse, it becomes evident through the way student teachers use language and frame questions about aspects of their teaching and experience that different kinds of reflection on practice can be identified (Ghaye, 2011). The typology devised by Ghaye and Ghaye (1998: 34) recognises useful qualitative distinctions, which can be drawn between reflective conversations:

- Descriptive reflection on practice - is personal and retrospective;
- Perceptive reflection on practice - links teaching to feelings;
- Receptive reflection on practice - relates personal views to others' views;
- Interactive reflection on practice - links learning with future action;
- Critical reflection on practice - places individual teaching within a broader 'system'.

The type of reflective conservation facilitates a particular purpose and can be utilised to frame the way student teachers evaluate and deconstruct their own teaching practice (Bell and Mladenovic, 2013). Underpinning the direction of reflective conversations, student teachers can engage in collaborative endeavour, with stimulus provided from theoretical literature, in attempting to answer different types of question, identified within experiential learning or professional practice. However, research studies (Kensington-Miller, 2011; Le Cornu, 2005;

Zwozdiak-Myers, 2009) highlighting qualitative distinctions in student teachers' reflective practice have shown critical reflective conversations are far less frequent than descriptive reflective conversations, as their principle concern focuses on the development of subject matter knowledge and pedagogical content knowledge (Hatton and Smith, 1995; Macdonald and Brooker, 1999; Tsangaridou, 2005). Tsangaridou (2005) implies that student teachers will be at varying stages in their professional development, and may require more directional influence or guidance, in relation to positioning their own teaching practice within the wider professional landscape of ideological and political contexts.

Within this theoretical context, teaching in a reflective manner becomes the primary context of learning by which teachers develop and improve their pedagogical practices (Galea, 2012). In utilising this theoretical construct, Galea (2012) indicates that reflective practice promises an emancipatory construct for teachers in moving away from the authoritarian teaching and learning patterns that echo controlling and disciplinary schooling practices, which many teachers have been privy or exposed too. Importantly, Bell and Mladenovic (2013) suggest that teachers develop their own professional practices, by not engaging in such reproductive systems through deep critical thinking about their particular experiences and contexts. Such endeavour, also leads teachers towards an articulation of their own teaching philosophies (Le Cornu, 2005). Similarly, Galea (2012) contends that the democratisation of teaching is also dependent on a representation of teachers who are encouraged to disseminate their own narratives, through reflexive discourse, with regards to sharing professional experiences and insights.

2.2.1 Types of Reflection

Pre-reflection

According to Larrivee (2008) and Collin and Karsenti (2011) at the pre-reflective or non-reflective level developing teachers react to students and classroom situations automatically, without conscious consideration of alternative responses. Furthermore, they state that practitioners operate with spontaneous responses attributing ownership of problems to students or others, perceiving themselves as victims of circumstances. There is an assumption posited that practitioners take learning for granted without questioning and do not adapt their teaching based on students' responses and needs (Collin and Karsenti, 2011). Unfortunately, there are those

pursuing teaching careers that fall into this category. It is especially important to find ways to facilitate their development of reflective practice.

Surface reflection

At the level of surface reflection teachers' reflections focus on strategies and methods used to reach pre-determined goals (Hickson, 2012). This suggestion categorises teachers' that are concerned with what works rather than with any consideration of the value of goals as ends in their professional armoury. For this level, the term technical has been most used (see, for example, Day, 1999; Farrell, 2004; Hatton and Smith, 1995; Schon, 1983; Tummons, 2011; Leigh and Baliey, 2013). It has also been referred to as prescriptive (Collin and Karsenti, 2011; Hickson, 2011). The term surface was conceptualised by Larrivee (2008) and Fook (2010) to depict a broader scope than technical concerns while denoting that values, beliefs, and assumptions that lie 'beneath the surface' are not being considered at this level of reflection.

Pedagogical reflection

This level of reflection engages with practitioners applying the field's knowledge base and current beliefs about what represents quality practices (Larrivee, 2008). This level has probably the least consensus in the literature primarily due to its composition and label. It has been previously labelled practical (Van Manen, 1977), theoretical (Day, 1993), deliberative (Valli, 1997), comparative (Jay and Johnson, 2002), and conceptual (Farrell, 2004). The term pedagogical was selected as a more inclusive term, merging all of the other concepts to connote a higher level of reflection based on application of teaching knowledge, theory, and research. At the level of pedagogical reflection teachers reflect on educational goals, the theories underlying approaches, and the connections between theoretical principles and practice (Valli, 1997). Teachers engaging in pedagogical reflection strive to understand the theoretical basis for classroom practice in attempting to foster consistency between espoused theory (what they say they do and believe) and theory-in-use (what they actually do in the classroom) (Argyris and Schon, 1996; Jay and Johnson, 2002; Larrivee, 2004; Thompson and Pascal, 2012; Thorsen and DeVore, 2013).

This level represents a type of reflection that goes beyond anecdotal surface reflective concepts. Pollard (2008) states that teachers reflect on the moral and ethical implications and consequences of their classroom practices on students. Critical reflection involves examination of both personal and professional belief systems. Teachers who are critically reflective focus their attention both inwardly at their own practice and outwardly at the social conditions in which these practices are situated (Pollard, 2011). They are concerned about issues of equity and social justice that arise in and outside the classroom and seek to connect their practice to democratic ideals (Larrivee, 2008). This level acknowledges that classroom and school practices cannot be separated from the larger social and political realities. Similarly, Hickson (2011) and Zeichner and Tabachnik (1991) suggest that critically reflective teachers strive to become fully conscious in acknowledging the range of consequences of their actions, which influence social and political constructs.

2.3 Thinking and reflective experience

Importantly for the development of reflective practice, the writings of John Dewey have significantly influenced educational thinking. In particular, his distinction of 'routinised' and 'reflective' teaching is fundamental to the conception of professional development through reflection. In conceptualising reflection, Dewey (1933) distinguishes between the origin of thinking and the occurring of general principles which pervade experiences in teaching. He contends that practitioners are able to think reflectively only when they are willing to endure suspense and undertake enquiry into their own teaching practice (action research). According to Dewey (1933) to be genuinely thoughtful and reflective, practitioners must be willing to sustain and protract the element of doubt that accompanies self-evaluation. He states that this particular mindset situated in doubt, renders the stimulus to thorough enquiry.

Hence, the following is suggested and defined as general features of reflective experience and engagement:

- Perplexity, confusion, doubt, due to the fact that one is implicated in an incomplete situation whose full character is not yet determined;

- A conjectural anticipation- a tentative interpretation of the given elements, attributing to them a tendency to affect certain consequences;

- A careful survey (examination, inspection, exploration, analysis) of all attainable consideration which will define clarified a problem in hand;

- A consequent elaboration of the tentative hypothesis to make it more precise and more consistent to accommodate a wider range of issues;

- Taking one stand upon the projected hypothesis as a plan of action which is applied to the existing state of affairs; doing something overtly to bring about the anticipated result, and thereby testing the hypothesis (within a teaching context).

(Dewey, 1933; Pollard, 2002: 4).

Importantly, with regards to measuring the effectiveness of such reflective deliberation, points three and four indicate deliberate and distinctive reflective practice, which works on a derivative of implementation and then evaluation (Dewey, 1933; Pollard, 2011). Pollard considers this distinction as 'fundamental to the conception of professional development through reflection' (Pollard, 2002: 4).

Galea (2012) notes that this distinction highlights how reflection and reflective practice can and have become routinised and how reflection does not automatically guard the teacher from uncritical practice. As Dewey (1933) explains, not all reflection is critical enough to be considered reflection. Similarly, Pollard (2011) contends that such practice could be identified as encouraging professional development. Dewey (1933) provides some examples of how thinking becomes devoid of inquiry, pointing to impatient dealings with uncertainties, a kind of thinking that loosely engages with possibilities, grabs at suggestions, and draws misinformed conclusions. Dewey's thinking resonates with the economisation of time that plagues educational contexts and which is perpetuated through the systemisation of teaching into a series of measured instructional procedures; which include pre-packaged educational material and curricula that de-motivate teachers away from serious inquiry into their own and their students' learning experiences (Bolton, 2010; Zeichner and Tabachnik, 1991).

The aspect of risk associated with such endeavour, as posited by Galea (2012) suggests that one of the problems with risk-taking by the teacher is the calculation of the prospects, with regards to reluctance to discover aspects of teaching practice which may reveal pedagogical shortcomings. Similarly, Loughran (2010) contends that teacher professionalism is generally thought through a language of mastery, in most cases teachers do not have the possibility of articulating the risks they have taken. Importantly, this implies reluctance for practitioners to divulge their problems inherent in practice, when existing exemplary models of the teacher epitomise the all-knowing masterful individual, not requiring an examination of existing practices (Pollard, 2011; Galea, 2012). The context provided denotes that reflective practice can be engulfed in systems of performativity, with regards to framing existing knowledge and creating capacities for new knowledge to be gained in relation to teaching and learning (Galea, 2012). Importantly, this resonates with Pollard (2011) who illuminates the significance of the unrevealing of unfamiliar knowledge to inform present understanding, this endeavour informs and underpins the process of reflective practice.

Pollard (2002) places responsibility on the teacher in developing a critical edge to reflective practice that navigates away from prescriptive and fixed teaching practices. He identifies open-mindedness as an essential criterion for teacher development (Pollard, 2002). Pollard (2002) recognises that such enquiry informs a willingness and open-mindedness to whole-heartedly engage in reflection. In attempting to engage in reflexive discourse, Pollard (2002) posits that teachers require the capacity to reflect upon whether they are reflective, and more importantly, does this is engagement transpire in an open-minded way. Such dialogue renders certain reflective responses among teachers' engaging in such processes which query:

- How am I supposed to open my mind to reflective practice?
- Am I reflective enough? What is good reflective practice?
- How would I know if I have reached the highest level of reflection?
- Are there benchmarks of good reflective practice?

(Pollard, 2002; 2011).

Conversely, reflective practice in teaching contradicts the landscape of normalisation. The central role of reflective practice in shaping teachers' identity (Thomas and Beauchamp, 2011) is complexly intertwined with discourses of professionalism that acknowledge the criteria of being recognised as a teacher (Galea, 2012). In attempting to prepare the teacher, for the independent nature of teaching, professional bodies have attempted to demonstrate a commitment towards

enhancing the autonomy of the professional teacher (Bell and Mladenovic, 2013). Nonetheless, such professional efforts towards a unified approach to accreditation, navigate the teacher towards accepted conceptions of practice and reflecting (Cochran-Smith and Fries, 2005). Galea (2012) highlights that it is through the documentation of reflections that teachers are confined within a scale that attempts to measure their open-mindedness. Thus, the openness of reflection on teaching and pedagogical practices becomes a standard expectation, with details of reflection disseminated for fellow teachers/ colleagues to access (Pollard, 2002; Loughran, 2010).

Such prescriptions of reflective practice render teachers to reflect in particular ways, even at particular times, with some contexts guiding the interpretation of reflection towards further research, to explore varying implementation and conceptions of this phenomenon (Bolton, 2010). This thinking pervades that reflective practice becomes a way of tracing rigid patterns of becoming professional through defining the characteristics of an idealised professional (Edwards and Thomas, 2010). Edwards and Thomas (2010) suggest that this routinisation of reflection on teaching renders teachers indifferent to the critical enterprise this practice is supposed to be committed towards developing. An important distinction made by Usher and Edwards (2007) explains, reflection through its regulated forms, undertakes a regulatory function within knowledge/power systems. They posit that reflection ambiguously provides a context and dialogue for expressions of active subjectivities. However, this is also not considered an all-encompassing component which perfects pedagogical practice (Galea, 2012). Furthermore, this indicates that in some cases there is nothing inherently emancipatory about engaging in reflective discourse which informs teaching and learning practices (Gore and Zeichner, 1991). To this effect, Pollard (2011) suggests that where reflective teaching practice taking place within an environment that encourages homogeneity of learning processes and the listing of precise standardised learning outcomes, this endeavour can become monotonous and repetitive. Thus, reflective practice inhibits traits of unproductivity if such practice maintains a reproductive and repetitive tendency (Usher and Edwards, 2007). Usher and Edwards (2007) suggest that such repetitive practice surrenders effectiveness when this becomes mandatory and compulsory. Hence, Edwards and Thomas (2010) emphasise the importance attributed to ensuring that teacher's individual reflections are conducive towards facilitating wider teacher collaboration that would strengthen the voices of teachers and inspire active engagement in developing pedagogical practices. However, aspects of the discourse posited contradict the importance attributed towards the professional teacher being an independent and autonomous reflective practitioner, for as Carr and Skinner (2009: 145) argue 'professional reflection cannot be merely a matter of obedience to external directions... a way to simply reflect a required competence'.

An issue, which has arisen from Dewey's conceptualisation of reflective action and its subsequent interpretation within initial teacher education concerns whether reflection is limited to thought processes about action, or is more inextricably bound within an action (Noffke and Brennan, 1988; Noffke and Zeichner, 1987; Grant and Zeichner, 1984). There is some evidence to suggest some support for the view that reflection is a distinctive form of thought (McNamara, 1990; Sparks-Langer and Colton, 1991) with regards to reflective thinking and reflective action, with the latter distinguished as a cycle of professional 'doing' which is informed and underpinned by modifications to practice stimulated by reflective actions (Noffke and Brennan, 1991; Gore and Zeichner, 1995). This particular cyclical process resonates with some of the student teachers' featured in this study, as they engage in the reflective processes inherent within peer-mentoring and action research to subsequently guide their future teaching and pedagogical practices.

Van Manen (1977: 264) advocates that much of teachers' daily 'practical' thinking about practice issues, such as; planning, adapting materials, developing courses, arranging subject matter content, teaching and evaluating' can be described as technical, contextual, dialectical and routine. Van Manen (1977) situates this conception by suggesting that practical dispositions in this context reveal themselves in 'grounded routine'. Van Manen however, distinguishes between levels of reflection, with regards to the nature and focus of questions that teachers may have regarding practice. Inherently, this may stimulate and lead to different interpretations of teachers' practical work (Pollard, 2011; Van Manen, 1977).

Van Manen's level of technical reflection is characterised by the application of past experiences and existing knowledge, to serve a particular purpose, which is not exempt from reconsideration or modification, with credibility gained from the efficiency of such 'reliable' competencies and practices focused on meeting pedagogical outcomes. The primary focus of teachers' disposition to enquiry is to resolve concerns about aspects of their own practice, by evaluating how such reflections can facilitate improved practice and stimulate innovation, rather than embrace notions of technical reflection (Bradbury, 2010). Tinning (1995: 27) draws a parallel between Van Manen's interpretation of technical reflection and the first level of reflective teaching identified by Grimmett et al., (1990), which applies research findings to practice and essentially represents thoughtfulness about action. Van Manen's level of practical reflection is characterised by the process of analysing and clarifying assumptions, experiences, goals, meanings and perceptions which underpin practical actions through dialectical, contextual and technical components. Therefore, teachers' queries are directed towards the more 'educational aspects' of their teaching

practice to gain an interpretive understanding, centred on conceptualising the nature and quality of educational experience. In addition to facilitating the making of practical choices' to inform teaching and learning practices (Van Manen, 1977: 226-227).

2.4 Reflective teaching

Reflective teaching implies an active concern with aims and consequences as well as means and technical competence (Pollard, 2011). Specifically, this context relates to the immediate aims and consequences of classroom practice, with regards to the teacher's main objective (Pollard, 2011). Significantly, Hickson (2011) indicates that classroom work cannot be isolated from the influence of the wider society. He reflects that teachers must therefore consider both spheres of this discourse. Such discourse also resonates with the idea of a cyclical process, by which reflective teaching is applied in a cyclical or spiralling process, in which teachers monitor, evaluate and revise their own practice continually and systematically (Stenhouse, 1975). Stenhouse (1975) associates this as the stimulus for reflective teaching. This provides the catalyst for teachers to engage and immerse themselves within developing aspects of their teaching practice. This particular conception is situated within the paradigms of action research (McNiff and Whitehead, 2011; Pollard, 2011). Importantly, this conception underpins reflexive processes which encourage teachers to act as active agents in developing their own practice and developing aspects of their curriculum through practical enquiry (Stenhouse, 1975).

Accompanying the discourse provided, various alternative models have since become available with regards to the capital attributed towards action research and teachers developing their own practice (Carr and Kemmis, 1986; Elliott, 1991; McNiff and Whitehead, 2006) and although there are salient differences between these varying models, the underpinning themes remain the same as, they all preserve a central concern with self-evaluation and reflecting upon practice (Pring, 2000). Pollard (2011) suggests that a significant aspect of teaching is the requirement to plan, make provision and deliver. Loughran (2010b) and Zeichner and Tabachnik (1991) posit that reflective teachers, also need to monitor and measure the effectiveness of their processes by the impact that this has on their learners. Crucially, they emphasise that this evidence needs to be critically analysed and disseminated, in the need to further improve teaching and pedagogical practices. Pollard (2011) notes that such practice, significantly contributes towards redeveloping practice, and strongly facilitates the dynamic process which is intended to lead through successive cycles, or through a spiralling process, towards improved standards of teaching practice. The simplicity attributed to this model has significantly influenced practice with regards to teaching. Hickson (2011) contends that such processes are consistent with the notion of

reflective teaching. Similarly, Dewey (1933) asserts that such practice provides essential clarification of the procedures required for reflective teaching.

Importantly, the association between reflection and teacher development is synonymous, and underpins much of the improvement on existing practice. Lange (1990) draws parallels between the intimate relationship, between reflection and teacher development arguing that the reflective process stimulates a framework of growing knowledge and experience, among teacher's that share a commitment to develop and improve. Furthermore, Lange (1990) contends that such commitment provides opportunities to examine practice with learners, challenge values and beliefs, and navigate practice towards maximising teaching proficiency and potential.

Further discourse highlights the significance attributed to such endeavour, the seminal work of Clark and Lampert (1985) argued that the findings of their research support the development, of teaching as 'reflectively professional enterprise' for both novices and experienced teachers. Their research navigates towards the promotion of understanding teaching as innovative endeavour, with the purpose of empowering teachers' commitment towards self-directed professional development. Another seminal piece by Sanders and McCutheon (1986) advocates pre-service teachers engaging in opportunities to learn and organise multiple factors related towards pedagogical and teaching practices through reflection, by the interpretation of their actions. Similarly, Schon (1987) asserted that beginning teachers can be coached through challenging situations by teacher educators or more knowledgeable others with the resulting reflection, providing the stimulus for the construction of new knowledge. Further, Valli (1992) contends that reflection is a tool for assisting student teachers' conceptualisation of the social problems currently confronting education, with regards to the undermining and supressing of developing best practices. Further, assertions from Valli (1993) endorse the promotion of social justice as a critical component of reflection; in rejecting reflection as a process to merely support the technical and mechanical aspects of instruction within teaching discourse. However, pertinent considerations for reflection highlighted by Hatton and Smith (1995) and Galea (2012) conclude that, while varying approaches have been used to promote reflection, there is a dearth of research evidence to confirm the effectiveness of such strategies and their implementation.

Pollard (2011) has suggested that teacher modification and development require an awareness and consciousness for change to occur. Further, he defines teacher improvement as a form of 'deliberate alteration' involving a persistent cycle of critical evaluation to circumstances, in which two key fundamental components of change are considered imperative: innovation and critical reflection (Pollard, 2011). Similarly, Richards (1990) also considers reflection as fundamental for

the development of teachers. Essentially, Richards argues that self-inquiry and critical thinking are imperative in navigating teachers away from impulsive, or routinised practice, in exchange for developing professional competency, where actions are guided by reflection and critical thinking.

Within this context, Hatton and Smith (1994) assert that, within recent discourse the terms 'reflection' and 'critical reflection' have become ingrained within various academic commentaries. Their assertion recognises that varying approaches of reflection within teacher education continue to be multifarious with regards to variances in definitions, and have been utilised without any fixed certainty to embrace a wide range of concepts and strategies attributed to this discourse. More recently, Loughran (2010) claims that despite variance within academic and research dialogue, reflection continues to remain problematic, in attempting to encompass a range of theoretical and practical approaches.

2.5 Mediation to promote higher order reflection

Much of the literature collated regarding reflection, encourages teachers to reflect beyond reflection that represents a surface level of engagement. Specific attempts to endorse this engagement with the aim of enhancing reflective practice sometimes prove to be unsuccessful (Korthagen and Wubbels, 1991; Smith and Hatton, 1993; Zeichner and Tabachnik, 1991; Valli, 1992, 1993). Despite intentions to progress and develop reflexive processes, reflections of student teachers tend to be mostly descriptive, in attempting to satisfy, training expectations and benchmarks, with limited references to theoretical frameworks (Collier, 1999; Pultorak, 1993; Wunder, 2003). The generally accepted position is that without carefully constructed guidance; that may be construed as being prescribed or technical, teachers sometimes are unable to engage in pedagogically-centred critical reflection to enhance their practice, this becomes more difficult in cultures where reflection is either not embraced or non-existent (Fullan, 2014; Rhodes et al., 2004; Wenger, 1998).

The seminal work of Hatton and Smith (1995) suggested that teacher progression through the levels or stages of reflection appear to be developmental in that teachers will need to engage in reflection primarily, before assessing technical skills and drawing comparisons between varying teaching approaches. However, Smyth (1989) advocated that adopting and engaging in higher order reflection is not always accessible to student teachers, as they will not possess the experience required to facilitate such engagement. Further, Larrivee (2008) suggests the importance of environments and cultures that stimulate novice teachers to utilise their

experiential experiences amassed to deepen levels of reflection through powerful facilitation and mediation within emotionally supportive learning climates.

There is an emerging consensus that student teachers and in-service teachers can be assisted to engage in higher levels of reflection, through multifaceted and strategically constructed interventions within supportive cultures (Russell, 2005; Ballard and McBride, 2010; Tummons, 2011; Etscheidt et al., 2012). Such mediation processes which encompass specific structures, such as providing deliberate prompts and strategically posing non-judgmental questions, have been found to promote higher order reflection by creating authentic dialogue (Rolfe et al., 2011; Leigh and Bailey, 2013). Similarly, researchers have found that helping prospective teachers acknowledge, articulation of practice and encouraging them to challenge their beliefs enhances productive reflection (Boyd et al., 1998; Nais, 1987; Walkington, 2005; Wideen et al., 1998; Yost et al., 2000). Therefore, reflection maintains a position as an abstract construct with its existence, based on the assumption of personally observed performance and expressed beliefs, in light of such observations (Pollard, 2011). The capacity for reflection is embedded in values, assumptions, and expectations. The assessment tool prescribed for measuring reflection can provide benchmarks and indicators for key behaviours required of reflective practitioners (Galea, 2012). Hickson (2011) suggests that structured processes for evaluating and developing practitioners' levels of reflection can assist teacher educators in targeting the specific attitudinal and behavioural characteristics necessary for effective reflective practice to occur. By identifying key behaviours, attitudes and practices that require refinement or development, more specific interventions can be implemented to promote higher order reflection among student teachers and in-service teachers (Pollard, 2011).

2.6 Reflective practice underpins the development of forms of knowledge that serve particular interests

Reflective practice through various perspectives is generally considered as a purposeful activity which advocates student teachers' concerning themselves with formulating specific goals to improve pedagogical approaches (Pollard, 2011). Such perspectives can be considered through: ethical, moral, personal and social constructs. Importantly, through such processes new knowledge is revealed; this is implemented to achieve a particular outcome. Student teachers, for example, who concern themselves with diagnosing ways to challenge all pupils within a mixed ability setting, might experiment with a range of approaches, facilitated by the utilisation of new insights and understanding gained from reflection to inform teaching practices (Hickson, 2012).

To support such contexts, Habermas (1971) devised a model of knowledge, which entails the understanding of constitutive interests to distinguish between technical, social science and the emancipatory interests of people, which frame human knowledge, through the implementation of processes of inquiry. Significant, to the considered context, Habermas' technical or instrumental interests, compelled by an individual's concern to understand the environment in which they exist, are realised through empirical and analytical scientific explanations. Interests within the social sciences and humanities, the historic hermeneutic disciplines, which have been driven by a concern to comprehend human interaction, behaviours and variances of communications, are acknowledged through the interpretation and integration of ideas in order to unpick meanings associated with human interaction and behaviours (Habermas, 1971). Emancipatory interests, driven by an individual's concern to understand the self within the human context are negotiated through critical and evaluative modes of thought and inquiry (Bradbury, 2010). Moon (1999: 14) argues that the acquisition of knowledge which accommodates emancipatory interests aim to produce transformations in individual behaviour, through personal, social or world constructions of reality. Habermas' model suggests reflective practice is hierarchical, that knowledge must initially be developed by instrumental or interpretive means before a critical overview of that knowledge or processes that have led to its configuration are possible. Pertinently, he considers methods of empirical and analytical enquiry associated with scientific explanation to provide an inadequate base for the social sciences. Specifically, since generated interpretations, which underpin and construct the social sciences, are derived from subjective dialogue and experiences that require continuous evaluation over specific periods (Zwozdiak-Myers, 2009). Although the fundamental mode of enquiry for the social sciences is interpretation, Habermas suggests this process, requires a critical form of evaluation and enquiry. Primarily, such interpretations acknowledge scrutiny from how viewpoints and interpretations have arisen. This reflexive disposition resonates with critical theory that has emerged from the process of critique and evaluation: specifically, the generation of questioning and understanding to facilitate and challenge pedagogical interests (Pollard, 2011).

Habermas' endeavour to immerse theoretical and practical underpinnings within a comprehensive theory of rationality has received critique and challenge. Specifically, a pertinent concern is the inability of Habermas' to demonstrate how theoretical critiques of powerful ideological forces, have distorted and suppressed 'practical reasoning (phronesis) within societal institutions, with regards to justifying social and political action on the part of the enlightened' (Elliott, 2005: 361). Such justifications, have led some critics (Bernstein, 1976) to argue that Habermas failed to demonstrate the unity or link between theory and practice (praxis). Bernstein

(1976: 192) claims the knowledge and constitutive interests reflect Habermas' attempt to go beyond epistemology, in attempting to develop a philosophical anthropology that 'singles out the distinctive characteristics of human social life'. Importantly, Habermas regards such discourse as basic human interests because this dialogue remains situated in the confines of what makes human social life distinctive. As such, they determine what transpires as knowledge and the appropriate methods of discovering, accessing and measuring such constructs. However, Bernstein (1976: 209) queries the lack of synergy and similarity between forms of knowledge and enquiry constructed by emancipatory interests, and those established by technical and practical structures. He argues that the former is substantive and normative, with regards to the specific aim of enquiry being pre-judged and to some extents pre-determined, whereas the latter resonates with formal conditions of enquiry and knowledge acquisition, which do not pre-judge or pre-determine specific outcomes.

Themes common to Dewey and Habermas' conceptualisation of reflective practice are their subjective interpretations relating to the process of reflection, which serves to develop, generate and acquire new knowledge. From a subjective disposition, such views posited could be perceived as complementary in that 'Dewey considers the processes and Habermas… the place of the process in the acquisition, development and consideration of knowledge construction' (Moon, 1999: 15). Habermas' discourse suggests reflective student teachers are those that stimulate or cultivate particular forms of knowledge. When the motivation or underlying purpose which guides reflective practice is considered however, a distinction between their approaches becomes evident (Bradbury, 2010; Ghaye, 2011). Dewey's conceptualisation of reflection is embedded within the social science paradigm, where interpretation is constructed from 'making sense of the world' for effective and productive education to transpire; whereas Habermas' conceptualisation derives from the ideal of empowerment and political emancipation (Morrison, 1995) towards freedom, justice and the acquiring of truth, as a basis for knowledge construction. Barnett (1997) claims that engagement in reflexive processes encourages student teachers to gain an awareness as to how their actions impact the classroom environment, and more importantly, how they come to understand their situations sufficiently to create the freedoms needed to frame future teaching and learning. Carr and Kemmis (1986: 157) argue that such processes resonate with critical reflection, as they can illuminate and identify self-evaluation and ideological variances within practices, considerations and structures of educational contexts, with reference developing and improving educational situations for all incumbents within the school landscape. Their interpretation of critical reflection resonates with the position advanced by Moon (1999)

with regards to attempting to assist the emancipatory interests of individuals by transforming aspects of educational teaching practice.

However, Macdonald and Tinning (2003) suggest this proposition represents a claim for what Carr and Kemmis (1986) believe critical reflection should be rather than an assertion for how this transpires within a practical context. Macdonald and Tinning (2003) assert the apprehensions of practitioners from within the critical reflection community about what reflection has become within contemporary educational discourse. The deployment of the term, critical reflection appears to harbour various interpretations, subjective to the context being considered. Calderhead (1989) notes that some meanings define this discourse as the constructive self-criticism of one's own actions with the objective of improving these actions through such self-critique, contrastingly others argue (Gore, 1987; Wildman and Niles, 1987; Zeichner and Liston, 1996) the concept of critical reflection indicates the acceptance of a particular set of beliefs, and in alignment with the epistemological and ontological assumptions that accompany this. McKernan (1996: 259-260) cautions that some critical theorists have 'become infatuated by the utilisation and development of grand theory' (Skinner, 1990) as a specific objective. Contextually, the approach advocated by Carr and Kemmis in attempting to distinguish critical reflection from other forms of reflection imposes a form of 'academic imperialism' which may stifle the potential for action research by separating theory-research from practice.

Barnett (1997) argues the predominant discourse concerning knowledge and the ill-defined concept of critical thinking, which has been a strong feature in past decades of Western universities, will not support the climate and trends within higher education and more specifically teacher training. Specifically, he posits fragmented and partial views of reflective practice, which reflect the notions of self-monitoring and reflexive connotations, are superseding of any inherent criticisms. He further contends that this could immerge as an ideology which utilises reflective practice, more specifically at just interpretive levels, rather than recognise the potential for emancipation, autonomy and empowerment among practitioners.

Barnett applies, interprets and further develops ideas proposed by Habermas regarding emancipatory interests and those associated with critical theory, within the confines of higher education. Essentially, he proposes a system, which embeds both considered action and critique, within a context that focuses on the student teacher progressing and developing as a practitioner (Barnett, 1997). He identifies action, self-reflection and understanding, as three key factors that higher education providers need to focus on, with considerations posited towards enabling student teachers in attempting to make them capable of both critical self-reflection and critical

action. He aligns this disposition with the potential to measure the 'real world' in a variation of manifestations, in which such aspects occur. Important attributes of 'critically' empowering and enabling student teachers are pivotal in attempting to provide trainees with clarity of thought and emotional competence to justify and rationalise their alternative ways of understanding teaching and learning within the 'real world' (Barnett, 1997; McNiff et al., 2003). Barnett concludes that critically reflective practitioners view their professional capacities with regards to what they can do to improve the quality of pupils' educational experiences, as opposed to prescriptive and structured 'safe' practices that may not stimulate productive learning among learners. Such practices enable student teachers to become risk-takers who strive to improve their pedagogical practices (Clandinin and Connelly, 1995) in attempting to explore innovative methods of teaching.

Underpinning the goal toward becoming a critically reflective practitioner is the notion of liberating thinking. Such thinking is synonymous with Zeichner and Liston (1987: 23) who describe the liberated individual as 'one free from the unwarranted control of unjustified beliefs, unsupportable attitudes and the paucity of abilities which can prevent that individual from maintaining complete autonomy of their own professional existence'. From this premise, it could be argued that reflective conversations, which value student teachers' lived experiences, authentic concerns, beliefs and practical theories have potential to empower and enlighten aspects of professional dialogue should such endeavour be nurtured and encouraged (Kemmis, 1985; Zwozdiak-Myers, 2009).

2.7 Reflective practice as an integral part of action research

Reflective practice underpins many research paradigms, particularly those situated in the hermeneutics, which focus on practitioners learning through experiential learning through authentic lived experiences (Whitehead, 1993). Thus, aspects of reflective practice have invariably been linked to action research (Pollard, 2002; Reason and Bradbury, 2001), which resists the application of standardised practices within professional contexts. Contrastingly, from this disposition, intentions are instead directed towards the use of contextually relevant procedures formulated by inquiring and resourceful practitioners that demonstrate a commitment to improving and informing aspects of their own practice (Stringer, 1996: 3). In this study, action research provides the stimulus through which student teachers' explore personal practice within a specific context (peer-mentoring) (Le Cornu, 2005) in an attempt to improve the effectiveness of their own teaching practice. Professional knowledge and judgement can be developed through reflection and further knowledge acquisition, while critical reflection supported by practitioner

engagement in research can provide a catalyst for measuring the quality of teaching and learning within the classroom, which can be 'evaluated and contextualised as a prelude to further improvement' (Bartlett and Burton, 2012; Bartlett and Leask, 2005: 298).

McKernan (1996: 29) refers to action research as grounded curriculum theory in that theories are not validated independently of practice and then applied to curriculum, they are validated 'through experimental learning and practice'. Similarly, Elliott (2005: 372) provides a perspective for considering the context of practice, and how determinants are measured within practice. This viewpoint aligns with the position advanced by Schon (1983, 1987) who asserted that student teachers come to develop their personal epistemology of practice, in addition to Boud and Walker (1990) who underline the importance attributed towards the context of the learning environment in framing ideas associated with teaching practice. As student teachers' engage in reflective practice, the knowledge gained and theories constructed are framed by personal experiences within the context of a specific teaching situation.

While advocating action research as a vehicle to validate teachers' personal, professional and political knowledge, Gore and Zeichner (1995: 209) contest the claim presented that such practice provides a platform for teachers to remain hidden within the confines of action research, which effects and contradicts some aspects of traditional practice. For example, Cochran-Smith and Lytle (1993: 304) identify a number of obstacles which need to be addressed before teachers can be expected to engage in research. For example, schools where inquiring and collaborative cultures are not prevalent for teachers, in addition to institutions that adopt a technical view of knowledge for teaching, and finally, schools that generally have no affinity for education research. Furthermore, McTaggert et al., (1997) found action research, to be considered a difficult process for teachers to learn and sustain due to its complexity and lack of congruence with the chaotic nature of the classroom experience. Zwozdiak-Myers (2009) contends that it is essential to be mindful that such factors may also significantly influence the research experiences of some student teachers featured in such studies.

Within educational discourse, action research has become a recurrent theme, as has the concern to improve and develop professional practice from within the teaching profession (McNiff et al., 2003; Pollard, 2011). This concern identifies with the conception that the purpose of the research process is to generate new insights into teaching and learning to improve practice for both practitioners and learners. Price (2001: 44) suggests action research is simultaneously an individual and collaborative project and Kemmis and McTaggart (1982) argue that such engagement allows groups of people to organise the conditions under which they construct

learning from their own experiences, and in turn, disseminate these findings to others immersed within this context. A specific purpose of engaging in collaborative action research is to construct and de-construct knowledge about problems inherent from experience, which arise from professional practice to facilitate change and improvement for improved teaching (Carr and Kemmis, 1986; Elliott, 1991; Lewin, 1946; McKernan, 1991). However, the effectiveness of active participation by student teachers within the research process underpins to a significant extent, the success with engaging and working with others within the process of collaboration (Gray, 2010: 347). This implies that working with peers and fellow practitioners requires sensitivity, trust and a mutual respect for the feelings and expertise of others. Le Cornu (2005) highlights these factors as essential criterion as student teachers embrace the concept of collating knowledge concerning teaching practice as part of a collective.

Integral to such processes which involve collaborative endeavour are the goals of equity and social justice as existing practices within the school which are examined critically, evaluated and transformed (Carr and Kemmis, 1986; Cochran-Smith and Lytle, 1993; Gore and Zeichner, 1995; Noffke, 2005). This context suggests that an examination of the conditions and contexts of teaching experiences helps practitioners to situate aspects of their practice in appropriate ways to accommodate their learning. As McNiff et al., (2003) note, the ethical and moral principles inherent within the action research process, significantly influence the outcomes of such practice in relation to:

- Personal development;
- Improved professional practice;
- Improvements in the institution;
- Contribution to the good order of society.

This critical perspective broadens the aims of action research as a vehicle for educational reform as such endeavour becomes a process for initiating change within teachers related to personal, professional and political perspectives which inform teaching values and beliefs. Importantly, such considerations resonate with how teachers produce knowledge for evaluating aspects of their own pedagogical practice (McNiff et al., 2003).

Although action research has been recognised as a means to develop reflective practice and promote educational change, there still remains a dearth of literature regarding the influence of such practice within student-teacher education (Hickson, 2012). Many studies have focused on written artefacts (portfolios, project reports, reflective journals) of teachers' enquiries (Beyer,

1984; Bissex and Bullock, 1987; Goswami and Stillman, 1987). This has been exemplified through studies which document experienced teachers' experiences of self-study, with narrative and anecdotal accounts provided of their personal experiences through contrasting professional dialogues with other teachers (Connelly and Clandinin, 1988; Russell, 1993). Additionally, previous studies have detailed professional development projects which encourage experienced teachers to engage in collaborative action research as a process both for professional learning and educational reform (Cochran-Smith and Lytle, 1999; Gore and Zeichner, 1995; Noffke, 2005; Pring, 2005; Somekh, 2006). Presently, Pring (2005) suggests that there still remain few studies which have examined how student teachers learn from the processes inherent within action research. More specifically, what is learned and how this connects with classroom enquiry, teaching and educational change (Zwozdiak-Myers, 2009).

One study in particular undertaken by Price (2001) has examined the experiences of eleven student teachers enrolled within an action research course on a Master's level programme, to explore ways in which connections could be drawn between research, pedagogy and change. The framework utilised embodied four components (or domains of teaching): reflection and enquiry; learning about students; learning about pedagogical content knowledge; and, learning about social justice and democracy. The findings illuminated that nine of the eleven student teachers' embraced the challenge of developing morally and ethically defensible practices, which considered the board range of student experiences internally and externally within the school environment, with some recognition for how classrooms and schools could create and address aspects of social justice (Price, 2001). In learning to become stakeholders responsible for changing and facilitating aspects of their own teaching practice, many of the trainees undertook a systematic study of their teaching which focused on challenging their understanding of teaching underpinned by the commitment to provide new ideologies to their existing values and beliefs (Price, 2001). All the student teachers involved with the study experimented with ideas and practices, which specifically focused on the learning and engagement of their learners. The trainees involved in Price's research asserted that their experience with engaging in action research was beneficial to the development and growth of their professional capabilities with regards to extending and improving their teaching practice.

The student teachers developed a view of teaching that was transformative; this was contrary to their pre-existing beliefs about schooling and the classroom context (Price, 2001). Some of the student teachers had observed minimal changes in their pupils' learning, which proved to be somewhat disheartening as some of the trainees had hoped for more significant gains in

analysing and researching their future teaching (Price, 2001). These findings could be useful for comparative purposes in relation to assessing the outcomes of this research study. Price (2001: 58) reports that the student teachers' encountered several challenges with regards to: finding time to reflect on their lessons; struggling to keep up with data collection; and, receiving support from subject mentors. For example, Price (2001) indicates that although mentors could be a tremendous support for student teachers, simultaneously they could also 'unwittingly set boundaries upon their experimentation'. Importantly, this study also seeks to explore whether student teachers' experienced any such challenges with regards to reflexive and peer-mentoring endeavour as they prepared for, engaged in and evaluated the impact of engaging within a community of practice and learning. When practitioners engage in action research which facilitates their own learning, there is need a to place learning within the context of improving oneself, in addition to providing an explanation as to how oneself is positioned in relation to disseminating their acquired learning within a community of practice (McNiff et al., 2003; Lave and Wenger, 1991). Guba (1996) asserts that teachers perceive action research to be a form of personal enquiry that resonates with their professional ideals. Within this context an extended form of professional enquiry undertaken by the practitioners themselves (Anderson et al., 1994; Kincheloe, 2005; McNiff et al., 1992, 1993; Stringer, 1996), which stimulates context-sensitive, particular (and) pertinent descriptive knowledge (Bell and Mladenovic, 2013). Additionally, Usher (1998: 18) highlights that the study of self seems to be ideally suited to revealing experience-based learning and monitoring the development of self in the construction of knowledge and learning. This conception resonates with Schon's (1983, 1987) discourse about developing a personal epistemology of professional practice guided by theories-in-use. Importantly, this is also a fundamental aim for the purpose of undertaking this research study.

From an ontological perspective, Grimmett et al, (1990: 30) consider self-reflection to be concerned with ways of being in the world, where human beings acquire an understanding of themselves through self-reflection, with experience being the stimulus for developing understanding. The utilisation of self-reflection as a mirror for personal development is pertinent to the construct of this practice also being used as a methodology for refining practice and gaining insights into the actions of teachers, not only as educators but also as adults, who are part of a lived reality with learners (Loughran, 2010). To be self-reflective within this context is to be attentive to the relationship between theories and practice (praxis) (Pollard, 2011).

The development of the reflective practitioner is a continuous and somewhat never-ending process (Rodgers and Raider-Roth, 2006) as personal evaluation involves continuous and cyclical

re-examining (Holstein and Gubrium, 2000) over significant periods. This could be considered as a process that shifts from fixed beliefs, in relation to aspects of culture, feelings, history, prejudices and values concerning aspects of differentiation (Kagan, 1992). A critical self-awareness is pivotal towards such professional growth (Dewey, 1933; Lipka and Brinthaupt, 1999; Pollard, 2011; Zembylas, 2003). When student teachers allow themselves to be immersed in such professional growth, such self-awareness can be accelerated, as learners' responses often provide the barometer towards the extent of professional growth as learners are the recipients of such commitment towards developing professionally (Raider-Roth et al., 2012). This resonates with Belenky et al., (1986: 227) notion of 'connected teaching' as a means to intrigue the perspectives within each learner. The interrelatedness between teaching and learning requires student teachers to reflect upon pupil learning and development, specifically, to better understand the rationale concerning conclusions drawn about their own teaching (Loughran, 2010). Through practitioner engagement in professional development, aspects of practical learning are continuously constructed and reconstructed, in order to refine teaching practice. Bruner (1990) notes that practitioners engage in this by resorting to previous experience and using this to inform future apprehensions.

Therefore, self-reflection identifies with a story about, whom and how we are, and why we engage in certain experiences. Zwozdiak-Myers (2012) utilises Elliott's (2005: 124) conception to assert that through self-study there are 'new possibilities for qualitative research to focus on the everyday practices by which individuals constantly construct and reconstruct their sense of individual identity'. Through such engagement of personal experiences student teachers engage in discourse which allows them to unpick and explore vulnerabilities, beliefs and values and take measure of the specific reservations related towards their experience (Ellis and Bochner, 2000). Reflective conversations can thus become a potent facet in attempting to understand personal practice as student teachers recall and verify their emotions, observations in practice, feelings, ideas and thoughts regarding future experiences (Pollard, 2002). Palmer (1998) claims questions regarding how we construct practice resonate and create coherence between teaching methods and how this is applied within our professional artistry. His notion concerns itself with the inner self, and more importantly, contends that good teaching comes from the evaluation of self-identity rather than standardised technique. Palmer (1998) strongly encourages student teachers to have the courage to teach in ways which reflect their personal values, as opposed to conforming to the standardised expectations imposed by institutions. This proposition, however, may reflect rhetoric rather than reality in practice, particularly in situations where standardised and prescribed approaches towards teaching are advocated (Ghaye, 2011; Pollard, 2011).

Additionally, power relations might challenge and conflict some of the core values held by some student teachers (Zwozdiak-Myers, 2012).

The dimension of feelings which encapsulates reflection is embedded into Boud et al., (1985: 19) approach towards reflective practice as student teachers are encouraged to summarise and capture experiences and utilise this to generate new ways of thinking:

- Association - relating new narratives to existing data to formulate new methods of thinking;
- Validation - determining the authenticity of the ideas and feelings which have resulted, in implementing new ways of comprehending and interpreting teaching;
- Appropriation- creating knowledge, engaging in professional autonomy, taking ownership of new insights and learning to inform future pedagogical and teaching practices.

Boud et al., (1985) approach to gaining knowledge from experience, which originates from the description of a particular teaching situation, incorporates the view that reflective practice involves reviewing retrospective experiences to facilitate new forward-facing experiences.

However, this framework has been construed in a reductionistic manner (Boud, 1999: 125), more specifically; this has been regarded as unrecognisable as reflective practice. Some staff within placement schools for example, asked student teachers to reflect by using a Likert scale numbers format; 1 – return to the experience, 2 – attends to feelings, 3 – re-evaluate by stages. Such practice suggests that this process is linear and mechanistic, and does not encourage deeper reflection in attempting to construct better understandings concerning teaching and learning practice (Boud, 1999; Bradbury, 2010). Boud argues persuasively that such summarisations of teaching are wholly inappropriate as this trivialises the process of learning and does not also reflect prior experiences. Contrastingly, this also posits unhelpful and unbalanced dynamics of power or oppression which may affect aspiration or teaching endeavour (Zwozdiak-Myers, 2012). Further, the emphasis placed on the need for personal disclosure was often considered to be beyond the capacity of some student teachers (Boud, 1999).

Boud and others suggest such problems can be addressed when practitioners within schools develop a context for reflection which is unique and specific, with regards to establishing a community for learning, and developing an environment which embodies mutual trust as an integral component for productive collaborative learning. The discourse presented highlights the importance of school institutions to provide supportive structures, which enable student teachers' to thrive and extract maximum benefits from their situational learning experiences (Boud, 2006; Galea, 2012). The focus towards such discourse has been furthered by Korthagen and Vasolos (2005: 48). They contend that when student teachers engage in reflective practice, they should probe and explore the following dispositions and questions:

- What was the context?
- What did I want?
- What did I do?
- What was I thinking?
- How did I feel?
- What did the pupils want?
- What did the pupils do?
- What were the pupils thinking?
- How did the pupils feel?

(Korthagen and Vasolos, 2005: 48).

The importance attributed to such approaches, distinguishes a balanced focus on wanting, feeling, thinking, and doing, and differs from contrasting views of reflective practice, which accentuate rational analysis (Dewey, 1910, 1933). Kolb (1984) explicitly associates reflective practice to his conception and theoretical paradigm of experiential learning, which advocates a four-stage cycle of learning underpinned by four distinct cycles of learning.

Kolb defines this cycle of learning as immediate or concrete experiences that:

1. Provide the basis for observations and reflections;
2. Observations and reflections are distilled and assimilated into abstract concepts;
3. Produce new possibilities for action, which can be actively tested;
4. Through experimentation, the possibility emerges for new experiences to be created.

(Kolb, 1984).

Kolb (1984) states that this process of learning is 'self-perpetuating' in that the learner changes from direct involvement to analytical detachment, which creates new experiences for practitioners to be able to reflect on and re-conceptualise values and beliefs concerning practice. Essentially, this theory has been constructed on the notion that experiential learning is a process, which involves reinventing professional constructs through personal experiences and social systems rather than the application of standardised techniques towards current practices (Kolb, 1984). Importantly, this is distinguished by attending to the organisation and construction of learning through observations gained within some practical situations, so that learning can facilitate improved teaching practices (Bradbury, 2010; Kolb, 1984; Pollard, 2011).

2.8 Learning with Colleagues

The value of engaging in reflective activity can be enhanced through engagement or association with other colleagues, in the form of trainees, teaching assistants, teachers or senior leadership teams (Ghaye, 2011). Presently, Pollard (2011) suggests that within the primary school context, very high proportions of contact-time with children, have constrained a great deal of such educational discourse and discussion, however this is gradually changing as whole-school professional development assumes a greater significance and priority for teachers that demonstrate a commitment towards improving their own professional practice. Importantly, Pollard (2011) contends that such endeavour provides opportunities for practitioners, particularly those on teacher education courses to engage in opportunities to disseminate, share, compare, support and advise in reciprocal ways (Vygotsky, 1978; Pollard, 2011).

Pertinent to developing professionally, collaborative and reflective discussions capitalise on the social nature of learning and constructing knowledge as a collective (Vygotsky, 1978). Such collective endeavour resonates with practitioners who share a commitment to assess basic processes associated with pedagogical protocol. According to Ghaye, this endeavour is achieved by disseminating experiences, which conceptualise and provide a stimulus for analysing and refining teaching practice (Ghaye, 2011). Through such processes, Pollard (2011) suggests that personal insecurities, with regards to implementing innovative methods are reduced, evaluation becomes reciprocal with other colleagues, and the promise for such endeavour is affirmed by subtle improvements in pedagogical practice. Moreover, openness, activity and discussion are gradually embedded within the values of practitioners, essentially this becomes the catalyst for creating a culture where teachers are able to engage in reflective processes which are personally fulfilling and educationally effective (Kohl, 1986; Bell and Mladenovic, 2013).

Importantly for this context, when the development of coherence and progression in school policies and practice becomes of enormous importance, collaborative endeavour will become an essential criterion for measuring productiveness and effectiveness within the education landscape (Pollard, 2011). Such work is officially endorsed by the requirement to produce 'school development plans', a process which has been considered to be 'empowering' for practitioners (Hargreaves and Hopkins, 1991; Pollard, 2011). Contrastingly, other practical contacts have illuminated that while such practice resonates significantly with regards to the value of whole-school staff teams working and learning cohesively, there has also been some evidence to suggest that such endeavour is complex and fragile, as it incorporates several aspects of input from varying stakeholders immersed within the process (MacGilchrist et al., 2004; Southworth, 1995).

An essential aspect for this particular study, advocates that however such collegial endeavour is implemented and interpreted, reflective teachers are likely to benefit from working, experimenting, talking, and reflecting with other colleagues, with specific benefits concerning the learning that occurs from within a professional collaborative learning community which redirects the process of learning from individualistic to communal (Hickson, 2012; Pollard, 2011).

2.9 Reflection during Induction

Within an English context, the 1999 reforms for the induction of new teachers, and more recently the 2007 and 2012 Standards reforms provide a strong stimulus for considering reflection (Hickson, 2012). In particular the revised September 2012 Teacher Standards demonstrates a shift away from the separate and 'core' 2007 standards to be satisfied by Newly Qualified Teachers (NQT's) to a more standardised one-size-fits-all approach. Importantly, Shaw (2013) contends that the new 2012 teacher standard reforms potentially stifle creativity and trainee development. Shaw (2012) states that this may have implications for the implementation of mentoring and reflective components during initial teacher training. Further, she posits that the prescriptiveness of these standards bears significantly and impacts the dynamic for collaborative cultures. Recently, collegial and communal professional development has become synonymous with collaborative mentoring cultures (Bradbury, 2010). Importantly, Bradbury (2010) contends that such ideals reflect the professional development focused around teaching maintenance and progressive refinement of individual and collective action planning through specific objectives. Such contexts reveal that mentoring is becoming ubiquitous in supporting reflective professional activity (Pollard, 2011). Aspects of such endeavour include performance management, whereby early-career teachers engage in a continuous cycle of setting and maintaining standardised professional objectives, with specific focus around pupil's attainment;

one being focused on observed teaching and responding upon feedback; and one with regards to reviewing professional objectives and how this may be achieved (Galea, 2012; Petty, 2006; Pollard, 2011). Such reflective cycles focus on professional development and systematic thinking or evaluation about phases of experience or activity (specifically description, feelings, evaluation, analysis, conclusion and action plan) (Gibbs, 1988), from a theoretical perspective to assist in the response to developing individual strengths with regards to teaching, and priorities for whole-school development. Importantly, conceptions of reflection have evolved in recent times, particularly within the ever-changing landscape of initial teacher training (Loughran, 2010). In previous capacities such models have supported teachers as relatively independent decision-makers in their classrooms, and highlighted consideration aims, values, aspirations and teaching philosophies (Pollard, 2011). Contextually, while such pertinent issues remain important, newer forms of reflection are now emerging which specifically focus on particular details of teaching practice (CUREE, 2005; CfBT, 2010; DfE, 2012; Ghaye, 2011; Pollard and Pollard, 2014). Such frameworks resonate with reflection now being conceived in a nationally established framework with aims and values. Such developments can be related to McIntyre (1993) definition of levels of reflection. Three main levels of reflection are cited:

1.) The technical level concerns itself with the effective attainment of set goals;

2.) The second level concerns itself with practical reflection, which relates to classroom practice and the underpinning values and beliefs which encompass this dialogue;

3.) The third level of reflection concerns itself with critical or emancipatory endeavour, which involves looking beyond practice to become actively aware of the role of institutional and societal influences upon teaching.

(McIntyre, 1993).

Pollard (2011) argues that current arrangements for teaching induction reflect an intensification of technical reflective practice, which sometimes compromises the first two levels of MyIntyre's reflection. Essentially, the quality of reflective professional development will be underpinned by the existing culture for enhancing teachers practice, particularly in the case of relationships between newly qualified teachers (NQT's) and induction tutors, based on the understanding of what skills the induction tutor can provide to the new incumbent within the teaching profession (Loughran, 2010). Loughran (2010) suggests that the enlistment of such responsibility can be

conceived to be stimulating and constructive in attempting to trigger reflective thinking and practice around teaching and learning.

With the vast majority of teacher education being deployed from Higher Education institutions, it is important to note the role that HEI's play in advocating reflective practice, and maintaining its effectiveness among student teachers (Bailey and Leigh, 2013). Additionally, the work of HEI's in accordance with local education authorities on teaching induction and professional development is highly valued in many parts of the UK. Pollard (2011) explains that such infrastructures help to support early and continuous professional development which is reinforced by enabling professional and coherent cultures.

2.10 Mentoring and Reflection

The relationship between mentoring and reflection is fundamentally important to the professional development and well-being of teachers within education, specifically student teachers (Bradbury 2010; Loughran, 2010). Pollard (2011) highlights that a relatively simple distinction of reflection elicits the process through which teachers, become aware of the complexity of their work, in considering how to implement actions positively. For such developmental practice to occur, mentoring is often referred to as a stimulus for drawing on accumulated professional knowledge and experience, which can support and help teachers to reflect with a specific purpose and focus (Le Cornu, 2009). Collectively, reflection and mentoring become the catalyst to help inform and structure cultures of professional learning. The synergy attributed to such practice, very much endorses the construction of learning communities within schools (Galea, 2011). Academic commentaries (Bell and Mladenovic, 2013; Loughran, 2010; Pollard, 2011) argue that the processes involved in learning about teaching are fundamentally complex because classrooms themselves resemble complex and dynamic environments. Calderhead (1991) suggests that learning to teach is different from other forms of learning in academic life, because the process involves being able to interpret a responsive, complex course of events with enormous rapidity. Such characteristics could be considered to be multidimensional within this context, due to the varying events which may occur within the classroom environment.

Pollard (2011) explains that developing existing understandings of teaching involve engaging in explicit ways, when considering the dimensions of the fundamental complexity of the classroom environment. However, to engage in such understanding, it is pertinent to identify professional learning which can occur within a context of collegial support, more specifically, mentoring.

Importantly, Le Cornu suggests that the mentoring role is crucially important as it has the potential to provide a trigger for new professional behaviours. Further, she posits that mentoring practice can challenge and stimulate differing values and beliefs which may affect pedagogical changes in practice.

Similarly, Pollard (2011) highlights the following points which resonate with Le Cornu's disposition:

- Within reflective discourse, mentoring is recognised as a constructive framework for professional learning. Among the many possible forms of mentoring are the following:
- Mentoring conversations where one teacher facilitates discussion with another by asking key questions that lead to the development of practice.
- Role modelling of good teaching for another to observe and utilise.
- Collaborative teaching involving a mentor and another teacher, with each defining their roles within a lesson.
- Observational teaching by a mentor and the provision of written feedback.
- Assessment of teaching by a mentor in either formative or summative contexts.
- Informal professional and/or personal support.
- Facilitating individual development plans for other teachers.

(Pollard, 2011).

Importantly, such endeavour which encapsulates reflective practice is facilitated by professional conversations which are concerned with critical review of practice (Schon, 1987). The querying and justification for classroom practice and occurrences, is what stimulates the capacity for new understandings to emerge concerning teaching and learning. Pollard (2011) indicates that the process of mentoring, between the mentor and mentee stimulates the possibility for improved changes in pedagogical practices, which resonates with the Zone of Proximal Development (ZPD) (Vygotsky, 1978). Further, Pollard states that within this period, a significant period of learning can take place, in addition to applying what the learner already knows and what they could learn with further guidance and support. The fundamental premise underpinning this model, is new learning and high-quality mentoring conversations which make a vital contribution towards professional learning. Hickson (2011) posits that an important contributing factor stems from the skilful intervention on the part of the mentor and the new professional learning which can be stimulated or generated and its impact on teaching practice.

2.11 Reflective Teaching as Creative Mediation

Creative mediation involves the interpretation of external requirements in the light of a teacher's understanding of a particular context, with consideration attributed towards the values and educational principles of the practitioner (Pollard, 2011). For example, the 1990's in England were characterised perhaps more than any other decade of the 20th century by a centralised control of education, with meritocracy becoming a significant point of contestation among the General Teaching Council (GTC). Following the Education Reform Act, 1988, which first impacted on the curriculum, this was quickly followed by national assessment and inspection. As a result, a steady critique of pedagogy emerged (Alexander et al., 1992) and at the end of the decade there was significant change in relation to the scope of teachers' pedagogic judgement through the introduction of the National Literacy Strategy (DfEE, 1998). Such policies became widespread, significantly, this also had considerable effects in Wales; however, Scotland and Northern Ireland retained a larger measure of partnership between teachers, significant stakeholders and policy-makers (Pollard, 2011).

The work of Osborn et al., (2000) identified four kinds of creative mediation deployed by teachers to interpret such requirements set by government agenda and policy-makers:

- Protective mediation calls for strategies to defend existing practices which are greatly valued (such as the desire to maintain an element of spontaneity in teaching in the face of assessment pressure).

- Innovative mediations concerned with teachers finding strategies to work within the spaces and boundaries provided by new requirements- finding opportunities to be creative.

- Collaborative mediation refers to teachers working closely together to provide mutual support in satisfying and adapting new requirements or environments.

- Conspirational mediation involves schools adopting more subversive strategies where teachers resist implementing those aspects of external requirements that they believed to be particularly inappropriate.

(Osborn et al., 2000: 78).

Pollard (2011) explains that such forms of mediation exemplify major strategies in the exercise of professional judgement. However, such mediations need clearer justification, with some paradox and contradictory positions revealing that creative mediation can often be considered to be the source of essential forms of innovation for future development (Ghaye, 2011; Bolton, 2010)

2.12 Moving toward autonomy

Autonomy with regards to professional practice within education is far from transparent, with several factors impacting the potential for such pedagogic engagement (Ghaye, 2011). In attempting to interpret this endeavour, one restrictive disposition, could interpret responsible and autonomous action as the student teachers' disposition to query aspects of their own practice. Dewey (1910, 1933) expands this consideration and positions accountability within his conceptualisation of reflective thinking which encourages student teachers' to consider the pedagogical aspects of their teaching and their school practices, as they query various educational constructs and relationships. Aspects of autonomy resonate with responsible action; such practice involves reflecting both on the means and ends of educational goals and values which underpin student teachers' values and beliefs with regards to their teaching practice (Edwards and Nicol, 2010; Lingard and Renshaw, 2010). Such queries engage the wider professional landscape and draw student teachers into reflection upon personal values which underpin their teaching and learning practice (Ashcroft and Griffiths, 1989; Bolton, 2010; Shaw, 2013). Pollard (2011) and Higgins (2011) suggest that student teachers can move beyond the school context and localised structures, towards considering how professional cultures and landscape might serve either to empower or constrain responsible and autonomous action.

Dewey highlighted two other orientations situated within professional growth and enquiry, which resonate with responsible action. Dewey (1933) indicates that open mindedness is demonstrated when student teachers reflect on aspects of their teaching practice, with a querying for principles which underpin their own teaching practice and other practitioners immersed within that environment. Such engagement demonstrates an openness to consider and implement alternative approaches and other possibilities. Whole-heartedness resonates with Dewey's notion of student teachers maintaining an enthusiastic approach towards their teaching, with the view to learning something productive from positive and negative experiences of teaching. Zeichner and Liston (1996) posit that very clear links can be drawn between reflective practice and assuming responsibility for professional development:

> 'When embracing the concept of reflective teaching, there is often a commitment by teachers to internalise the disposition and skills to study their teaching and become better at teaching over time, a commitment to take responsibility for their own professional development. This assumption of responsibility is a central feature of the idea of a reflective teacher' (Zeichner and Liston, 1996: 6).

Another interpretation concerning responsibility for professional development indicates the responsibility of practitioners to be accountable for developing pedagogical practice, Eraut (1994: 232) attributes accountability and responsibility of professional practitioners when they demonstrate:

- a moral commitment to serve the interests of students by reflecting on their wellbeing and their progress and deciding how best it can be fostered or promoted;

- a professional obligation to review periodically the nature and effectiveness of one's practice in order to improve the quality of one's management, pedagogy and decision-making;

- a professional obligation to continue to develop one's practical knowledge both by personal reflection and through interaction with others.

(Eraut, 1994: 232).

Some of these ideas resonate with Stenhouse's discourse concerning extended professionals, in addition to Hoyle and John (1995) who identified within their conceptions of responsibility, the importance for teachers to ensure the interests of pupils are addressed, in alignment with personal and professional development. They suggest that such endeavour concerning learners' engagement becomes established when teachers' engage in continuous development of knowledge and skills, the cultivation of judgement, and the adoption of a student-centred practice. Within this study, the student teachers' accountability for maintaining Standards in schools is explicitly stated in terms of the required expectation to satisfy such protocols, in gaining the award of QTS, by demonstrating the enhancement of pupil learning and professional capabilities. Further components within the Standards encompass both theoretical and experiential knowledge, in addition with professional values and commitments which draw parallels with accountability in developing professionally as identified by Eraut.

The interrelationship between the concepts of professional development proposed by Hoyle and John, of knowledge, autonomy and responsibility have been summarised by Furlong et al (2000: 5), who indicated that due to professionals facing complex and unpredictable situations they require a specialised form of knowledge. In attempting to implement this knowledge, it is argued that practitioners must engage in autonomous action in attempting to make their own judgements. Autonomy among practitioners becomes an essential criterion when attempting to develop appropriate professional values. Importantly, Edwards and Nicoll (2006) highlight that it is important for student teachers to clearly express and frequently examine their own educational values, however such values must resonate with aspects of improving ethical, moral and teaching effectiveness. Pollard (2011) contends that student teachers need to justify and examine their own values particularly as they may be underpinned by the expectations of professional orthodoxy.

Thus, a consideration for student teachers whilst embarking on their professional induction into the teaching profession is the need to articulate educational values, not in isolation and abstraction, but in collaboration with other colleagues within the landscape of the school environment (Nixon, 1995: 220). Such consideration requires student teachers to critically reflect and engage with what occurs within the classroom and on the periphery of this. Contrastingly, teachers from varying backgrounds, career aspirations, expectations and priorities, will maintain perspectives with regards to the purposes of education, which may lead to differences in values. Bolton (2006: 205) notes the difficulty often faced by teachers lies not in aligning themselves with the values associated with the school, but in recognising what and how endorsement translates in practice, particularly if some values do not resonate with other practitioners. Conversely, this discourse suggests that some student teachers' school-based teaching experiences could be incongruent, as values expressed in principle might not necessarily be demonstrated in practice (Zwokziak-Myers, 2009).

Importantly, educational values are underpinned by socially constructed and critical reflections which are deliberated and validated in student teachers' actions, values and beliefs with colleagues and learners (Kensington-Miller, 2011). Zwokziak-Myers (2009) states that as student teachers' build on experiences and develop confidence to exercise discernment, professional judgements and decisions concerning pedagogical contexts, this can impact personal educational goals and values, which may indicate the type of teacher they intend to become throughout their professional career. Whitehead (1993) contends that as student teachers experience autonomy in relation to making professional judgements and decisions, pedagogical strategies/approaches and

assessment procedures, require consideration, in addition to learning objectives implemented. Such commitment, among student teachers should resonate with personal values situated within the teaching of trainees (Whitehead, 1993).

2.13 Professional development discourse regarding reflection

The language attributed to professional development resonates throughout education with competent practitioners demonstrating a willingness and commitment to engage in such endeavour. Edwards and Nicoll (2006) contend that the language of reflective practice underpins the discourse of professional development, set within a context of developing teaching and learning adaptation and change. Edwards and Nicoll (2006) suggest that there is an associated attractiveness with the language of reflective practice, in that it advocates the professional dialogue required to engage in practices which require an open-mindedness to consider areas of improvement within professional practice. Furthermore, they contend that such language is employed, in part, to legitimise the need for professional development. Edwards and Nicoll (2006) explain that the rhetoric of reflective practice may be powerful, not in the sense of whether it is literally true, but in the ways in which it is persuasive and the work it attempts to do in developing practitioners professionally. However, it is also apparent, that the discourse of reflective practice, or indeed professional development, is not always accepted within the workplace setting, particularly where cultures required for such practice, are not visible or evident within schools.

Fanghanel (2004) argues that reflective practice, and more pertinent professional development generally underpins the dialogue presented for teaching and learning programmes. She highlights dissonance between this environment and the environment in operation within the workplace settings of teachers whether, in relation to practice, structure, ideology or epistemology. Similarly, Trowler and Cooper (2002) present incongruities regarding professional development between self-theories, distribution of power, discourses concerning other disciplines, and underlying assumptions operating within these two settings.

As Clegg et al., (2002: 135) stated, 'reflective practice is becoming the favoured paradigm for continuing professional development in mainstream education'. Therefore, Hickson (2011) places emphasis on adopting reflective practices and considering what is meant by reflection. He highlights that such considerations are of increasing importance to education institutions. Within this context, Pollard (2011) considers that reflection underpins a very important part of teaching and learning. For this purpose, vehicles that can encourage and develop reflective practice and

facilitate professional development are essential. Additionally, peer-observation processes can also inform an important part of such developments (Hickson, 2012).

As several authors (Argyris and Schon, 1974; Causarano, 2011; Rolfe et el., 2011; Hickson, 2012) have argued, reflective teachers who engage in varying professional development tend to be more open towards innovative pedagogies. This commitment towards professional attainment informed by reflexive processes takes teachers beyond the point of being a subject specialist that only reflects on subject content, to practitioners that consider aspects of teaching and learning philosophies and pedagogical cultures (Hickson, 2012). Within this conception, professional difference and debate is encouraged, through this more collegiate responses to 'how we learn and teach' are developed (Galea, 2012). Building a consensus which is based on professional dialogue and consideration can help develop high quality learning environments for student teachers to thrive and improve pedagogically (Le Cornu, 2009). Therefore, Ghaye (2011) suggests that this is imperative for the process of reflective practice to avoid stagnation. This can be avoided by encouraging practitioners' at varying stages of the professional teaching continuum to engage in reflection that will enhance their understanding of approaches to curriculum, teaching styles, students' learning and subject matter (Edwards and Nicoll, 2006). Teaching and learning professional development programmes that embody reflection at their core, are imperative towards encouraging evaluation and improvement of practitioners' professional learning and practices, particularly when associated with providing better student experiences of learning (Bradbury, 2010).

2.14 Summary

Reflective practice can be defined as a complex, multi-dimensional concept which has invariably underpinned educational practice for a considerable period of time, particularly in educational discourse and research. As this review of literature illustrates, there is various rhetoric concerning the implementation of reflection and reflective practice within education. Synonymous with Calderhead's (1989: 43) disposition it has become evident that conceptions of reflective practice very often encompass 'some notion of reflection in the process of professional development, but at the same time, disguise a vast number of conceptual variations, with a range of implications for the organisation and design of teacher education courses'. Furthermore, teacher educators, researchers and other commentators within the field maintain various beliefs and values concerning teaching and teacher education generally, with regards to the impact of reflexive discourse.

This chapter has explored and considered the varying discourse that accompanies reflective practice, and its implementation within education among student teachers, and in-service teachers as a vehicle to inform professional teaching practice. Additionally, the discourse presented has examined the characteristics which key theorists, researchers and practitioners have attributed to this phenomenon. Importantly, this review of literature has considered the impact of reflective practice on developing student teachers pedagogical teaching practice, through positing that such endeavour challenges practitioners' values, beliefs and assumptions. The thinking which pervades reflective teaching endorses student teachers' querying aspects of their own practice in attempting to develop teaching competency, proficiency and confidence. An exploration and dissemination of varying considerations highlighted the skills associated with reflective practice, which can be learned or developed within accommodating educational cultures. Conversely, other factors may also affect the ability for student teachers to engage in reflexive processes and higher order reflection, which embodies stages of reasoning, critical thinking and reflective judgement.

Reflective practice has been conceptualised as a creative process in that student teachers utilise and frame their experiences to generate new ways of knowing, in addition to developing epistemological dispositions, in attempting to evaluate teaching practice. The synergy Schon (1983, 1987) draws between knowing-in-action and reflection-on-action provides some stimulus for how student teachers can develop tacit knowledge, challenge beliefs and values, and scrutinise teaching practices within private or public domains. Within this context, emphasis is directed towards the role of the dialogical other and critical friend in assisting reflective endeavour, in attempting to progress student teachers' teaching and learning practice.

When situated at the centre of professional growth and development, reflective practice can be the catalyst for self-study and research into personal teaching practice. Student teachers, within this concept assume the role of action researcher in critiquing and evaluating what they do, and how this impacts the teaching environment and their teaching competencies. Preceding the engagement of reflective analysis concerning aspects of practice, student teachers are able to consider the possibilities for future action by questioning existing practice and considering how this may influence future practices. Formative evaluation is a fundamental component of teacher research, particularly through interpretivist and action research paradigms, where arguably, the central aim for student teachers' is focused on ways to capture professional experiential learning by conceptualising and reflecting on aspects of their own practice.

Importantly, the capacity for student teachers to become reflective practitioners and autonomous teachers that take responsibility for their own professional development is prevalent not only in the governments' agenda but also within teacher training and the professional landscape generally. The evolvement of reflective practice has become 'a generic pedagogical principle' (Tsangaridou and O'Sullivan, 1997) within initial teacher education, where such procedures are immersed and embedded through initial teacher training (ITT) programmes of study, in attempting to cultivate pedagogical development. The reflective literature presented highlights aspects of teaching, which advocates that student teacher development should be focused on personal and pedagogical fulfilment. However, an issue considered problematic within academic discourse concerning reflection, illuminates a dearth of empirical evidence to support theoretical propositions regarding the potency of reflection in developing teaching practice. While the literature presented supports the potency and effectiveness of reflection, in addition to developing student teachers' reflective capabilities and dispositions through a variation of approaches in order to frame learning; there remains a paucity of recent knowledge within educational research literature concerning the impact that such strategies have upon informing aspects of collaborative learning among student teachers to develop professionally.

The next chapter considers the literature and discourse surrounding mentoring within education.

Chapter 3: Review of Literature on Mentoring in Education

3.1 Introduction

This review of literature regarding mentoring begins with some consideration towards the more traditional approach towards mentoring where conceptions, definitions and models related to mentoring are generally reviewed. The structure of this chapter is then navigated towards mentoring specifically within the teacher education context, regarding the traditional use of more structured or systematic approaches. Importantly, the criteria utilised for exploration within this particular chapter, is focused on pertinent literature by eminent scholars, which has been purposefully selected to reflect relevant and recent conceptions of the mentoring discourse. Thus, the chapter adopts a structured approach, which concerns itself with exploring a more meaningful and deeper understanding of the concept, process and issues related and situated around mentoring within a teacher training context.

Importantly, the literature reviewed within this chapter, is recently published, with the exception of some seminal works to frame the historical context of this phenomena. The exploration of the concept of mentoring, underpins the conceptual framework for this study. Explicitly, the roles and skills of a mentor and characteristics of effective mentoring are explored. Selected models of mentoring and theoretical approaches to mentoring are presented and utilised to frame the context for newer forms of mentoring such as collaborative and peer-mentoring. Lastly, the chapter concludes with a set of considerations and justifications for adopting a constructivist approach towards mentoring, with research questions explored for the study.

3.2 Concept of Mentoring

Traditionally, mentoring is viewed as a process where an experienced individual provides information, expertise and in some cases emotional support to a novice over a period of time (Barrera et al., 2010; Le Cornu, 2005; Larson, 2009). Esch (2009) suggests that mentoring is a learning process facilitated by experts through identified learning activities, such as the structuring and planning of lessons and teaching. Within this context, mentoring from these definitions could be interpreted as a process of initiation or socialisation where the student teacher or student teachers are integrated into a school system or culture (Fieman-Nemsar and Beasley, 1997; Rippon and Martin, 2006; Scanlon, 2008). In this capacity, mentors are expected to support novices to develop professional knowledge and skills (Bradbury, 2010; Cunningham, 2012; Megginson and Clutterbuck, 2010). Within these conceptions of mentoring, emphasis is placed on the more 'traditionalist' practice of teachers' utilising their prior knowledge and

experience to facilitate the student teacher mentoring relationship. In varying commentaries, this conception of mentoring is viewed as pivotal towards the development of the student teacher (Burley and Pomphery, 2011). However, more recent and wider commentaries by practitioners and academics (Cunningham, 2012; Gardiner, 2010; Ponte and Twoney, 2014) acknowledge that this framework for mentoring is quite standardised and restrictive in trying to enable reciprocity (Le Cornu, 2005). However, there is acceptance that when this type of mentoring is utilised appropriately, this can be beneficial to the student teacher (Pollard, 2011). Bradbury (2010) explains that experience is a fundamental element for conceptualising mentoring. Restricting the underpinning principles of mentoring to the traditionalist and hierarchical perspective, would seemingly suggest that mentors cannot learn from their mentees (Le Cornu, 2005). Recent conceptions of mentoring provide a basis for collaborative and egalitarian relationships where experienced and novice teachers operate as mutual partners to improve their professional practices (Hargreaves and Fullan, 2000; Koballa and Bradbury, 2012; Bradbury, 2010). Additionally, recent conceptions also embody peer-mentoring as a vehicle for empowering student teachers' involved in the teacher training process (Kennsington-Miller, 2011; Le Cornu, 2005). Essentially, it is this conception that facilitates the proposed framework of mentoring for this particular study.

Presently, mentoring is considered as a multi-faceted activity that includes coaching, facilitating, counselling and networking (Ponte, 2010; Stokes and Hampton, 2004) and collaboration between participants (Bradbury, 2010; Shank, 2005). Reinforcing this, Shank (2005) argues that mentoring is not restricted to the single-directional flow of ideas, from mentor to novice but rather a mutually informed relationship which should embody principals of reciprocity. Similarly, Shea (2002) contends that mentoring is a process whereby mentor and mentee collaborate together to discover and develop student teachers' covert professional capabilities.

In considering some of these perspectives, mentoring utilises a coaching and reflective strategy by which mentors guide and encourage their mentees to initiate ideas for their personal and professional development within their teaching (Ghaye, 2011). More recent conceptions of mentoring have however, began to observe a generational shift away from 'traditional' hierarchical expert-novice structures of mentoring. Larson (2009) posits that conceptions of mentoring now reveal a reverse process whereby in a lot of cases, younger or more technologically knowledgeable individuals provide technological-oriented assistance to senior or more experienced individuals with limited technological experience (Bottoms et al., 2013; Larson, 2009). In this situation, Larson (2009) suggests that age and experience are not regarded as

important factors, as the expertise and professional knowledge, override any hierarchical norms within such contexts. Perhaps, through this lens, this is maybe why mentoring can be described as fostering egalitarian relationships where experienced and beginning teachers collaborate as a collective to improve pedagogical practice (Bradbury, 2010). These views seem to acknowledge the importance of reciprocal support and collaborative endeavour during the learning process (Ghaye, 2011).

This particular dialogue also consolidates the conception that mentoring is a multi-faceted activity. Thus, the productivity of mentoring is not as effective when the process is not lucid and collaborative (Pollard, 2011). More importantly, mentoring from this perspective is non-hierarchical and less restrictive, with equity endorsed, regarding interactions where mentor and novice both see themselves as teachers and learners (Kafai et al., 2008). Burley and Pomphery (2011) provide a continuum of activities encapsulated in mentoring which stem from three varying factors:

- Networking- Friendship and Orientating
- Facilitating- Coaching and Counselling
- Collaboration- Mutual Learning

It is evident from these characterisations of mentoring that definitions are varied from structural to personal perspectives (Harrison and Pell, 2006). In acknowledgment of this, Cove et al., (2007) describe mentoring as a voluminous concept with the potential for varying of applications. Illuminating some of the academic commentary presented, mentoring within a teacher training context is an integrated and collaborative endeavour between supporter teachers' and student teachers' for personal and professional development (Ponte, 2010). Contextually, the role of the teacher trainer is to provide an environment and community for learning which encourages student teachers to achieve their professional objectives during their teacher training (Le Cornu, 2005). Conversely, student teachers are required to demonstrate a commitment towards the principals which underpin collaborative endeavour, in attempting to establish effective mentoring relationships (Pollard, 2010). Without this commitment, in addition to other aspects which facilitate effective collaborative mentoring relationships, this process could become unproductive for all participants involved within the process (Burley and Pomphery, 2011; Ponte, 2010). The context presented acknowledges that mentoring enterprise works best when reciprocity is heralded as an imperative component for successful collaboration, particularly within learning communities (Lave and Wenger, 1991; Wenger, 1998).

3.3 Considering the comparison between coaching and mentoring

This section of the chapter aims to acknowledge the impact that coaching has had in underpinning mentoring principals. The terms 'coaching' and 'mentoring' are often conflated because of the parallels in their purposes for facilitating development (Ponte, 2010). However, these parallels should not allow for a conclusion that the concepts are entirely the same, as their purposes serve different objectives regarding the situation. The obvious difference to be extracted is that coaching transpires in situations where an individual is being observed, whilst undertaking an activity, with the observer providing formative and summative feedback (Bradbury, 2010). The conception of coaching also enables constructive criticism and suggestions that could facilitate improved performance (Rhodes et al., 2004). Thus, it could be concluded that coaching and mentoring embody different principals which aim to extract differing objectives. Essentially, a continuum of directive and non-directive concepts contribute widely to the supporting of student or beginning teachers (Boud, 2010). Importantly, this is a significant distinction between mentoring and coaching (Veenman et al., 1998). According to Rhodes et al, (2004) coaching is an enabling process, while mentoring adopts a more supportive disposition. By implication, the subtle similarities can often crossover, resulting in the mentor displaying the *professional agility* to adopt a similar set of skills, comparable to that of a coach in supporting student teachers (Bradbury, 2010).

Similarly, The Centre for the Use of Research and Evidence in Education (CUREE) (2005) framework for mentoring and coaching highlights that mentoring and coaching share similarities which are analogous and are sometimes difficult to differentiate. For example, their philosophy embodies the improvement of the individual and organisation, with the same principals at its core (CUREE, 2005). The same skills and qualities are also required of good coaches and mentors while the same models could be applied in coaching and mentoring (Bradbury, 2010). Nonetheless, there are few differences in their modes of operation. For instance, coaching encourages parity among participants while mentoring at times emphasises the hierarchical expert-learner relationship (Le Cornu, 2005). The point for differentiating acknowledges that coaching is a non-directive practice, while the interpretation of mentoring facilitates directive practices in its implementation, particularly within initial teacher training contexts (Ponte, 2010). Conversely, CUREE (2005) highlight that importantly, coaching sometimes does not encourage judgement in feedback, however, judgement can sometimes be accommodated in mentoring.

In exploring some of the subtle differences between coaching and mentoring, it is evident that coaching and mentoring are inextricably linked (Ponte, 2010). However, coaching does illuminate

that while mentoring within the process is not always involved, mentoring can be underpinned by coaching principals (Rhodes et al., 2004: 28). Rhodes et al., (2004) suggest that the role of a mentor needs to adopt coaching within their mentoring armoury, in attempting to provide a bespoke mentorship that is suited to the needs of the student teacher. Importantly, Ponte (2010) posits that the implementation of coaching also allows for effective support to be provided to the mentee for mutual benefits to be appreciated within the mentoring relationship. The next section within the chapter explores some benefits of mentoring within an initial teacher education context.

3.4 Benefits of mentoring in an Initial Teacher Education (ITE) context

The benefits of mentoring have been well-documented in the literature of teacher education. It is universally accepted that mentoring promotes the acquisition of professional knowledge and skills necessary for the enhancement and development of professional practice (CUREE, 2005). This conception of mentoring has been widely explored. Kaasila and Lauriala (2010) report that the learning which occurs within a teacher education context associated with mentoring practices is beneficial to both mentors and mentees. Similarly, it could be assumed that mentoring supports the transition from novice teachers into becoming more proficient practitioners (Barrera et al., 2010). Greiman (2007) states that mentoring assists novice teachers in becoming proficient in the developing of pedagogical practices and professional artistry required to effectively deliver teaching and learning objectives. This view is consistent with Hobson's (2002) study, in which 92% of student teachers' interviewed, indicated, that they were able to develop classroom management skills through their mentors' support. Greiman (2007) indicates that the important characteristic to be extracted from mentoring acknowledges that this tool for development is not exclusive solely to student teachers, but also supporter teachers and mentors who recognise the relevance of mentoring in developing professionally.

In a study conducted by Lopez-Real and Kwan (2005), 40% of the participating teachers measured the improvement of their student teachers' via their mentoring interactions, noting improvements when engaging in a more collaborative construct of mentoring. Similarly, Scanlon (2008) found that teachers engage themselves in mentoring relationships purposely for developing their own professional development. More recently, Kaasila and Lauriala (2010) report that teachers were able to learn through constructivist, collaborative endeavours focused on their students' learning and practical development. Thus, Le Cornu (2005) highlights the importance of collaborative cultures to develop teachers' professional practices. She suggests that

communities of practice/ learning (Lave and Wenger, 1991; Edwards and Collison, 1996) encourage the dissemination of ideas needed to become effective mentors.

Mentoring encourages reflectivity and professional growth of student and experienced teachers (CUREE, 2005; Pollard, 2011). In a collaborative context, there is scope to suggest that student teachers and experienced teachers could develop a body of shared professional beliefs and values. Rhodes et al., (2004) acknowledge this by asserting that mentoring enhances self-awareness in both student teachers and supporter teachers. Experiential learning is also identified as a significant component of teaching and reflection upon that teaching (Schon, 1987). Unsurprisingly, reflective practice facilities and underpins many of the mentoring paradigms within teacher education and teaching practice (Brockbank and McGill, 2009; Kincheloe, 2005). Bradbury (2010) also documents the significance of professional development underpinned by a spiral of reflexivity in developing student teachers'.

Mentoring can improve tolerance and understanding among mentoring participants (CUREE, 2005). From a community of practice perspective (Edwards and Collison, 1996; Lave and Wenger, 1991; Wenger, 1998), this can potentially foster a community of collaborative learners' that disseminate good teaching practice and professional maturity in relating with one another. Additionally, Tomlinson (2004) notes that mentoring can contribute towards clarifying issues for effective transformation, regarding the changing of beliefs and values regarding teaching. Similar commentaries reinforce this perspective; with Lopez-Real and Kwan (2005) contending that the development of interpersonal skills through mentoring could enhance both the development of student teachers' and existing teachers.

Mentoring can be pivotal in the creation of more effective teachers within schools (CUREE, 2005). From a conceptual viewpoint, mentoring as a learning process can facilitate relationships among participants experiencing similar problems within their induction into the teaching profession (Cunningham, 2012; Le Cornu, 2005). The implementation of this may in turn create a strong sense of belonging among mentoring participants. Furthermore, Harrison and Pell (2006) report that a collaborative learning process could assist teachers, student teachers and other school members to work cohesively in satisfying strategic aims. Building a developed team through mentoring practice can also lead to job satisfaction for the people involved (Stanuli and Floden, 2009). Development of cohesive practice among mentoring participants may also bring about sustainability in good practice. Importantly, Stanuli and Floden (2009) emphasise that student teachers' can learn to develop resilience regarding the more challenging aspects of teaching and learning from their mentors. Additionally, mentoring has been utilised to measure

and evaluate individual and institutional performance. In this sense, supporter teachers or mentors sometimes assume the role of assessors in supporting the improvement of student teachers' (Rippon and Martin, 2006). Good practice could therefore be applauded while change could be facilitated for improvement purposes. However, there are acknowledgements that this can also be problematic (Le Cornu, 2005).

The breadth of mentoring also contributes towards reducing the attrition rate of student teachers' (Greiman, 2007; Koballa et al., 2010; Stathatos, 2006; Zeichner and Ndimande, 2008). Development of teacher education and encouragement of teachers to remain in teaching posts during their induction into the profession or even as experienced teachers, are vital towards societal development (Greiman, 2007; Le Cornu, 2009). Research undertaken utilising an American teaching demographic highlights that beginning teachers' struggle to cope with the demanding aspects and expectations of teaching (Loughran, 2010). The study indicates that 30% of teachers within the United States of America (USA) do not remain in teaching beyond two years upon entry. Furthermore, 40-50% remains in teaching for five years after qualifying as teachers before leaving the profession (Hughes, 2003). Within an American paradigm mentoring is also used to support teachers from minority groups (Souto-Manning and Dice, 2007) in attempting to eliminate feelings of isolation and marginalisation.

As reported by Fletcher and Barrett (2004) and Greiman (2007), mentoring support received by beginning teachers has also helped towards supporting diverse students, and understanding the rigours of the school environment. Conceptually, therefore, mentoring is implemented as a continuous support strategy. Krull (2005) argues that supporting beginning teachers should be a continuum starting from the school practice stage to induction into the profession stage. In this sense, Krull (2005) maintains that mentoring should contribute to the provision provided for the support of beginning teachers. This view is consistent with the CfBT's philosophy for a continuum of supporting beginning teachers' professional development and continuous professional development (CPD) in addition to that of experienced teachers.

Within this section, mentoring has been considered as a pivotal reflective tool for professional development, particularly in relation to student teachers' development of knowledge and skills. The context provided allows us now to explore, the roles and skills of the mentor, and to further consider the components that make a practitioner suitable to engage in the mentoring processes. Thus, the roles and skills of a mentor within the ITE context are explored in the next section.

3.5 Roles and skills of a mentor within an Initial Teacher Education (ITE) context

Similarly, Lipman (1998) and Nguyen (2009) suggest that educational modification and change would require a concerted effort from government, policy makers, and educators. Importantly, supporter teachers' role is fundamental towards effectively modifying existing school cultures, including the implementation of educational change in order to enhance initial teacher education. Educational change would resemble a cultural shift towards collaboration endeavours, underpinned by consistent and productive mentoring to support learning in initial teacher education, as evidenced by the CUREE (2005) mentoring framework. In this section, various commentaries are explored regarding the roles and skills of the mentor situated within an ITE context. This section aims to illuminate the potential for fostering understanding and exploring the roles and skills required for effective mentoring relationships between mentors and mentees.

The term mentor, in its various guises is synonymous with the trusted friend, adviser, teacher, counsellor (Shea, 2002), coach and guardian (Clutterbuck, 2001). Harrison and Pell (2006) and Clutterbuck (2001) explain that a mentor normally assumes the role of the knowledgeable individual willing to share knowledge with someone less experienced in a relationship based on mutual trust. Harrison and Pell (2006) and Morton-Cooper (2001) highlight the following attributes as essential for effective mentoring within initial teacher education:

- Guiding/leading/advising/supporting
- Coaching/educating/enabling
- Organising/managing
- Counselling/interpersonal

For mentors to be effective in adopting the identified roles, they may need to possess some of these qualities and skills. Collective commentaries within the literature agree that (Clutterbuck, 2001; CUREE, 2005; Morton-Cooper, 2001; Rawlings, 2002), the following are common qualities and skills required of a good mentor:

- Wise/Trusted/Confidential adviser
- Professional knowledge/Inspirational/Relationship Management
- Communication/Good listener/Feedback/Ability to praise
- Committed/Enthusiastic/Willingness to assist/Willingness to learn
- Good leadership/Dynamism/Target Driven/Willingness to spend time
- Teamwork/Identification of needs/Awareness of Available Resources

Specific in relation to the teaching and learning context, Stephens (1996) states planning, liaising, demonstrating, facilitating, observing, assessing and navigating as all underpinning skills to achieve mentoring goals. Further, he explains that a mentor facilitates a student teacher's learning and development of professional abilities through the process of support with steady and gradual scaffolding as learning progresses. Thus, tensions may arise in mentoring relationships in situations where mentors are promoting an overreliance or are disabling the process of development (Le Cornu, 2005). Further, Burley and Pomphery (2011) indicate that mentors may adopt both participant and non-participant observation styles to facilitate student teachers' professional development. Stephens emphasises that the non-participant observation is essential, in encouraging autonomy and confidence. However, he warns that a mentor needs to adhere strictly to the non-interventionist idea as some student teachers' may want to rely heavily on the prior experiences of the mentor; whether positive or negative to inform practice during the induction and developmental phases.

The skills identified by theorists and authors within the discipline, reflected by Rhodes et al., (2004) defined as 'skills in the field of human relations', can be contextualised in schools. This conception seems a valid benchmark in recognising all activities concerning mentoring as grounded in interactions between and among people in specific cultural contexts. The skills in the field of human relations (Rhodes et al., 2004) are as follows:

- Establishment of learner's needs;
- Taking account of preferred learning styles;
- Ensuring that learning is engaging for the learner;
- Assisting in the removal of barriers to learning;
- Helping to maintain learner's motivation;
- Monitoring and evaluating performance against personal development plan.

Drawing upon the contexts presented, it would appear that all the qualities and skills identified, form the conceptual framework for effective mentoring in initial teacher education to occur. Moreover, arguments have been explored acknowledging that learning and teaching involve multifarious tasks (Tang, 2003; Strong and Baron, 2004). However, the stimulus for many of these skills being effective within a mentoring framework stems from effective communication skills vital in achieving purposeful mentoring (Apple, 2006). Within this context, Apple (2006) suggests that these skills can act as indicators to supporter teachers to determine the needs of student teachers, with a view to enhanced personal and professional development. The nature of

this process can also contribute to the generation of novel ideas that can be of benefit to both the supporter teachers, peer-mentees and student teachers as co-learners and inquirers in collaborative communities of practice (Hargreaves, 2002; Harris and Mujis, 2005; Lave and Wenger, 1991). Conversely, skills such as team work, leading by good example; provision of information and awareness of resources support the facilitation of good mentoring (Ponte, 2010). Perhaps, this maybe, Tomlinson's (2004) reasoning for suggesting that a good mentor requires the capability to evoke listening skills to function effectively in a professional context. The next section considers some of the characteristics associated with effective mentoring in initial teacher education.

3.6 Characteristics of effective mentoring relationships in ITE

Varying commentaries (Baumi, 2009; Gardiner, 2010; Kensington-Miller, 2011; Loughran, 2010) have highlighted the impact of prior experiences regarding the disposition of values and beliefs, the significance of this is important when considering the effectiveness of mentoring relationships (Bradbury and Koballa, 2012). Conversely, perceptions play a pivotal role in the influence of students' learning. James and McCormick (2009) argue that teachers' beliefs about learning, significantly underpin their approaches towards constructing their professional practice within the classroom. Similarly, Nokes et al., (2008) suggest that the beliefs and perceptions of mentees particularly those in a teacher training capacity, could affect student teachers' experiential learning whilst undertaking teaching practice. Contrastingly, student teachers' pre-conceived ideas and expectations also significantly impact on their learning (Duit, 1996; Hobson, 2002) and the dynamics of mentoring relationships with supporter teachers. Furthermore, Baumi (2009) and Hammerness et al., (2005) highlight that there are variances in student teachers' dispositions concerning teaching and learning which may not align with traditionalist perspectives and discourse. The ideas presented resonate with arguments citing the development of mentoring, to purposefully facilitate constructive mentoring (Gardiner, 2010; Ponte, 2010). The development of this practice coincides with mentors' examining the views of student teachers concerning what they perceive to be effective mentoring, this practice steers towards collaborative practice which is mentee-centred (Hudson, 2007; Wang et al., 2008). Failure to acknowledge this praxis promotes and facilitates mentorship which resonates with an autocratic disposition. Thus, by implication, supporter teachers' and student teachers' views about mentoring should be complementary for effective mentoring relationships to occur; particularly as collaborative endeavour is recognised as the stimulus for good practice within initial teacher education (Blasé, 2009; Nokes et al., 2008). The next section therefore provides some insights

into the characteristics of effective peer-mentoring among student teachers. The following ideas explore the more recent shift towards collegial and reciprocal dialogues within mentoring discourse.

3.6.1 Peer-mentoring within teacher education

The terms mentor and mentoring have been existent for a long time with various definitions and conceptions existing within academic commentary and literature (Le Cornu, 2005). Le Cornu (2005) suggests that the term peer-mentoring might seem somewhat of a paradox given that mentoring is normally associated with hierarchical expert-novice relationships. Varying commentaries (Le Cornu, 2005; Gardiner, 2010; Bottoms et al., 2013) have declared a shift away from the mentor as expert, reinforcing a hierarchical one-way view to a more reciprocal relationship which encapsulates mutual learning. Importantly, terms such as co-mentoring (Bona et al., 1995), mutual mentoring (Landay, 1998), collaborative mentoring (Mullen, 2000), critical constructivist mentoring (Wang and Odell, 2002) and communities of practice (Law, 1999; Lave and Wenger, 1991) are being used to reflect these changes and the variance now utilised in mentoring discourse. Pertinent to this particular research study, the term peer-mentoring is utilised to encapsulate and highlight the focus of student teachers mentoring one another through their induction into the teaching profession.

Cultural shifts within education reflect a movement towards collegial learning relationships, with particular regards, to teacher development and professional learning to support pedagogical approaches and constructs (Bottoms el al., 2013). Recently, the emphasis placed on professional learning communities that provide enabling and supportive frameworks for practitioners to support one another and challenge teaching and learning practice, has become pertinent for the development of in-service teachers and student teachers (Kensington-Miller, 2011). This very much facilitates some the conceptual frameworks which consider collaboration and learning, in particular, that of learning being a fundamentally social activity (John-Steiner, 2000; Rogoff, 1990; Vygotsky, 1978; Wenger, 1998). Wenger (1998) explains that learning occurs when practitioners engage in the negotiating of meaning through mutual engagement in collaborative endeavour. Through their mutual engagement, practitioners learn from each other's skills, knowledge, beliefs, and strengths, and are able to accomplish more collectively than they could achieve individually (John-Steiner, 2000; Rogoff, 1990; Wenger, 1998).

Significantly, peer-mentoring represents a shift away from the traditional transmission models of schooling, teaching, teacher development and mentoring, and highlight the influence of

constructivist thinking (Lai, 2010; Le Cornu, 2005; Vygotsky, 1978). Kensington-Miller (2011) notes that central to constructivism is the notion that learners' play an active role in constructing their own meaning, while proponents of social constructivism also acknowledge the role of social interaction in learning. A social constructivist view of learning therefore suggests that learning should be 'participatory, proactive, communal, collaborative and submissive to the construction of meanings rather than receiving them' (Bruner, 1996: 84). Importantly, this has impacted on the experience of pedagogical learning for student teachers and in-service teachers immersed within learning communities, as the emergence of this dialogue encourages practitioners and learners alike to engage in a constructivist learning philosophy (Kensington-Miller, 2011).

Essentially, peer-mentoring adopts the concept that learning is enhanced through social membership. Similarly, Gardiner (2010) cautions that while this social membership may encourage enhancement, membership within this community does not automatically engender learning; the extent to which learning occurs is dependent on a series of reciprocal and collaborative features. Additionally, Gardiner (2010) emphasises that for learning to transpire practitioners and stakeholders within the learning process must be willing and able to collaboratively question, construct and negotiate meaning with regards to pedagogical practices within teaching and learning. Other conceptions of peer-mentoring encapsulate a variation or extension of the traditional dyadic model of mentor and protégé and is sometimes referred to as peer-coaching, critical friend, professional friend, or co-mentoring, each with particular features (Allen, 2008; Driscoll et al., 2009). In this study, peer-mentoring is defined through equity where both practitioners are at comparable levels of experience and may be both mentor as novices or protégés simultaneously, as they work together to facilitate growth and development in each other (Kensington-Miller, 2011).

Participation within such professional learning communities have encompassed various terms to describe learning communities for teacher development, including: teacher research groups (Grimmett, 1995, evidence-based teaching (Petty, 2006), communities of practice (Wenger, 1998), learning circles (Collay et al., 1998; Le Cornu et al., 1999, 2002), inquiry communities (Cochran-Smith & Lytle, 1999) and teacher networks (Lieberman, 2000). Regardless of the mantra or umbrella term adopted, the work which occurs in such specific communities, resonate with the endorsement and encouragement of professional dialogue, which ultimately enables teachers to reflect upon their practices within a socially constructed environment, which encompasses shared learning concerning the mastery of professional artistry in teaching

(Kensington-Miller, 2011). A conception which resonates with the context being considered is that of student teachers being able to influence and improve each other's teaching and learning practice. Kensington-Miller (2011) suggests that student teachers have the ability to be active agents in directly improving their teaching. Further, she states that within her study all student teachers that engaged within peer-mentoring believed that through reflection-on-practice any improvements to their teaching depended entirely on them advocating the changes to amend teaching practice. Similarly, Zachary (2011) suggests that by student teachers working cohesively within this domain, student teachers can help, advise, encourage and try different ways of teaching. Driscoll et al., (2009) emphasise the potential for peer-mentoring to provide an opportunity to work closely with a colleague to support changing continuous development in each other's teaching. Further, this discourse explains that as the relationship matures within a peer-mentoring construct among student teachers, trust is built, friendships develop, and current ideas and beliefs can be challenged or validated within a 'safe' environment where professional enquiry is embraced (Driscoll et al. 2009; Munby and Russell, 1989; Robb, 2000).

Each peer-mentoring relationship is unique

The emphasis and characteristics that underpin peer-mentoring, often encapsulate individual and unique aspects which are important in preserving the differentiation of journeys rather than homogenising them (Zachary, 2011; Kensington-Miller, 2011). Perry (2000) utilises the metaphor of a footbridge to describe mentoring, she highlights that the mentor must design and construct a bridge carefully to be wide or narrow, with or without handrails, suspension and so on, to encourage, the community to take risks within experiential learning. Viewed within this context, Kennsington-Miller (2011) highlights that peer-mentoring relationships are reflected differently within any specific construct or mentoring relationship, with each being dependent on a particular set of variables which embody, clear goals, commitment, setting boundaries, flexibility, respect, and structure or format. Perry (2000) suggests that good peer-mentoring practice embodies all of these aspects, which help to navigate the peer-mentees towards collaborative discovery which can be infiltrated into new experiences. The building of relationships to go within a mentoring construct requires time for professional trust and reciprocity to develop (Ponte, 2010). When student teachers or practitioners work together, Lieberman and Pointer Mace (2009) describe the interaction as personal, giving opportunity for discussion, as well as being able to criticise, evaluate and disagree, while at the same time being treated like professionals. Aspects of this embody the importance of effective communication in the enactment of peer-mentoring relationships among student teachers (Zachary, 2011). This

commitment towards developing effective communication, as posited by Saunders and Pettinger (1995) signifies accountability, and is essential for energy to be invested, in the promotion of productive mentoring. If both partners are not committed to the process, despite the amount of effort invested, peer-mentoring will not be successful (Lieberman, 2000). Zachary (2011) believes articulating this commitment increases the likelihood of success within the peer-mentoring relationship (Perry, 2000; Zachary, 2011). In this way both partners become aware and are clear about the provisional requirement to commit time to achieve the learning goals and how the peer-mentoring relationship plans to encourage and support pedagogical practice. Importantly, the combination of peer-mentoring and liaising regularly with other practitioners, in particular student teachers within a community of practice as part of a larger group, allows for the provision of continual collegial support with other student teachers who may share the same values, experiences and professional goals (Lave and Wenger, 1991; Le Cornu, 2005, Kennsington-Miller, 2011).

3.6.2 Mentor Involvement

Fieman-Nemsar and Beasley (1997) explain that some practitioners believe that intervention is not necessary during the observation of a student teacher' unless pupils' learning is at risk. Furthermore, Fieman-Nemsar and Beasley contend that some mentors prefer to abstain from the classroom environment to avoid being tempted to collaborate with student teachers' during teaching practice. The obvious prefix to this, suggests that for student teachers' to develop, learning must take place within an environment which accepts mistakes for practice to develop (Nokes et al., 2008). The learning that informs tacit knowledge sometimes needs to derive from learning that has been explored in a solitary capacity within the classroom. Similarly, Fieman-Nemsar (2001 cited by Nokes et al., 2008) reports that some teachers believe that learning occurs within an individualistic vacuum; therefore, proficient teachers are able to work independently to achieve educational objectives. However, Fieman-Nemsar and Beasley (1997) propose that the involvement of mentors in student teacher activity could be seen as assistance, in a constructive and enabling manner and not invasive. This indicates that assistance could be given by mentors when beginning teachers are observed to encounter difficulties in practice. Fieman-Nemsar and Beasley (1997) locate this context towards the zone of proximal development (ZPD), a theory developed and conceptualised by Vygotsky (1978). The ZPD is the region of activity located between what the novice can achieve individually and what they achieve with the assistance of a knowledgeable other (Fieman-Nemsar and Beasley, 1997: 110). Collaboration with student teachers is essential in developing teaching components; therefore, mentors must be mindful of

their collaborations, to avoid undermining student teachers internally and externally of the classroom. Orland-Barak and Hasin (2010) explain that trainees and supporter teachers' understanding of complexity in mentoring and its power dimension are elements of good mentoring. The thinking that pervades this suggests that, a mentor can provide constructive criticism, in addition, to implementing specific approaches that allow for student teachers' learning to be enriched.

3.6.3 Considering Feedback and Communication within Mentoring

Quality and timely feedback are regarded as an important component of effective mentoring for student teachers (Arday, 2013). Wang et al., (2008) identify that novice teachers acknowledge constructive and timely feedback as fundamentals of effective mentoring. Ponte (2010) explains that feedback reflects a continuous endeavour towards constructively helping and supporting student teachers to improve on their professional practice. Further observations highlighted by Wang et al., (2008) posit that novice teachers could receive ongoing support that could enhance their knowledge of teaching in the form of feedback from researchers and teacher educators. Considering the importance attributed towards feedback in effective mentoring, it may therefore be argued that communication should be at the forefront of a mentoring practitioner's practice, in attempting to successfully facilitate student teachers' learning (Burley and Pomphery, 2011). Margolis (2007) suggests that verbalising some of the challenges of teaching and learning through communicative processes, has helped experienced teachers and student teachers to devise collaborative problem-solving procedures.

Similar contexts reveal that information gathering through inspired communication contributes towards the basis for mutual relationships (Goffman, 1959). Burley and Pomphery (2011) emphasise that without information prior knowledge or experience, this may directly influence decisions, leading to counter-productivity. Furthermore, Orland-Barak (2005) argue that inspired conversation, within a professional development context, must recognise feedback as the most important component for communication that can assist both supporter teachers and student teachers to rationalise their mentoring experiences. The importance of communication is acknowledged as an important factor for mentors. Significantly, Barrera et al., (2010) suggest that 37% of mentors involved within their study rated being made aware of their position as a mentor by the university as pivotal. Peripherally, this may suggest that effective communication between universities and mentors is obligatory for effective mentoring to occur (Barrera et al., 2010). The catalyst for effective feedback and communication stems from trust established between supporter teachers and student teachers (Bradbury and Koballa, 2008). Importantly, the trust

established between university tutors, mentors and student teachers, strongly facilitates reciprocal and productive relationships which embody communication at its core. However, the constructs for developing this trust are specific to any given context, resulting in differing perspectives regarding the context.

3.6.4 Management Skills

Baumi (2009) reported the identification of interpersonal and management skills by student teachers as a significant indicator towards measuring the effectiveness of relationships with supporter teachers. Further, Baumi's (2009) study revealed that student teachers identified the use of managerial skills such as assertiveness and effective leadership, as significant attributes in communicating effectively with pupils. Additionally; this was recognised as an essential component for facilitating the interactions encountered during field experiences.

The development of management skills and opportunities to implement learned skills seem to be important to student teachers because of the need to manage behaviour within the classroom (Pollard, 2011). Nguyen (2009) indicated that classroom management skills are important to student teachers, because they underpin their beliefs about behaviour and discipline. Perhaps, this bears relevance for student teachers, as they may associate pupils being more attentive and respectful within a managed classroom that resembles calm, rather than a chaotic atmosphere, normally influenced by poor classroom management (Burley and Pomphery, 2011; Nguyen, 2009). The development and improvement of classroom management skills and strategies are important to mentors. Oliver and Reschly (2007) explain that teachers' ability to manage and negotiate the classroom is significant towards improving the educational achievements of students'. Further, Oliver and Reschly (2007) note that effective classroom management reflects no guarantee for effective teaching, however, it may provide an environment for conducive and effective teaching to be facilitated. Perhaps, this acknowledges why mentoring commentaries have revealed that classroom management and processes associated with that management need constant review and, this is viewed as a by-product of an effective mentoring relationship (Barrera et al., 2010; Ghaye, 2011; Pollard, 2011).

3.6.5 Participation within the process: Active Participation of the student teacher

Active involvement of student teachers in classroom activities assisted by supporter teachers is considered necessary for effective mentoring. Furlong and Maynard (1995) argued that student teachers are not able to develop their own professional understanding and knowledge until they become immersed in practical activities within the classrooms and schools. Further, Margolis

(2007) explains that the most important aspect for student teachers is to develop professional knowledge and skills, and actively participate in classroom activities which involve taking opportunities to observe outstanding teachers, from which good practice can be exacted. The professional development of teachers is synonymous, with co-teaching through active engagement and creating experiences which facilitate the development professionally of both supporter teachers and student teachers (Larson, 2009; Kafai et al., 2008; Shank, 2005).

However, it has been documented (Burley and Pomphery, 2011; Kensington-Miller, 2011; Gardiner, 2010; Ponte, 2010) that student teachers may sometimes prefer to coordinate the classroom activities individually, even though the presence of a supporter teachers may be available within the classroom an as observer. Beck and Kosnick (2002) contend that student teachers are willing to collaborate with cooperating teachers in the areas of planning and finding resources but not in teaching, in the attempt to develop autonomously. Contrastingly, Shea (2002) explains that the desire for a mentee (student teacher) to orchestrate their own self-identity, greatly impacts on how the mentor may suggest aspects for development for the mentee. Unsurprisingly, Larson (2009) found that mentees identified a progression from modelling good practice, provision of practical experience to encouraging independence as components of effective mentoring. Therefore, the importance attached towards student teachers adhering to advice given by their mentors and tutors, is imperative in attempting not to make mentoring relationships problematic for mentors (Larson, 2009).

3.6.6 Respect

Respect seems a compulsory component for student teachers' confidence and performance. Beck and Kosnick (2002) contend that student teachers value respect as an important component, particularly as all student teachers' want their ideas valued in accordance with some of the views of their supporter teachers. Strengthening this conception, Kaasila and Lauriala (2010) and Gardiner (2010) indicate that the idea of collegiality increases teachers' efficacy which directly influences pupils' performances. A plethora of Commentaries (Loughran, 2010; Rhodes et al., 2004; Rhodes and Beneicke, 2002; Nguyen, 2009) also acknowledge the importance attributed to peer-mentoring between novice teachers with similar experiences. Suggestively, such arrangements provide student teachers' with the opportunity to develop together, without the constraints of a hierarchical structure placed upon them (Le Cornu, 2005; Ponte, 2010). D'Amico and Stein (2002) found that novice teachers have a tendency to gravitate to other trainees sharing similar experiences. The context presented suggested that trainees and mentors often struggle from a teaching viewpoint, and the disparity is sometimes not managed

appropriately within the hierarchical structure that mentoring can sometimes denote (Burley and Pomphery, 2011). Nugent and Faucette (2004) suggest that relatively newly-qualified teachers have the capability to act as effective mentors in that they can easily recognise the apprehensions of the novice teachers, from recent experiences and provide them with constructive processes and feedback. A contrasting perspective from, Nguyen (2009) observes that the level of respect to be given to student teachers can be determined by the manner in which the supporter teacher introduces them to pupils within the classroom. For example, an anecdote that facilitates this conception is the presentation of the student teacher's role when they are introduced as helpers or future teachers, this could be conceptualised or expressed better, in maintaining professional respect (Nguyen, 2009). Similarly, some teacher educators have suggested that student teachers need to be given designation such as 'pre-service teacher' or 'teacher candidate' to avoid anything that resembles meritocracy or hierarchy (Beck and Kosnick, 2002, p. 87). Essentially, student teachers appreciate their status as novice teachers but are reluctant to except less favourable views on hierarchical values and advice from colleagues involved in their professional learning journey, when they resemble a condescending or tyrannical nature (Kennedy and Allan, 2009).

3.6.7 Pedagogical Skills and components

Provision of support aimed at the development of pedagogical skills is considered as an important aspect of effective mentoring relationships. Hobson (2002) found that the qualities that student teachers acknowledge as being instrumental towards their learning and professional development include: utilising different methods of teaching, helping to develop subject knowledge, and being supportive and reassuring. Similarly, Lofstrom and Eisenschmidt (2009) reported that the provision of subject knowledge expertise is identified as an important factor in supporting trainee teachers within their ITT programme of study. More recently, Larson (2009) indicates that mentees recognise the ability of mentors to demonstrate subject content knowledge and pedagogical expertise which are considered as significant in their professional learning journeys within a mentoring relationship. The possession of pedagogical skills for mentors, are also expected to facilitate student teachers' development of such skills by engaging student teachers' in activities focused on pedagogy (Long, 2009). In this situation, it is believed that student teachers would be equipped with the necessary practical experience to help support their professional competence and development (Long, 2009). Further commentaries by, Orland-Barak and Hasin (2010) argue that robust pedagogical knowledge and skills, alongside other factors, entail multi-faceted capabilities for mentors to link theory with diligent practice (praxis), in navigating the development of mentees.

3.6.8 Developing Professional Relationships

The establishment of a good relationship between mentors and mentees within an ITE context is another element of effective mentoring, within mentoring discourse. Le Cornu (2009) found that the establishment of good relationships is important in the learning process. Le Cornu (2009) suggests the need for teachers and student teachers to maintain harmonious relationships, with particular emphasis directed towards developing personal and professional development. Other studies (Gardiner, 2010; Long, 2009) concerned with the development of trainee teachers identified the following components, as imperative for the development of good relationships: continuous encouragement, positivity and availablity to provide support (Lofstrom and Eisenschmidt, 2009). Le Cornu (2009) noted that in some circumstances, student teachers who placed emphasis on relational aspects of teaching and field experience, exhibit tendencies to provide less attention towards pedagogical aspects of teaching. However, Gardiner (2010) in line with reciprocal processes suggests that the relational aspects of mentoring can promote learner-centred practices, which embody collaborative endeavour. Within this context, Hobson et al., (2009) contend that relationships have a significant impact on the professional development of student teachers' with regards to other emotional responses to teachers, pupils and other school colleagues. They note that this has a significant bearing on the development of collaborative relationships where practice is disseminated. For professional relationships to be productive, Hoigaard and Mathisen (2009) argue that the quality of communication needs to be transparent and consistent, as this significantly impacts on other contexts facilitated by this. Furthermore, both explain that adequate communication between teachers and student teachers can enhance the mentoring relationships and professional developments, while contrasting experiences can have adverse effects on personal and professional developments.

3.6.9 Providing Emotional and Pastoral Support

Supporting student teachers' pastorally and emotionally is recognised as important towards the mentoring process. In a study undertaken by Beck and Kosnick (2002) they note that student teachers' emphasised emotional and pastoral support as an essential form of support during field experiences. They emphasise that failure to provide this type of support, could be potentially detrimental on practitioner learning. Contrastingly, Wang and Odell (2007) report that emotional support to student teachers' may not necessarily translate into development of teaching skills, but alternatively create an dependency on the mentor, which may be detrimental towards progressive and independent learning. Kaasila and Lauriala (2010) explain that field experiences can be anxiety provoking for student teachers. As such, emotions need to be acknowledged as a key

component in trying to enhance teacher education (Kaasila and Lauriala, 2010). This perspective recognises friendliness and emotional support as, important features of a good mentoring relationship (Ponte, 2010). Furthermore, Bradbury and Koballa (2012) also argue that moral support is imperative for the personal and professional development of the student teacher. Such support can also facilitate a situation where mentors and mentees are equally reliant on the mentoring relationship, therefore promoting equal benefits for all (Bradbury and Koballa, 2012).

3.6.10 Time for Adjustment

Barrera et al., (2010) explain that student teachers' must be given appropriate time to develop relevant professional knowledge and skills. Researchers have identified (Barrera et al., 2010; Claycomb and Hawley, 2000) a period of three to seven years to be necessary for novice teachers to attain high levels of teaching competency. Further studies, also illuminate (James and McCormick, 2009; Long, 2009) that teachers' professional learning and confidence to implement changes to classroom practices requires time. Thus, Long (2009) explains that necessary conditions for effective mentoring reflect situations where supporter teachers are sensitive to the needs of student teachers, having experienced similar dilemmas upon induction into the teaching profession. This time for adjustment, according to Long (2009) provides student teachers' with some scope to learn and develop professional skills progressively. Additionally, institutions can facilitate the support period for mentors' by providing them with sufficient time and induction training to help facilitate the learning of newly-qualified teachers (Hickson, 2011). Barrera et al., (2010) found that mentors felt that they were provided with insufficient time by their schools to evaluate trainees' activities. Thus, special provision should be provided for mentors in considering their own preparations for teaching, assessments and administrative responsibilities (Bradbury, 2010). Additionally, mentees must also be given sufficient time to internalise the skills needed to act professionally.

This section, has attempted to explore some of the characteristics associated with productive mentoring relationships as reported in empirical studies. Importantly, the literature presented posits that the effectiveness of mentoring is not solely dependent on mentors but the mentee also. While mentors are required to collaborate with mentees and provide a variance of supportive structures, mentees also need to be actively involved within the process, particularly within a classroom context, and practice the advice given by mentors and tutors within an ITT programme of study. From the perspectives considered, it is important to acknowledge that failure for both stakeholders to collaboratively comply, may impact negatively on the mentoring relationship. From some of the mentoring practices already explored, some of the factors

considered, significantly impact the peer-mentoring framework enacted in this study. This section has also engaged with, other issues within the literature recognised as factors that challenge the mentoring process. Thus, the next section presents some challenges inherent in mentoring relationships between mentors and mentees.

3.7 Mentoring within an Initial Teacher Training context: Issues, problems and challenges

As expressed in varying commentaries, mentoring is viewed as a complex phenomenon, with varying conceptions. The variation of these conceptions can be problematic; this can provide a number of issues and challenges. This section explores the challenges encountered within mentoring:

3.7.1 Conception

The term mentoring is conceptualised in varying capacities, dependent on stakeholders' interpretations. Furlong and Maynard (1995) recognise the variance of mentoring, by acknowledging the lack of a specified conception of mentoring, as this may vary given the context. Other authors (Burley and Pomphery, 2011; Ghaye, 2011) concede that the variances in the definitions of mentoring, directly affect the complexity of mentoring collaborations between mentors' and mentees' (Bradbury and Koballa, 2012). Discourse surrounding interpretations and definitions, can often reinforce restrictive and traditionalist conceptions of mentoring. Harrison and Pell (2006) argue that there is a lack of practitioner evidence to measure the effectiveness of mentoring within ITE context, primarily because agreed definitions can sometimes be problematic. Within an ITE context, the importance attributed to agreed and flexible conceptions of mentoring are reinforced by Tang (2003) who argues that the complexities of student learning regarding initial teacher training are important when examining factors concerning professional learning. Furthermore, Tang (2003) highlights three student teaching contexts which have been explored in mentoring discourse. The explorations presented facilitate the action context within professional environments such as classroom experience; the socio-professional context- interaction with the wider school community; and supervision- guidance provided by university teacher trainers. By implication, the process which facilitates learning to teach such as mentoring could also be utilised as a multi or single faceted intervention. This context is discussed further in section 3.9, titled; theoretical approaches to mentoring.

3.7.2 Preparing and training mentors

Several commentaries (Burley and Pomphery, 2011; Edwards and Collison, 1996; Kensington-Miller, 2011) recognise the importance attributed towards appropriate training for mentors to be adequately prepared and trained for mentoring, for effective collaboration to occur (Gardiner, 2010). Historically, this training and preparation has been challenging and problematic in attempting to facilitate effective mentoring (Gardiner, 2010). Terrion et al., (2007) argue that a significant factor which may affect the enactment of effective mentoring relationships is the absence of sufficient training or development for mentors. In support of this, Krull (2005) argues that substantive barriers disrupt effective mentoring. He states that insufficient and comprehensive preparation of teachers for mentoring roles; require comprehensive and pragmatic approaches in utilising mentoring effectively within initial teacher education. Additionally, Ehrich et al., (2004) assert that effective training for mentors, significantly influence how successful an implemented mentoring framework or initiative maybe. Furthermore, the work of Evertson and Smithey (2001) found that trained supporter teachers demonstrated more in depth understandings of generic skills and awareness of student teachers' needs for effective mentoring, when considering relationships and field experiences.

Importantly, Long (2009) asserts that the type of orientation for both student teachers and supporter teachers contributes towards effectiveness of mentoring relationships between participants within the mentoring relationship. The onus for productivity should be navigated through both the student teachers and supporter teachers in reflecting upon existing classroom and school practice (Burn, 2006). Rhodes et al., (2004) maintain that facilitators of mentoring require or would prefer a set of rules and standards, which student teachers could adhere to, in attempting to further assist mentoring within schools. Practitioners therefore, should be privy to knowledge of national educational objectives and standards, regarding the standards and benchmarks that student teachers' are required to satisfy during teaching placements (Le Cornu, 2009). These standards are acknowledged as formal and informal. Burley and Pomphery (2011) state that the importance designated to satisfying standards, needs to be reflected in training from internal and external stakeholders for mentoring goals to be successfully achieved. However, this does not always work practically within the professional context. The work of Clarke et al., (2007) found that induction training which includes specified writing tasks was given to mentors; however less attention was afforded to training facilitated by local organisations, who aim at providing teacher specific training for varying remits. Another study, explores that capacity building for professional development with regards to research training,

needs to be prioritised to enhance teacher education practices (McNiff et al., 2003; Murray et al., 2009). Essentially, both student teachers' and supporter teachers would be better situated to conduct research about their practices if adequate research training was provided. Margolis (2007) highlights that opportunities for training are important for teachers in trying to develop professional identities as mentors, apart from their classroom roles as facilitators of learning. Similarly, Zeichner and Conklin (2005) contend that the selecting of teachers to undertake mentoring roles without formalised orientation, and support, perpetuates the belief that experienced teachers, which exemplify good practice, are not in need of any preparatory training to undertake mentoring roles. Thus, Zeichner and Conklin (2005) explain that student teachers and mentors need to adopt practice which encourages the need for professional enquiry, underpinned by the need to professionally develop continually. Further, they contend that exposure towards different mentoring models and theories can facilitate this endeavour. Similarly, Harrison et al., (2005, cited by Bradbury and Koballa, 2008) state that mentoring training should provide opportunities for the exploration and dissemination of varying models of mentoring, with additional consideration provided towards the facilitation of collaborative endeavour with mentees.

3.7.3 Feedback

Commentaries within the field of reflective practices and mentoring, acknowledge the importance of feedback as a fundamental element of effective mentoring (Beck and Kosnick, 2002). Interestingly, some practitioners prefer not to distribute feedback, with the underlying rationale that learning how to teach is of more importance to student teachers' development rather than feedback (Beck and Kosnick, 2002). Margolis (2007) and Rippon and Martin (2003) state that the significant challenge to mentors comes from the expectation of student teachers regarding explicit feedback and information regarding what is expected of them. Hudson (2013) found that some mentors encountered problems in presenting constructive and honest feedback, that was respective of the mentoring relationship. Furthermore, Bradbury and Koballa (2012) explain that some mentors experience difficulty in providing feedback because of the duality of the roles encompassing supporter, observer and examiner. Contrasting literature (Gardiner, 2010; Long, 2009; Ponte, 2010) contends that some student teachers are hesitant to ask questions, regarding formative and summative feedback from their mentors. Bradbury and Koballa (2012) suggest that mentors and mentees seem unwilling to provide feedback, due to the protection of personal feelings, this tends to be favoured over professional honestly and reciprocity, instead of placing the mentoring relationship at risk or jeopardising the professional

respect developed. Some mentees may also find it challenging to ask questions, in fear of presenting they are not competent practitioners, as this may impact assessment or teaching practices (Bradbury and Koballa, 2012). Other factors which can impact this are reflected in the breakdowns of communication or feedback when mentors and mentees, harbour differing beliefs or interpretations regarding classroom effectiveness and teaching competency (Hudson, 2013; Bradbury and Koballa, 2008; Tomlinson, 2004).

Negative or inadequate feedback can have a significant bearing on the learning process. Margolis (2007) indicates that the process of feedback may not be productive for student teachers' due to a potential lack of experience in providing feedback to student teachers'. Further, Margolis states that considerations for the production of this feedback, directly impact the effectiveness of mentoring relationships. Additionally, Hobson (2002) explains that tension and frustration can be observed in mentoring relationships, where communication is poor. The disposition presented could be as a result of inadequate training. Rhodes et al., (2004) acknowledge that certain significant factors affect the distribution of effective feedback within mentoring, when inadequate training or mitigating circumstances for both supporter teachers and student teachers are prevalent such as:

- Inadequate time
- Inadequate information
- Lack of interest in judging others
- Fear of potential damage to relationships

However, Persloe and Wray (2000, cited by Rhodes et al., 2004) provide a framework for supporting and enhancing effective feedback. They engage with the following:

- Being sensitive to the fact that the feedback is meant for an adult;
- Being honest and able to balance positive and negative messages;
- Being conscious of tone and language to be used;
- Being descriptive rather than being judgemental;
- Being able to act as a good role model and reflective on actions.

3.7.4 Mentoring selection and pairing

The selection of mentors remains a problem for senior administrators within educational settings (Rhodes et al., 2004; Hudson, 2013; Bush and Middlewood, 2005). Effective models of mentoring have been associated with compatible pairing of mentors and mentees (Spezzini et al.,

2010). The productivity of mentoring relationships may be compromised if mentors are not fully engaged within the process. Conversely, potential for effective mentoring can become apparent when the selection process resembles collaboration, with the chosen mentors demonstrating a capacity and interest for mentoring engagement (Hickson, 2012). Joyce and Showers (2002) explain that inappropriate pairing of mentors and mentees may hinder the effectiveness of support, underpinned by collaborative principles situated around reflective practice. Similarly, Ehrich et al., (2004) found that contrasting personalities also hinder the mentoring process, and can affect the knowledge exchange process between mentors and mentees. The process of formalised mentoring distributed from senior leaders within schools, often tend to be afforded to teachers that are viewed as willing and competent to guide novice or newly-qualified teachers through their induction into the teaching profession (Long, 2009). A study conducted by Clarke et al., (2007) found that two-thirds of supporter teachers were recommended by senior administrators within schools, while several practitioners volunteer themselves for mentoring roles. The study indicated that a substantial amount of head teachers involved in the study indicated that they utilised some criteria to select mentors based around good teaching practice and pedagogical approaches (Clarke et al., 2007). The criterion utilised included required teachers to exhibit experience, supportiveness, inspire and demonstrate good communicative and inter-personal skills. However, a problem which affects the commitment of experienced teachers, to mentor is the notion that mentoring can be exhaustive and time consuming (Long, 2009). The time constraints on professional teachers, means that the collaborative process for sharing ideas and dilemmas for mentoring to flourish, is not always prioritised (Ehrich et al., 2004). In such situations, some teachers may not be able to make a suitable commitment towards mentoring (Hale, 2000; Long, 2009; Ehrich et al., 2004) and this may present a challenge regarding productive mentoring.

Further explanations posit that not all pairings between teachers and student teachers produce successful mentoring outcomes (Nguyen, 2009). Nguyen (2009) explains that some student teachers are regularly, perplexed by their supporter teachers' obsolete pedagogical approaches, and feel pressurised to adopt their approach for fear of failing observations and assessments, which completely contradicts the constructivist position. The obvious position therefore seems to promote that supporter teachers are sensitive to the needs and learning of student teachers' in addition to, engaging in reflexive processes which question practice and provides ideas for improving that practice (Margolis, 2007). Hudson (2013) explains that the provision of mentors to novice teachers is essential; however, emphasis should not be placed on quantity. To reduce the need for quantity over quality, Long (2009) suggests that schools need to organise a collective

of experienced and competent teachers from which mentors can be selected. Additionally, Long (2009) proposes that mentors and mentees meet prior to the commencement of the mentoring relationship and teaching practices. Significant for effective mentoring, this proposition has the potential to facilitate the enactment of collaborative endeavour within a professional educational context (Long, 2009).

This sentiment encourages the dissemination of ideas concerning pedagogical principles and the development of these principals within the classroom (Long, 2009). Underpinning this, the role of friendships and informal relationships, should be acknowledged as imperative for effective mentoring to commence (Le Cornu, 2009; Smith, 2008). D'Abate and Eddy (2008) note that prescribed pairings may not be as effective as 'organic' pairings, where two practitioners share a similar professional ontology. Thus, informal relationships play a significant role in assessing the effectiveness of possible collaborations for mentoring.

3.7.5 The notion of Power in Mentoring

The somewhat hierarchical nature of mentoring, often promotes an unfair distribution of power, which can affect the dimension of the mentor and mentee relationship (Christie, 2014). Although, mentoring is recognised in some literature as reciprocal and equal (Krull, 2005), from a praxis perspective, this is not always possible as tensions may surface within a collaborative relationship given the hierarchical structure that separates the expert from the novice within mentoring discourse (Siry, 2011, Smith, 2007). The traditionalist perspective regarding mentoring requires the experienced practitioner to lead in matters of learning and reflecting on practice (Siry, 2011). However, the nature of such a delicate role indicates that if caution is not applied, then the mentee may feel part of an autocratic partnership where democracy is not embodied nor practiced within the mentoring relationship (Le Cornu, 2005; Rippon and Martin, 2006). Significantly, Rippon and Martin (2006) warn that power constructs and distribution of that power may surface in some situations if supporter teachers are to serve as assessors to novice teachers. Power discourse and distribution continue to be challenging and problematic for effective mentoring when the mentoring structure resembles hierarchy (Gardiner, 2010). Importantly, Bradbury and Koballa (2012) highlight the risk of compromising the mentoring relationship in situations where mentors are forceful in their declaring of support and guidance towards the mentee.

3.7.6 Power, social learning and developing professionally in Mentoring

Christie (2014) contends that over the past three decades there has been an emergence of new perspectives on learning, and it is widely recognised that learning is a social, as opposed to an individual process, which flourishes when dynamics of power are eliminated within the mentoring process. Rather than being about acquiring sequential cognitive skills, learning is considered as a situated process where the skills, dispositions and self-knowledge that underpin success are grounded in the particular institutional environments, where student teachers engage in reciprocal methods and communities of practice, which embody equality and even distribution of power, in coming to know and understand through ongoing processes of participation and engagement (Anderson and McCune, 2013; Lave and Wenger, 1991). This perspective points to a range of social practices through which students are supported to become successful learners such as peer-learning, engagement in learning communities, active learning and problem-based learning, and student teacher mentoring (Brockbank and McGill, 2007; Falchikov, 2002).

Inherently, power and control are inevitably evident within the dynamics of the working relationships between mentors and mentees, particularly in constructs which resemble the traditional hierarchical novice-expert relationship or the overbearing dominance of an individual among a group of peer-mentees within a learning community (Christie, 2014). Within a community of practice, researchers (Burley and Pomphery, 2011; Christie, 2014; Lave and Wenger, 1991; Wenger, 1998) have highlighted tendencies for misbalances of social power, with regards to equal distribution of opinions, values and beliefs. Anderson and McCune (2013) highlight that such communities can be problematic, particularly when participants feel that they are not able to explicitly contribute to pedagogical discourse within the learning community. The misbalance of power within these learning communities often prompts feelings of disenchantment, disillusionment, being under-valued, and not being able to actively contribute to ideas within the community, in subservience to the dominant individual within the group or social context (Anderson and McCune, 2013; Christie, 2014).

Research (Anderson and McCune, 2013; Arday, 2013; Le Cornu, 2005) indicates that the effectiveness of mentor training is dependent upon two key factors, both of which indicate differing dimensions of the power relations between stakeholders immersed with the mentoring relationship (Colvin and Ashman, 2010). On the one hand, participants within the mentoring relationship underpinned by socialised constructs must be willing and able to work within a prescribed set of boundaries agreed by the participants, to avoid misbalances of power within a community of practice (Christie, 2014). Then contrastingly, the success of the mentoring

dialogue relies on there being clarity of expectation about the roles of the various people involved (Le Cornu, 2005). Within this context, Ponte and Twomey (2014) suggest that the roles and the representation of these activities and roles lead to the possibility of viewing the representations of different roles, in objective ways which may coincidentally promote the uneven distribution of power. Further, Ponte and Twomey (2014) contend that the detailing of student teachers responsibilities within the mentoring dialogue is particularly limited to the representation of agency versus passivity: who is presented as active and as setting the agenda in the mentoring relationship, and who is presented as a passive recipient of the scheme. Significantly, how this is managed reflects how power is distributed when considered aspects of equality within the mentoring relationship, hence the promotion of peer-mentoring within this study, where power is distributed evenly (Le Cornu, 2005; Ponte and Twomey, 2014).

Historically, while mentors have found the mentoring process to be purposeful and fulfilling, as supported by previous research (Burley and Pomphrey, 2011; Ponte, 2010) it is also imperative to note the significant challenges inherent within this process. In a study conducted by Ponte and Twomey (2014) they highlight that structures and imbalances of power were most evident in experienced teachers that were reluctant to engage in mentoring training, with regards to re-examining their own professional practices in attempting to support student teachers from a position of reflecting-on-practice. Initially, Ponte and Twomey (2014) explain that not all the mentors were motivated to participate in mentoring trainee teachers out of an altruistic desire to support new entrants into the teaching profession or to enhance their own development and learning. Although the research conducted by Ponte and Twomey presents clear benefits of mentoring for teachers, this does not always resonate as a substantial reason for teachers undertake mentoring roles, particularly if some practitioners are required to examine and challenge the complexities of their own pedagogical practices. Significantly, for teachers that want to maintain the expert-novice hierarchies related to power, this leaves them in a position of 'professional vulnerability' (Christie, 2014).

Christine (2014) and Ponte and Twomey (2014) contend that the motivation for mentoring is not always driven by a selfless desire to improve the profession. Contrastingly, both contend that such motivations can sometimes be influenced by senior school administrators and colleagues, which perpetuate notions and structures of power inherent within institutional cultures, particularly among student teachers and experienced teachers. Relatively recent research points towards a framework for developing mentoring which considers the time and physical resources provided to mentor teachers (Cunningham, 2007; Brockbank and McGill, 2009). This is

significant, because in contrast to some of the positions presented concerning power dynamics within mentoring, Christie (2014) posits that the embodied experiences of mentoring which have been analysed within the mentoring discourse (Ponte and Twomey, 2014) reveal that if some constructs of power can be minimised between participants, then benefits can be obtained, with regards to the development of student or early-career teachers, specifically because mentoring provides a catalyst for reconceptualising practice for both parties involved.

Importantly, Cunningham (2007) suggests that this is not to dismiss mentoring but to suggest that practitioners need to adopt a cautionary position with regards to the relations of power and control that are inherent within mentoring relationships. Importantly, Christie (2014) and Le Cornu (2005) posit that there needs to be some challenge provided to the assumption that mentoring can only be viewed through the hierarchical lens of the experienced practitioner, in a traditional expert-novice construct, which resembles the apprenticeship model of mentoring.

3.7.7 Developing a Framework

Rhodes et al., (2004) suggest that a formal framework for effective mentoring relationships in initial teacher education (ITE) is required despite, encouragement for mentoring pairings to organically form, rather than subscribe to prescription. Larson (2009) explains that while formalised mentoring structures maybe favoured by some practitioners, there are indications that mentor teachers and novice teachers, prefer informal mentoring relationships, as they identify more with democratic and reciprocal principals. However, a significant obstacle to informal mentoring relationships could be the need for structured and adequate support which informal mentoring does not always encompass (Larson, 2009). In recognition of the disparities between formal and informal frameworks for mentoring, Larson (2009) initiated a formal mentoring framework, underpinned by elements of an informal structure. Rhodes et al., (2004) and Larson (2009) conceptualise the following elements as typical of a formal mentoring framework:

- Aims of the scheme;
- Objectives of the scheme that are measurable within specific time;
- Roles and responsibilities of mentors;
- Training of mentors;
- Elements of the mentoring process;
- Management and monitoring of the scheme;
- Review and evaluation of the scheme.

Conversely, Rawlings (2002) argues that the identification of qualities, used to denote skills and roles which underpin mentoring, could be utilised to develop or structure mentoring frameworks or activities that promote collaborative reflection regarding teaching practice, beliefs and values. He suggests the following as important factors for consideration, in implementing effective mentoring:

- Clarity of purpose in mentoring relationships and programme;
- Awareness of differences in roles of mentor and mentee;
- Training should be given to mentors (possibly mentee);
- Mentor must tailor programme towards the needs of mentee in a developmental manner.

Furthermore, Barrera et al., (2010) indicate that it is essential to implement a structure and framework for effective mentoring. Barrera et al., (2010) and Flynn and Nolan (2008) identify the following as essential within a mentoring framework:

a) Selecting mentors with the same certification and in close proximity to their mentees;
b) Providing mentors and mentees schedules that allow common planning time and opportunities to observe each other;
c) Reduced workloads for mentees, and;
d) Providing orientations for both mentors and mentees.

(Flynn and Nolan, 2008: 173–174).

While informal frameworks can be advantageous, there is some scope for suggesting that structured frameworks support the criteria necessary to achieve mentoring goals (Flynn and Nolan, 2008). In a study conducted by, Barrera et al., (2010) they found that 95% of mentors indicated that mentoring can be productive with structured and well-defined objectives. Further, Long (2009) suggests that a mentoring framework, needs to be agreed for objectives to become attainable and achievable. Suggestively, this may indicate that for the mentoring framework to be a productive process for mentors and mentees there needs to be a clear definition of what the aims of the collaborative process are, to maximise the potential for mentoring (Christie, 2014). A formalised framework also allows for accountability in mentoring (Long, 2009). Importantly, Gardiner (2010) suggests that factors concerning formalised constructs of mentoring need to be taken seriously, as instability could cause fiction within the mentoring process between supporter teachers and student teachers, if the identified objectives are not adhered too. The mentoring

relationships considered within this study, will possibly also encounter some of these challenges, as later chapters regarding the progress of the peer-mentoring intervention in practice will reveal.

As relevance and substance are peripheral concepts that underpin effective mentoring, the importance attributed to mentoring relationships, to be made sustainable becomes more imperative (Kensington-Miller, 2011). However, effective and sustainable mentoring is not always easily achievable, due to some of the challenges explored within this section. Teacher educators have become more vigilant of some of the challenges that underline the process, and in reaction to this, have developed and adpoted differing models which aim to reduce some of challenges presented within mentoring. The next section explores the essential characteristics of effective mentoring, with some explorations of some of the models utilised within mentoring.

3.8 Models of mentoring which inform Teacher Training and Teacher Education

Varying models of mentoring have been expressed and documented within the literature (Flynn and Nolan, 2008; Le Cornu, 2005; Siry, 2011). Within the confines of this study, the models of mentoring considered are pertinent to the professional discourse, which underpins teacher development, in particular with reference to the ITE context. This context explores the following models of mentoring:

3.8.1 The Anderson and Shannon (1988) Model of mentoring

Anderson and Shannon (1988: 40) conceptualise mentoring as:

> 'a nurturing process, in which a more skilled or more experienced person, serving as a role model, teaches, sponsors, encourages, counsels, and befriends a less skilled or less experienced person for the purpose of promoting the latter's professional and personal development. Therefore, mentoring functions are carried out within the context of an ongoing, caring relationship between the mentor and the protégé'.

The holistic essence of this definition, strongly underpins the conception of mentoring within their model. Burley and Pomphery (2011: 78) describe the following attributes associated with Anderson and Shannon's conception of mentoring, which reflect the following:

- The process of nurturing,
- The act of serving as role model,
- The five mentoring functions (teaching, sponsoring, encouraging, counselling and befriending),

- The focus on professional and or personal development,
- The on-going relationship.

Within the model, the mentoring relationship is characterised by role modelling, nurturing and caring. This context suggests that supporter teachers serve as the role model, nurturer and carer for student teachers, within a school context, where the model is reflected in practice (Anderson and Shannon, 1998). For mentors to be effective, in the undertaking of their roles, Anderson and Shannon (1998) recognise a plethora of components as imperative for productive mentoring, such as: teaching, sponsoring, encouraging, counselling and befriending. Moreover, they suggest that the following mentoring activities should encompass: demonstration lessons, observations and feedback and supporting meetings.

Importantly, some of the components that underpin this model of mentoring have the potential to enhance student teachers' personal and professional development. Components which embody nurturing, caring, encouraging, counselling, sponsoring, observing and providing feedback, at its core, strongly empower student teachers with a sense of professional and emotional stability whilst in school environments (Le Cornu, 2009). Siry (2011) explains that practitioners, particularly those in the role of supporters to trainees maybe willing to experiment with ideas that are capable of enhancing their own personal and professional development. Significantly, this model refrains from facilitating this practice. Within this context, Le Cornu (2009) explains that supporter teachers' experience specifically should adhere to facilitating the nurturing process, with the primary focus to act as role-models and carers for student teachers. This aligns more with the apprenticeship theory (discussed in section 3.9.1) as emphasis is placed on experienced teachers and novice teachers' relationships without recognising the potential for reciprocity. In this model the potential for collaborative relationships, as a means to inform professional development is not as considered as in other mentoring models (Siry, 2011). Brooks and Sikes (1997) argued that the essence of this conception is theoretical and focuses more on the mentor within a mentoring relationship.

3.8.2 The Furlong and Maynard (1995) Staged Model of mentoring

The Furlong and Maynard model was devised around discourse on empirical studies. The underpinning for this model is stimulated by the need for mentoring to be tailored towards a clearly defined learning process, which recognises the importance attributed to the students' developmental stages (Furlong and Maynard, 1995). This model emphasises that learning to teach, should embody intermittent processes, which are coordinated, with the student teacher

navigating the mentoring needs and developmental process (Furlong and Maynard, 1995). The stages identified are as follows:

Beginning teaching characterised by:

- Focus of student learning: rules, rituals and routines, establishing authorities
- Mentoring role: model
- Key mentoring strategies: student observation and collaborative teaching focused on rules and routines

Supervised teaching characterised by:

- Focus on student learning: teaching competencies
- Mentoring role: coach
- Key mentoring strategies: observation by the student, systematic observation and feedback on student's performance

From teaching to learning characterised by:

- Focus of student learning: understanding pupil learning, developing effective teaching
- Mentoring role: critical friend
- Key mentoring strategies: student observation, re-examination of lesson planning

Autonomous teaching characterised by:

- Focus of student learning: investigating the grounds for practice
- Mentoring role: co-inquirer
- Key mentoring strategies: partnership teaching, partnership supervision

(Furlong and Maynard, 1995).

This comprehensive model recognises that the learning of student teachers' is complex and varying approaches should be dispensed to enhance student teachers' personal and professional development (Furlong and Maynard, 1995). The positionality of the model, redirects from the socialisation process, which is normally associated with the induction of student teachers (apprenticeship) through learning strategies such as coaching and observation, to reflective activities, which encourage autonomy in teaching through co-inquiry (collaboration/partnership).

Thus, this model seems to underpin the contexts associated with constructivism (discussed in section 3.9.4) with regards to socialised components.

Stephens (1996) explains that Furlong and Maynard's model is helpful in attempting to direct mentors on how to assist student teachers to navigate from apprentice to autonomous professional. However, Stephens (1996) cautions that potential and practising mentors need to develop skills, which allow them to be sufficiently competent enough to identify the needs of student teachers, in provided scaffolded support. Essentially, Stephens (1996) explains that this model utilises mentoring as a scaffolding process, where mentors provide assistance to mentees in trying to develop professional skills. Further, he states that upon the development of these skills, mentors adopt a reduced mentoring capacity to allow mentees to practice and develop individually and autonomously.

Authors and scholars note that training is crucial for effective mentoring to occur. Within this model, the issue of training is not acknowledged. This is because of the likelihood that mentors will already be qualified teachers, with sufficient experience to guide the mentee (Stephens, 1996). However, contrasting commentaries (Burley and Pomphery, 2011; Ponte, 2010; Siry, 2011) have argued that being a good teacher is not a guarantee for good mentorship. As such, the implementation of this model can be measured more effectively when the expectations of mentors and mentees given by providers of ITE are transparent and made clear for all participants within the mentoring dialogue (Stephens, 1996).

3.8.3 The Co-planning Model (1997) of mentoring

The co-planning model was developed and introduced by Fieman-Nemsar and Beasley, in response to assisting the professional development of novice teachers. The origins of the model draw from socio-cultural theories of learning through collaborative and constructivist endeavour. Fieman-Nemsar and Beasley (1997) explain that mentoring engages through a process of mentor/supporter teacher support, where encouragement is provided to student teachers co-collaborate, within the classroom environment as a stakeholder in learning exchange and knowledge transfer. The view shared, is that of, understanding and the co-construction of knowledge about teaching and learning, which can be facilitated through collaboration between the student teacher and the mentor (Ponte, 2010). Co-planning is also defined as a process by which mentors assist student teachers to comprehend the necessary components of teaching. The context described, has been characterised as assisted performance (Fieman-Nemsar and Beasley, 1997; 110). The principals that underpin co-planning recognise that the mentor should

be a position to facilitate a student teacher's development of professional skills, which consider components such as lesson planning, lesson content and pedagogical approaches to teaching. Importantly, Fieman-Nesmar and Beasley emphasise that such dialogue is imperative for effective co-planning to influence mentoring relationships between support and student teachers'. The following concepts are components which facilitate the co-planning model of mentoring:

- Exploring Content: Joint efforts in exploring the curriculum content, in attempting to plan and determine relevant classroom activities.

- Designing Learning Activities: Joint decision on the learning activities to be designed.

- Coaching for Teaching: Unlike the first two components where a mentor and a student teacher are co-learners and partners, coaching for teaching features a situation where a mentor provides clues or ques (as the experienced one) on how to coordinate classroom activities.

(Fieman-Nemsar and Beasley, 1997: 110).

The conception of co-planning resonates with other contributors to mentoring practice. LaBoskey and Richert (2002) suggest that collaborative practices facilitate the opportunity for student teachers to disseminate ideas, which help to improve practice in teaching and learning. Similarly, Lopez-Real and Kwan (2005) found that learning from reciprocal collaboration is regarded as important in the development of both the supporter teacher and the student teacher. By implication, the emphasis on this conception of mentoring is based on working as a collective to gain mutual benefits, which are viewed as fundamental in achieving mentoring goals (Hickson, 2012). Nokes et al., (2008) reports that mentors and mentees are able construct their own model of collaboration in teaching and learning, when clear objectives and purposes are set out for implementation. The collaborative process transpires during the planning and instruction stages, based on established processes for collaboration, regarding effective teaching and learning (Nokes et al., 2008). This highlights that novice teachers will always require informative direction whilst immersed within the induction process, regarding the development of teaching practice (Nokes et al., 2008).

However, Smith and Ingersoll (2004) warn that aspects of the co-planning model of mentoring can render counter-productivity if the supporter teacher involved upholds that experience is the

defining factor for navigating a student teacher. Further considerations may illuminate why some teachers declare collaborative processes as fostering poor practice, as there are clear differences in the stages of knowledge between the experienced practitioner and the novice teacher (Smith, 2004). Smith explains that ideas concerning collaborative mentoring also report that tension may arise during collaborative practices, with regards to the negative impact, regarding lack of direction, as both stakeholders in this model of mentoring share an equal position in relation to the development process. Therefore, Smith (2004) and Nokes et al., (2008) state that exertion or abuse of power may surface if and when tension arises between the student teacher and supporter teacher, resulting in the student teacher having to a adopt a more confined and restricted disposition, when confronted against the more experienced teacher. However, Nokes et al., (2008) does also contend that the student teacher can articulate their point constructively, reflecting assertiveness rather than confrontation.

Fieman-Nemsar and Beasley (1997) note that individual knowledge and thinking, in considering appreciated values may also disrupt the co-planning process. As such, Smith (2004) notes that individual differences between the beginning teachers' and experienced teachers' knowledge and skills must be negated and considered primarily for successful co-planning within mentoring to occur. Interestingly, Rippon and Martin (2006) acknowledge that good supporter teachers are able to negotiate difficulty and navigate support accordingly to enhance effective mentoring. According to Rippon and Martin this particular model recognises mentoring as a collaborative process, which is deemed effective when student teachers and supporter teachers implicated within the co-planning process, share similar value and belief patterns regarding teaching and learning. However, mentoring relationships can experience difficulty, with particular reference to this model, when mentors and mentees do not share similar beliefs and values as suggested within the literature explored. Additionally, mentoring goals may struggle to be achieved in situations where mentors and mentees, do not share similar conceptions of inherent beliefs relating to teaching (Siry, 2011).

3.8.4 Educative Mentoring (Zeichner, 1996; Fieman-Nemsar, 2001)

The educative mentoring model derived from Dewey's (1938) educative experience, encourages improvement without interference, for future development (Fieman-Nemsar, 2001). For the educative experience to be revealed, educators are expected to facilitate socio-physical environments for learners to embrace learning and developing as practitioners (Fieman-Nemsar, 2001). Zeichner (1996) characterises educative mentoring by the enabling of environments which allow and accommodate student teachers' to flourish in complex and challenging circumstances.

Zeichner (1996) explains that educative mentoring encourages novices to apply praxis through collaborative endeavour with mentors. Such endeavour includes investigation, experimentation, reflection, deliberation and decision-making (Loughran, 2010). This indicates that collaboration between mentors and novices in the teaching and learning process is essential. However, the effectiveness of this collaboration is measured against the enabling of environments provided by mentors. In support of this, Fieman-Nemsar (2001) contends that mentors need to be sufficiently prepared in order to achieve the objectives which underpin educative mentoring. Thus, emphasis is placed on mentors' being able to demonstrate a willingness to embrace new ideas, akin to ensuring that the roles of the mentor are clearly defined and made explicit. Furthermore, Fieman-Nemsar (2001) explains that mentoring roles need to facilitate the following:

- Finding openings, diagnosing problems;
- Pinpointing problems and areas for improvement;
- Probing novice thinking regarding teaching;
- Modelling teaching and good practice.

Drawing on Fieman-Nemsar's conception, Bradbury (2010) explains that educative mentoring differs from traditionalist perspectives of mentoring. Table 3.1 summarises the differences in conceptions between the traditionalist approach and the educative mentoring approach.

Table 3.1: Differences between traditional views of mentoring and educative mentoring (Bradbury, 2010)

Traditional Mentoring	Educative Mentoring
Providing necessary support to retain trainee and early-career teachers in the profession	Fostering a disposition of sustained inquiry into teaching practice
Meeting immediate needs	Meeting immediate needs while developing a long-term plan towards reform-based teaching
Sharing experiences and daily problems	Considering teaching as a complex process, where reflection brings about several questions relating to practice
Providing of copies for lesson planning	Using existing knowledge of students and their work samples to plan lessons that support specific topics

Sharing of advice from mentor to novice	Valuing the contributions and ideas of both stakeholders (mentor and mentee) within the mentoring process

(Bradbury, 2010: 1052).

Evidently, there are some advantages to utilising educative mentoring processes, with regards to considering both the short-term and long-term of novice teachers. The underlying concept which underpins this model of mentoring are the collaborative contributions from student teachers and mentors involved within the process (Bradbury, 2010). This context resonates with the characteristics which underpin constructivist approaches (see section 3.9.4). However, the implementation of this model is based significantly on the roles of mentors to facilitate effective mentoring. Importantly, Bradbury (2010) explains that the role of the mentor within this model is pivotal towards the success of educative mentoring. Collaboration plays a significant role in facilitating the aspects considered with educative mentoring, with reference to navigating the short and long term objectives for the student teacher with the mentor.

3.8.5 Summary of the section

From the aspects considered, conclusions could be drawn with regards to the advantages and disadvantages of the models of mentoring that have been explored. In support of this, Scanlon (2008) reports that a mentor can extract ideas from differing models of mentoring in alignment with the circumstances they are presented with. For example, implementing coaching or counselling if required. Essentially, this facilitates the idea of the mentor utilising a coaching or counselling intervention, dependent on the situation concerning the mentee (Scanlon, 2008). This resonates with Burn et al., (2000) who argue that there are no familiar or uniformed stages of student teachers' development. Perhaps, this reflects the variance of challenges which are presented within school cultures, which differ from perspective students (Burley and Pomphery, 2011; Pollard, 2011). The thinking which pervades this stems from the need for teachers to understand student teachers' needs and mentoring desires with regards to achieving the best possible results. Additionally, Burn et al., (2000) highlight that student teachers must be informed about a particular style/model of mentoring, and the importance attributed to this. Essentially, collaboration between teachers and student teachers remains the catalyst for mentoring goals to be achieved. Wang et al., (2008, citing Williams et al., 2001) explain that a comparative study in Britain revealed that structured collaborations between supporter teachers and student teachers

significantly improved teaching and learning within schools where a collaborative culture, was fostered, in comparison to, individualistic cultures which promote segregation of learning communities. The next section, examines some theories which underpin the models of mentoring that have been explored and discussed.

3.9 Theoretical approaches towards mentoring within an ITE context

Within this section, the theories that underpin mentoring relationships are discussed, with some exploration of the essential features of mentoring within ITE contexts. Through varied conceptual lenses, it is hoped that some rationale can be provided, with regards to understanding why a teacher educator may adopt a particular theory or model attached to mentoring. More importantly, this section aims to provide some theoretical underpinning and understanding for the justification of the collaborative mentoring relationships being utilised within this study. Various theories of mentoring are identified within the literature but for the purpose of this study, the theories considered for discussion are as follows:

- The Apprenticeship Theory
- The Socio-Cultural Theory
- The Reflective Theory
- The Constructivist Theory

3.9.1 The Apprenticeship Theory

The apprenticeship approach towards learning has been utilised as a means of learning before the advent of formal schooling. Aspects of this concept can be likened to the traditional approach described by Goffman (1959) who recognised that certain situations require people to express themselves consistently, in accordance with the traditions of their social group or the social status required for that specific setting. The apprenticeship approach is recognised as a process which facilitates knowledge transfer, particularly within social settings involving skills from experts to novices (Collins et al., 1990). Several practitioners also recognise the apprenticeship system, as still dominant within initial teacher education (Krull, 2005). The apprenticeship conception of mentoring is not restricted to educators and researchers exclusively. Recent studies (Burley and Pomphery, 2011; Christie, 2014; Hickson, 2011) indicate that the most common implementation of mentoring reflects the apprenticeship model (Bradbury and Koballa, 2012; Bold, 2008). Perhaps, this derives from the apprenticeship

approach to mentoring, which allows supporter teachers' to demonstrate the significance of being an experienced practitioner to student teachers in the development of relevant professional knowledge and skills (Krull, 2005; Leidenfrost et al., 2011; Lofstrom and Eisenschmidt, 2009). For example, cognitive apprenticeship is focused on providing guidance centred on the induction of student teachers into the school system, to better understand the ethos and culture that underpin the school (Brown et al., 1989). Significantly, Bandura (1997) proposes the concept of modelling, by suggesting that modelling practice, for the mentor/supporter teacher can demonstrate how both can work collaboratively to facilitate a lesson to achieve educational goals using different examples. Bandura, however, warns that student teachers need to be attentive, studious and highly motivated to learn and improve upon professional practices, through utilising reflexive processes. Vygotsky's Zone of Proximal Development (ZPD) theory also posits that genuine tasks where difficulty could be experienced by the student teacher left to configure and problem-solve individually, would not be productive over structuring supportive processes where colleagues are able to learn from each other (Brown et al., 1989; Bold, 2008). This premise configures with Pollard (2011) who suggests that learning needs are not an individualistic activity. This conception acknowledges that learning from others is essential for effective teaching and learning. Therefore, mentors must understand this whilst observing teachers (Stephens, 1996) and provide necessary assistance to student teachers when problems in practice arise (Fieman-Nemsar, and Beasley, 1997).

Kaasila and Lauriala (2010) also explained that initial teacher education strongly maintains a set of prescribed rules, with an ethos that strongly advocates student teachers' to comply with proposed practices, particularly during field experience. For student teachers to access such information there becomes a particular reliance on the cooperation and support of their mentors/supporter teachers (Ghaye, 2011). Similarly, apprenticeship theory could be utilised to encourage socialization and induction of student teachers into school communities (Kaasila and Lauriala, 2010). Additionally, Lofstrom and Eisenschmidt (2009) maintain that the apprenticeship approach can assist student teachers to comprehend and adjust to the prevailing school norms and cultures within that context. Similarly, Brooks and Sikes (1997) recognise the potential for the apprenticeship model towards mentoring, suggesting that the factors that underpin this model encourage positive contributions towards, effective teaching and learning. Through a practitioner lens, it could be considered that this model could encourage student teachers to operate in conformity with school culture in attempting to satisfy other school objectives. Importantly, Freire (1972) concludes that traditionalist approaches to education, regarding the apprenticeship style, can be used in a forceful manner to perpetuate the integration

of people into a structured system, to ensure their conformity to the system. However, he contends that such approaches represent oppressive regimes because learners are not provided with an opportunity to contribute. Lortie (1975) has conceptualised the apprenticeship model as a form of learning, through the practitioner lens of using apprenticeship as a means of observation. This conception posits that students sometimes develop interests in teaching, or gravitate towards a particular method of teaching after evaluating other teachers' methods of teaching (Borg, 2004). Fieman-Nemsar (2001) and Nguyen (2009) argue that an individual's experience at schools significantly influences their epistemological and ontological beliefs, with regards to societal values and their thinking about the world. Thus, student teachers in some situations tend to emulate their past teachers, based on what they have learned and observed within a habitus context, with regards to organising learning within a classroom (Lortie, 1975).

However, contrastingly, this could be beneficial when the teachers emulated are enthusiastic, empathetic and can navigate through different scenarios to achieve purposeful and specific educational goals (Bradbury, 2010). However, some of the features which underpin apprenticeship theory have been criticised. For example, aspects of this model do not recognise the natural endowment of student teachers, with regards to teaching ability, existing skills and knowledge, despite arguments from scholars stating the importance of existing beliefs and values to inform ideas on teaching and learning (Furlong and Maynard, 1995; Nguyen 2009; Lofstrom and Eisenschmidt, 2009). Additionally, from an autocratic point of view, this also promotes experience over the embracing of new innovative concepts which may positively inform existing practice (Boud, 2006; Boud et al., 2006). Such resistance ultimately promotes the discouraging of new approaches towards teaching and learning (Rippon and Martin, 2006). Similarly, Brown and McIntyre (1993) concede that experienced teachers sometimes struggle to embrace new more innovative practices, which impact on professional knowledge and practice. According to Rippon and Martin this view negatively implicates the validity of apprenticeship models.

Earlier commentaries within the chapter highlight, that students gain a lot from observing and, placing those observed skills into practice, particularly when they have observed enthusiastic and innovative practitioners (Pollard, 2011). Conversely, however, it could have detrimental effects on students. Borg (2004) utilises Lortie's (1975) conception in arguing that such contexts can discourage students from implementing new skills and methods learned during a programme of study, as some practitioners may want to revert to existing conceptions of teaching based on their observations of teachers within educational settings. Significantly, this approach does not facilitate deeper learning with regards to how students think, when considering the negative

effects of certain approaches, with innovation often considered as an afterthought, in favour of structured practices (Borg, 2004). Apprenticeship theory also maintains traditionalist and hierarchical norms, by unconsciously positing that mentors retain superior knowledge over their mentees (Shank, 2005). Freire (1972) described such a situation as an educational process characterised by a banking system. That is, a situation which reflects autocratic governance, where teachers or mentors maintain control over students, as they are considered as only receivers of information rather than equal providers. In support of this, Kafai et al., (2008) describes the apprenticeship approach as an approach that promotes a deficit thinking process towards mentoring, in that mentees are considered incapable of making or contributing to decisions concerning teaching and learning.

3.9.2 The Socio-cultural Theory

The socio-cultural approach to learning is grounded in situated cognition theory which suggests that learning occurs from lived experiences within a context or culture (Brown et al., 1989). Influences attached to socio-cultural theory, can also be attributed to Vygotsky's social development theory. Within this theory, Vygotsky (1978) asserts that the development of a child cannot be fully understood by observing the child in a solitary capacity alone. Rather, other contexts need to consider the environmental impact that has influenced the child's values and beliefs. Perhaps, given this context, this is why Hargreaves (2003, cited by Kougioumtzis and Patriksson 2009) argues that schools which represent a context for learning also reflect the historical, political, economic and sociological features of a country. Importantly, Kaasila and Lauriala (2010) emphasise the need for socio-cultural settings to be considered in trying to signpost teacher education goals. Thus, Ponte (2010) asserts that for effective teaching and learning to occur within an ITE context, socio-cultural aspects of schools need to be considered regarding where student teachers' undertake their field experiences. Essentially, Vygotsky argues that learning occurs through a course of interaction which facilitates a given context:

> 'Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological) and then inside (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher originate as actual relationships between individuals' (Vygotsky, 1978: 57).

Vygotskian theory attempts to clarify that any type of socialisation process encourages the development of consciousness. Additionally, Koballa et al., (2010) argue that socio-cultural

theory advocates individuals' participation within learning contexts, to promote meaningful changes to professional dispositions and orientations. Koballa et al., (2010, citing Nasir and Hand, 2006) highlight the impact of further cultural facets within a learning context, as imperative towards student learning. Thus, aesthetics within the classroom environment may impact greatly when acknowledging environmental and cultural tools such as the material (furniture, technological devices, classroom arrangements, etc) and non-material (values, norms, language, etc). Such contexts require adequate attention in the facilitation of student teacher learning. Furlong and Maynard (1995) maintain that mentoring orientates practical processes which involve the participation of the mentors and the mentees, when considering learning, and the concepts and practices to be derived from that learning. Similarly, Bradbury (2010) contends that learning occurs within social process that is not separate from the cultural context.

Hence, Furlong and Maynard (1995) highlight the importance of utilising conceptions of mentoring, which specifically support the needs of student teachers'. Furthermore, Bradbury (2010) explains that the experiences gained, by mentors assist in facilitating and supporting the classroom experiences of student teachers' by signposting them towards effective practices for teaching and learning. This supports the thoughts of Vygotsky (1978, cited by Souto-Manning and Dice 2007) who argues for mentors to be competently responsive, to the variation of needs encountered by the student teacher for learning within a social construct to be effective. The sense of pro-activeness associated with this type of intervention, resonates with mentoring being viewed as a responsive activity, Brown et al., (1989) explain that situated cognition, accommodates changes that may occur within society as learning tends to reflect the content and culture reflected within society. Additionally, mentors also need to correlate student teachers' experiences, with relevant classroom practices to enhance learning (Souto-Manning and Dice, 2007).

While aspects of socio-cultural approach have been widely conversed and discussed, there does seem to be a restricted view regarding the scope for innovative processes, with particular regard to, when the leadership presented reflects a conservative approach (Souto-Manning and Dice, 2007). Kougioumtzis and Patriksson (2009) acknowledge the position of socio-cultural theories in effective mentoring, but caution that senior leaders within a school context may significantly impact the facilitation of mentoring practice within a school, dependent on the priorities, or the agenda of the school. Within this context, this could encourage some of the deficiencies of the apprenticeship approach towards mentoring to emerge.

3.9.3 The Constructivist Theory

Piaget is widely considered as the originator of constructivism, as we define it presently. Leach and Moon (2008: 58) acknowledge Jean Piaget and John Dewey as the first major contemporaries to develop a clear idea of constructivism, in realising the potential for this to be applied to childhood development and classroom contexts. Other contributors to the Zeitgeist include Bruner's (1983) learning theory; Bandura's (1977) social cognitive theory; Lave and Wenger's (1991) situated learning theory and Vygotsky's (1978) social learning theory. Their conceptions suggest that individuals gain knowledge best, as part of a collective, through a spiral of self-construction (Allen, 2008). Importantly, Piaget defines knowledge in this respect, as easily attainable for an infant or an individual. Neither, is it absolutely inherent within an infant or individual, but significantly, this is encouraged through interaction, within varying environments whilst exploring the components within those situated settings (Allen, 2008). According to Kim (2001), constructivism is characterised through the following assumptions: reality (being a product of human activity), knowledge (being generated from social and cultural interaction) and learning (being a process that is not restricted to individual activity). Thus, Allen (2008) explains that a constructivist paradigm acknowledges the learning that is brought to the situation, from learning experiences and knowledge, from existing experience. Allen (2008) declares that this particular knowledge strongly influences the processes, by which learners construct meaning, and acquire new knowledge from new experiences. With regards to, pedagogical techniques employed, constructivism encourages teachers to serve as facilitators of learning, with student-centred learning at the epicentre of this paradigm (Allen, 2008).

The constructivist theory derives from constructivism. Kincheloe (2005) utilises Freire's (1972) conception of this paradigm, which contends that critical constructivism does not observe knowledge as an object that can be supressed, and revealed on demand. As such, critical constructivism views the creation of knowledge as something stimulated by the influence, with society or environments influencing that phenomenon (Kincheloe, 2005; Pritchard and Woolalard, 2010). However, this paradigm embodies some of the principles from constructivism, in recognising the capital attributed towards getting mentors and mentees to actively engage in the process of knowledge creation through socialisation. Kincheloe (2005) explains that critical constructivism supports collaboration as a framework for enabling creating knowledge within a context. This context is targeted at actively encouraging supporter teachers and student teachers to be involved in the production of knowledge, in particular the rationale associated with ideas and constructs that facilitate collaboration. Significantly, it does not encourage 'spoon-feeding' of

information to student teachers, as emphasis is placed on collectively discovering knowledge, rather than the trainee being absent during this process (Allen, 2008). Furthermore, this conception encourages for improved understanding of teaching discourse to be facilitated by collaborative investigation (Fieman-Nemsar, 2001; Schon, 1987; Wang and Odell, 2002). This is consistent with Freire's philosophical assumption which identifies the importance of individuals' to acknowledge aspects of personal consciousness which affect personal development (conscientisation). Freire, defines conscientisation, as an enabling factor in the engagement of active learning by utilising meaningful dialogue, reflection and communication.

Thus, a constructivist mentoring process is underpinned by collaborative endeavour between supporter teachers and student teachers, in the exploration of pedagogical approaches, and disseminating good practice and ideas, which contribute towards the generation of new professional knowledge (Lave and Wenger, 1991; Pritchard and Woollard, 2013; Rhodes et al., 2004). From this perspective, constructivist theory challenges traditionalist norms which resemble hierarchical structures in relation to mentoring, where mentees are the receivers of knowledge without input, questioning or discussion. The disposition presented acknowledges the primary goal of constructivist thinking, which embodies the transformation of teaching and learning through collaborative processes between supporter teachers and student teachers (Wang and Odell, 2002).

For transformative, teaching and learning to be achieved, stakeholders within the mentoring process need to be critical of existing practices and professional cultures within the school. The thinking that pervades this, argues for the improvement of professional practices (Cochran-Smith, 1991 in Wang and Odell, 2002). Significantly, Kougioumtzis and Patriksson (2009) contend that, cultures which foster collaborative endeavours contribute towards effectively resolving difficulties within the school environment. Purposefully, this thinking is situated within a community of practice (Lave and Wenger, 1991) framework where ideas are disseminated regarding professional practice. Constructivism also identifies with cohesive dialogue (Siry, 2011), which involves teachers and student teachers engaging in socially stimulating environments and professional dialogue for improving professional practices related to teaching and learning. Furthermore, Siry (2011) emphasises that professional dialogue is an important factor in rationalising collaboration, with regards to exploring opportunities for co-teaching and the joint construction of knowledge, in facilitating improved practice towards teaching and learning. For constructivist mentoring to be implemented, mentors and student teachers, are required to adopt the principals, which underpin this theory (Wang and Odell, 2002).

The constructivist paradigm encourages continuous inquiry regarding conceptions concerning teaching and learning, collaborative practice and reciprocity between mentors and mentees (Bruner, 1983; Bandura, 1977; Vygotsky, 1978). Within this context, similarities are consistent with cooperative inquiry described by Heron and Reason (1997) as the collaborative efforts of individuals focused on a participative vision. Torbert (2000) suggests that cooperative inquiry derives from a commitment to embrace communities of inquiry which enable varying subjectivities and differences in perspectives. However, constructivism is also critiqued for a number of reasons. Wang and Odell (2002, citing Cochran-Smith and Lytle, 1991) argue that the constructivist paradigm for peer and collaborative mentoring is founded on the assumption that pedagogical conceptions are problematic if they are not developed or resolved through collaboration between stakeholders/ colleagues in the mentoring process. They conclude that, it may not be viable for teachers to be fully immersed within collaborative inquiry, with regards to aspects related to teaching and learning. According to Kaasila and Luariala (2010), the changes in teacher education identify with multi-faceted approaches. The premise for critical (radical) constructivism recognises that potentially, this theoretical paradigm could facilitate multi-faceted endeavour such as mentoring because of the focus on the individual constructing reality for themselves (von Glaserfeld, 1989). However, Kaasila and Laurila (2010) note that difficulty may arise, with regards to agreeing a coherent and working definition, which embraces the combination of different ideas. The critical and reflective constructivist also encourages equal participation, with significance attributed towards valuing contributions from mentors and trainee teachers (Wang and Odell, 2002). However, reality may dictate that values, needs and experiences may differ depending on the context presented.

3.9.4 Justification of the constructivist theory within an Initial Teacher Education (ITE) context

This section attempts to examine, some theoretical approaches towards mentoring through a constructivist paradigm and their potential implications within an ITE context. From the aspects explored, it appears that some of theoretical approaches to mentoring are situated within two main conceptions, namely: bureaucracy and participation (Vonk, 1993). The bureaucratic viewpoint, observes that the student teacher needs to implement programmes within the classroom, and engage from a participatory perspective, which encourages effective decision-making about wider perspectives associated with the school (Harrison and Pell, 2006). This resonates with Krull's (2005) conception who also contends that mentoring is influenced by Dewey's apprenticeship approach where learners engage in activities with the objective to

develop professionally. Therefore, importance must be attributed to supporter teachers, in raising awareness, to utilise a mentoring model that is informed by some of the varying theories explored, particularly when applied to different purposes and perspectives. Furlong and Maynard (1995) argue that, student teachers' exhibit complex learning needs, which change continually, parallel to their professional development. They posit that these needs require accommodation and support for significant and purposeful learning to occur (Furlong and Maynard, 1995). Importantly, to accommodate this practice, Vonk (1993) asserts that supporter teachers need to be well-informed about the theoretical approaches used to foster effective mentoring, in order to achieve mentoring goals. Further, Lofstrom and Eisenschmidt (2009) argue that, the understanding of various approaches to mentoring, and how these approaches can be best applied, redirects the intensions of a good supporter teacher from more directive approaches, towards supporting student teachers development, with more collaborative processes.

Within this study, mentoring is defined as a collaborative endeavour targeted at the professional development of both mentors and mentees, as reciprocal learners (Le Cornu, 2005). Mentoring is also believed to be complex and subjective based on the context in which it is applied (Christie, 2014). Margolis (2007) reports that a combination of varying approaches to mentoring, which embody openness and collaboration, facilitate positive discourse concerning improved teaching and professional development. For collaborative mentoring to be achieved, mutual dialogue is considered as an imperative. Despite this, Gardiner (2010) warns that mutual dialogue may not be sufficient if varying viewpoints and approaches are not examined. Within this context, the constructivist paradigm appears to identify with the principals which underpin this study. The context considered recognises participation, with regards to encouraging active participation of mentors and mentees. The ideas which underpin this also combine principles from the apprenticeship, socio-cultural, reflective and collaborative theories to promote effective peer-mentoring (Le Cornu, 2005). Nokes et al., (2008) argue that teachers' learning and development could be enriched by engaging in practice which facilitates collaborations and experimentation. Further, Hobson (2002) utilises Vygotskian theory to indicate that human activities such as learning and knowledge acquisition are grounded in communal discourse rather than isolation.

Earlier references within the section indicate that constructivism encompasses a variety of social constructs to support effectiveness in implementation. This study does acknowledge some of the criticisms attached to this theory, more specifically the issue of equality within mentoring relationships between mentor and student teacher. Other aspects also consider that transformative processes which develop or improve, will also present challenges if this is not

managed sufficiently (Mortimore, 2001). However, constructivist principles can be implemented effectively, when mentors and mentees are navigated towards effective preparation for a collaborative mentoring amalgamation (Gardiner, 2010).

Clarity of terminology used to conceptualise and define mentoring is also important. Earlier commentaries (Gardiner, 2010; Loughran, 2010; Siry, 2011; Vonk, 1993) note that, constructivism can effectively support, communicative teaching and learning through equal participation in collaborative inquiry. This is considered a key component of mentoring. Equality is recognised as a central component of constructivist thinking (Wang and Odell, 2002; Lofstrom and Eisenschmidt, 2009). In avoiding a misinterpretation of the term equality, Blasé (2009) indicates that active and equal exploration between mentors and mentees is a necessity for effective mentoring. Within this study, equal participation is utilised not to infer equality in the status of experienced teachers and student teachers. The meaning of equality within this context is defined as equal or reciprocal participation, for both mentors and mentees, to enable cohesive partnerships which embody professional respect at their core (Blasé, 2009).

Conceptually, constructivism may be viewed as a means of maintaining team cohesiveness between teachers and student teachers (Pollard, 2011; Tomlinson, 2004). Goffman (1961) observes a team as a group of individuals who need to cooperate irrespective of social structures or constraints. Boud (2010) contends that this conception acknowledges that, both teachers and student teachers need to have input. This prohibits allegiance to schools or universities within this context, but rather, accepts that mentoring is best conceptualised through mutual learning based on collaborative philosophy. Long (2009) argues that the teaching profession needs to eliminate static mentoring initiatives where hierarchical and traditionalist perspectives are upheld. Alternatively, Long (2009) infers that mentoring programmes are needed where teachers motivate and engage actively, in addition to, beginning teachers being viewed as co-learners and receivers of knowledge. Spezzini et al., (2010) indicate that collaborative mentoring is successful where professional, practical and reflective activities underpin the mentoring discourse. Additionally, Blasé (2009) contends that significant learning in teacher education supports a post-modernist paradigm for teaching, with regards to how teaching and learning is conceptualised by stakeholders and practitioners within teacher education and in schools.

Considering its integrated nature, the review of literature presented contends that constructivist theory can facilitate the fulfilment of collaborative and effective mentoring relationships in this study. Essentially, varying commentaries conclude (Ghaye, 2011; Le Cornu, 2005; Pollard, 2011) that constructivist theory, can be used as a stimulus to characterise and underpin aspects of

effective mentoring. The constructivist paradigm aligns itself with the active participation, and development of pedagogical and management skills in the classroom environment, where relationships are established, and feedback is stimulated (Bandura, 1977; Bruner, 1983; Berliner, 1987; Ghaye, 2011). Podsen and Denmark (2000) and Souto-Manning and Dice (2007) contend that the enactment of collaborative mentoring, is beneficial when trainee teachers work in a combined capacity with experienced teachers which embodies reciprocity. This study also acknowledges the importance attributed towards learning communities (Lieberman, 2000; Wenger, 1998), and their advocating of minimising within mentoring relationships the challenge of power, in attempting to ensure that such endeavours do not resemble an expert-novice hierarchical structure (Souto-Manning and Dice, 2007). Thus, the components associated with mentoring coupled with the quality of dialogue between practitioners within the mentoring construct, particularly, between supporter teachers and student teacher are key factors to the enactment of the collaborative mentoring relationships (Edwards, 1995; Kensington-Miller, 2011).

3.10 Considering mentoring programs within initial teacher education

The goals and purposes of mentoring programs vary in different settings and according to Odell (1990) such programs vary in structure. However, Odell (1990) explains that such programs encompass a common fundamental goal of providing beginning/student teachers with well-structured and supportive foundations for induction into the teaching profession. Specific aims and goals identified in some programs include improving trainees' classroom practices by strengthening commitment towards teaching; providing pastoral support to decrease feelings of isolation among new teachers; introducing and making accessible curriculum materials; integrating new teachers into the school culture; building collegiality; encouraging reflective practice; encouraging the undertaking of action research into own teaching practice; and encouraging collaborative learning communities which inform the improvement of pedagogical learning (Feiman-Nemser and Parker, 1990; Lieberman and Pointer-Mace, 2009; Mullinix, 2002; Evertson and Smithey, 2000).

Literature suggests that for teacher mentoring programs to work, interactions must be encouraged, in attempting to establish rapport between teachers and mentees (Hobson et al., 2009; Le Cornu, 2009; Ligadu, 2008). Importantly, the implementation of positive relationships, support the possible implementation of a successful mentoring program within a particular working environment. The capacity for both encouraging and managing professional intimacy is a key component within the mentoring construct. Fox et al., (2010) contend that without strong

relationships built on common experience, trust, and a strong judgemental disposition, a mentoring program is unlikely to flourish. As Perry (2000) indicates these are essential components of an effective mentoring program. Some components are based on the accessibility of mentors to student teachers; with regards to the idea of collaboration and disseminating ideas on teaching and learning strategies; and the provision of pastoral, psychological and professional support to motivate and increase teaching competency.

Specifically, among the important elements for incorporation within a mentoring program are effective questioning strategies; teacher roles and relationships; professional personal development; and effective support systems including provision of resources by mentors to improve the induction programme and thus the experience of student teachers (Hudson, 2013). Importantly, McCormack (2007) argues that the mentoring program needs to be more than just supervisory or formal in its implementation. Rather, he contends that it should not just acknowledge professional learning and development, but also the need for the mentoring relationship to be based upon mutual cohesiveness, agreements and constructive communication. Importantly, well -structured mentoring programs should facilitate professional development, personal growth and empowerment, promote diversity and provide continuous support (Pollard, 2011). Generally, most mentoring programs avoid some forms of orientation, induction or training. Some programs utilise team approaches to facilitate such purposes, in which the teachers feel the support function, while others judge their trainees performance for purposes of employment or satisfying of particular standards of assessment. Other programs provide mentors; in particular that of subject mentors, with a prominent role in navigating student teachers pedagogical practices (Feiman-Nemser, 1990).

Feiman-Nemser (1990) contends that subject teachers appear to benefit from the support and training needed to become successful mentor. The abilities, personal and professional characteristics required of the mentor, provide the basis for critical components of a successful mentoring program. Consequently, equality mentoring program defines criteria for selection of mentors. Ganser (2006) suggests that normal criteria will often include experience, knowledge, skills, attitudes and values, with the process and content of the mentoring relationship determined by the goals set by the supporter teacher and student teacher, within whichever context the mentoring provision operates.

The literature on mentoring training in preparation is helpful in determining essential criteria to include in the training and preparation of teachers to become subject mentors (Ghaye, 2011). According to McIntyre and Hagger (1993) the need for such training has been heavily

emphasised within initial teacher training. However, training involves highly contextualised learning and is not always easy to determine what is most relevant in an effective mentoring program (Carter and Francis, 2001). Significantly, Christie (2014) highlights that teacher mentor training mentoring programs are normally configured and designed to train mentors and mentees in similar ways, so that equality of understanding is extracted from the experience. Topics covered normally include the functions of mentoring such as coaching skills, trust-building, problem definition, problem-solving, planning alternatives and formulation of pedagogical practices and how this translates within the classroom environment (Hudson, 2013; Mullen, 2005). The pertinent areas of student teacher development are situated around training and learning for improvement in the refinement of teaching behaviours such as lesson preparation, classroom management skills and reflection (Furlong and Maynard, 1995; Tomlinson, 2004).

Kensington-Miller (2011) identified that professional cultures that embody mentoring as a worthwhile activity are pivotal towards this process. Such integrated cultures reflect conducive, collaborative working environments for student teachers. Kensington-Miller (2011) suggest that such cultures are characterised by corporation communication, and collegiality; which is adaptive to the changing needs of student teachers, in attempting to provide an environment which accommodates educating trainees in attempting to develop their professional growth. Within this context, political support is an important factor in teacher development and teacher mentoring programs must reflect this within their designs when considering this particular component of support for student teachers (Hickson, 2011).

The following section details a number of existing mentoring programs. These mentoring programs derive from various sources, summarised in Table 3.2. Exploration of these programs provide insight into and guidelines for adapting and implementing varying approaches in the construction of mentoring programs or mentoring provision generally.

Table 3.2: Examples of mentoring programs

Examples of mentoring programs	Target group	Sources
Reformed-orientated-pre-service program -Conversations between student teachers and experienced teachers. -Expose novices to broad themes of reform through discussion of highly contextualised problems of practice.	Student teachers	Cochran-Smith (1991)

Communities of Practice and Learning Communities Program -To assist senior managers and leaders in developing capabilities and cultures in creating an educational vision, leading school improvement efforts, delivering through people and building commitment.	School leaders and management	Lave and Wenger (1991), Lieberman (2000), Ponte (2010)
The New Teachers Program -Support for new teachers; to retain and nurture good teachers. -An active involvement in a subject teacher, University tutor and school headteacher. -Emphasis on reflective learning.	School teachers, university teacher trainers	Burley and Pomphery (2011)
The GTA mentoring program (graduate teaching assistant) -Offers needed support for graduate students in training as scholars. -Development of personal professional relationship; discussion of teaching and research issues: increased professional support and increasing greater confidence in classroom instruction. -Provides social support and addresses as immediate concerns. -Teamwork by observing giving comments, discussion and class dynamics.	Graduate students and university lecturers	Gaia et al., (2003)
Internship scheme: Oxford University Department of education studies -Collaboration between school and university in the form of subject teachers becoming mentors.	schools, universities and subject teachers	Furlong and Maynard (1995)
UTP Urban Teaching Partnership program (UTP) -Prepares teachers to work in schools of high poverty, diverse student populations, urban contexts; blends theory and practice (praxis) of teaching.	Teachers	Dandy et al., (2001)

-Includes experienced teachers in the preparation of mentoring student teachers.		
Developing Beginning Teachers through: An Interactive Induction and Internship Program -Offers opportunities for practitioners to work alongside experienced practitioners. -Encourages learning with and from other student teachers.	Student teachers	Nugent and Faucette, (2004)

(adapted from Ligadu, 2008: 45).

The selection of mentoring programs depicts some diverse orientations to conducting mentoring programs for pertinent stakeholders such as, student teachers, supporter teachers and university tutors in varying settings and geographical constructs (Ligadu, 2008). The majority of these mentoring programs are focused on providing professional learning support to both student teachers and teachers that share a desire for developing trainees. Christie (2014) explains that such mentoring provisions provide an insight into the specific and salient nature of professional learning which is imperative in mentoring, particularly in developing aspects of self-efficacy within student teachers and professional autonomy.

3.11 Research Questions and Themes

1.) How can peer-mentoring and reflective practice contribute towards developing more collaborative learning with regards to student teachers' supporting one another through their teacher training?

2.) What are some of the challenges of peer-mentoring within a practical context during teacher training?

Teacher Trainer themes for considering Mentoring Practice within the ITE context

- Mentor Selection
- Mentor roles and responsibilities
- Mentor-mentee relationships
- The mentoring programme

- Potential for initiating and implementing peer-mentoring among trainee and student teachers

Mentoring dimensions:

- Defining mentoring
- Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention
- Studying teaching for personal improvement through reflection
- Establishing a Community of Practice
- Developing Trust within Peer-Mentoring
- Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study

Other mentoring themes and stimuluses' for consideration:

- Measuring the effectiveness of peer-mentoring
- Professional learning support
- Mentoring relationships and communication
- Teaching observations and assessments
- Mentoring roles and responsibilities

3.12 Summary

This chapter has explored literature related to mentoring within the initial teacher education context. From the literature reviewed, mentoring is considered as a collaborative endeavour between teachers and student teachers which endorses mutual learning and transformation of teaching and learning. Within this context, mentoring is considered to be beneficial to student teachers and supporter teachers, particularly in peer-mentoring contexts where trainees support one another's pedagogical learning and practice. The literature presented recognises that several components are required for effective mentoring to occur, and this needs to be considered during the planning and implementation phases of mentoring interventions to support student teachers. These components involve; active participation of student teachers and mentoring others, respect, pedagogical skills, mutual trust, reciprocity, communication and time for adjustment, among other components. However, it is imperative to acknowledge that such

components do not alleviate the challenges associated with mentoring in initial teacher education. This specifically, resonates with factors such as feedback, selection and matching, time allocation, training and frameworks. Within the chapter, varying models and discourse surrounding mentoring have been explored and considered, in addition to examining some of the theoretical dispositions that underpin some of these models of mentoring.

From the discourse presented, it is apparent that the models and theories attributed to mentoring practice are purposeful, but also fraught with practical challenges within an education context. However, in considering the features of these theories presented, a constructivist paradigm, which is often embedded and implemented in social learning and action research, will be utilised to facilitate the peer-mentoring to be enacted in this study. Purposefully, this aligns well with the conception of mentoring as a collaborative venture, which encourages the engagement of learning between teachers and student teachers. Finally, this chapter concluded with the research questions, sub-themes and contexts that will be signposting and navigating the methodological design and data collection phases and processes in alignment with the study's aims and objectives.

The next chapter presents the research methodology implemented to conduct this study.

Chapter 4: Methodology for Research Study

4.1 Introduction

This chapter discusses the methodological framework which guided the research study. Specifically, this section examines the schematic for the data collection protocols, with considerations given towards the research design and the integrative phases for data collection. Additionally, a rationale and summary is provided for each phase detailing why this casestudy was built around a four-phase, sequential data collection strategy. Detailed accounts of the participants' data collection (narratives) are provided, as well as the format and structure of the mentoring intervention, which was facilitated through various themed workshops. Lastly, the process for analysing data is considered, and issues concerning validity and reliability are acknowledged.

Strauss and Corbin (1998) define the term methodology as a way of rationalising thoughts about and studying social realities and contexts which supports the twin focus to educational research as: attitudinal- a distinctive way of thinking about educational phenomena; and action- a systematic means of investigating educational phenomena proposed by Morrison (2003). Decisions that navigate the selection of research methodology, Bell (2010) argues are dependent upon the nature of the enquiry and kind of information sought.

Importantly, to gain an understanding of how methodologies are devised and utilised, it is imperative to acknowledge the nature of philosophical inquiry or research paradigm. Broadly, these two traditions are separated into positivist or interpretivist viewpoints (Punch, 2009). Each tradition maintains key characteristics and assumptions which underpin their specific approach towards empirical research (See Table 4.1). Historically, these have been the overarching philosophical systems which indicate a particular ontology, epistemology or methodology (Denzin and Lincoln, 2011). Significantly, these paradigms represent a belief system that attaches the researcher to a particular worldview (Denzin and Lincoln, 2011; Lincoln and Guba, 1985). Further, this also positions the researchers' own ontological and epistemological view in determining reasons or providing a rationale for the selection of specific methodological tools or processes for data gathering and analysis. Pertinent to this study, an interpretivist approach was considered appropriate to facilitate the objectives and purposes of the research study. The purpose of this study was to explore how peer-mentoring can be used to inform reflective practice among student teachers, and how this could support the development of collaborative

learning, nurtured and captured within the context of action research (Ghaye, 2011; Lave and Wenger, 1991; McNiff and Whitehead, 2009; Pollard, 2011; Schon, 1987).

Table 4.1: Key characteristics and assumptions underpinning positivist and interpretive approaches to research

Positivist Approach	Interpretive Approach
Assumptions: • Social facts have an objective reality • Primacy of method • Variables can be identified and relationships measured • Etic (outsider's point of view) **Purpose** • Generalizability • Prediction • Causal expectations **Approach** • Begins with hypotheses and theories • Manipulation and control • Uses formal instruments • Experimentation • Deductive • Component analysis • Seeks consensus, the norm • Reduces data to numerical indices • Abstract language in write-up **Researcher role:** • Detachment and impartiality • Objective portrayal	**Assumptions:** • Reality is socially constructed • Primacy of subject matter • Variables are complex, interwoven and difficult to measure • Emic's (insider's point of view) **Purpose** • Contextualisation • Interpretation • Understanding actor's perspectives **Approach** • Ends with hypotheses and grounded theory • Emergence and portrayal • Researcher as instrument • Naturalistic • Inductive • Searches for patterns • Seeks pluralism, complexity • Makes minor use of numerical differences • Descriptive in write-up **Researcher role:** • Personal involvement and partiality • Empathic understanding

(adapted and taken from Glesne and Peshkin, 1992: 7; Zwokwiak-Myers, 2009: 103).

4.2 Action Research

Originally, derived from the work of Lewin (1946) the term 'action research' is based on the amalgamation of action and research. The process encourages teachers and practitioners to become researchers in evaluating their practice, through becoming involved in a cyclical process of planning, action, observation and reflection (McNiff, 2002; McNiff and Whitehead, 2009). Through utilising the findings derived from such endeavour the process then begins again, with a view towards improving pedagogical practices (Ghaye, 2011). Thus, action research underpinned with components of reflective practice provided the foundation for the methodology utilised within this research study. Primarily, this was due to the collegial and collaborative nature of the activities, the development of the peer-mentoring intervention, the agenda for the workshops and focus groups, and the evaluation of whether such endeavours promoted reflective practice.

The extensive work on teacher effectiveness and pedagogical strategies in classrooms in the USA during the 1960s and 1970s used systematic observation techniques (for example, Flanders, 1970), and these are still positively regarded for some purposes (for example, Galton et al., 1999; Pollard and Collins, 2005). A study undertaken by Hattie and Gan (2011) synthesized findings about the effects regarding a range of pedagogic strategies. In other discourse, action research has also been referred to as practitioner-based research (McNiff, 2002: 6). This study adopted this approach and acknowledged action research as a powerful instrument for reflection, change and improvement among student teachers (Cohen et al., 2011). The involvement of teacher educators were integral to the study, and pivotal towards the research design, as their insights guided some of the practical contexts which needed to be considered in configuring a student-teacher aimed peer-mentoring intervention. Moreover, the student teachers (participants) became fundamental in shaping the research design, as their initial insights highlighted areas for development regarding pedagogy, reflection and mentoring.

These insights greatly impacted the primary outcomes of this research, due to the participants developing pedagogically and being able to enact peer-mentoring with one another, through verbalising teaching experiences encountered during initial teacher training (Ghaye, 2011). From the insights gained, ideas then focused around developing a community of practice, through the utilisation of the peer-mentoring intervention (discussed in Phase Two of the research design), where reflective structures and relevant pedagogical components were prioritised, with the aim of improving teaching proficiency. Importantly, the rationale behind adopting this particular approach resonates with some of the ideas associated within disseminating knowledge within a supportive environment, thus providing opportunities for student-teachers to share or challenge

similar belief or value systems. The democratisation of such processes informs the development of professional identity, and supports the navigation of student-teachers through their induction into the teaching profession (Gardiner, 2010; Kensington-Miller, 2011). The nature of action research encompasses active participation, and more significantly, the endorsement of reciprocity as an important component, and the rejection of hierarchical expert-novice structures provided a platform of equality, where all participants were viewed as equal contributors towards the research process.

4.3 Ethical Issues

During this study, data were collected in accordance with the ethical guidelines of Liverpool John Moores University (LJMU), and the British Educational Research Association (BERA). Ethical approval forms were completed and deposited for consideration, ethical clearance and approval was given by the LJMU Research Ethics Committee. Permission to access participants and potential external institutions (schools and universities) were provided by the necessary stakeholders within those institutions and schools, by Headteachers and the ethics committee at LJMU. Following ethical approval, letters were distributed, detailing the contents and purpose of the research to the necessary participants. Additionally, intentions were made clear by the researcher for their aim to gain personal perspectives for the purpose of data collection process, to which all participants responded positively, citing and declaring their interest to be involved (see Appendix H).

All the participants within the study completed the consent form indicating their willingness to participate in this study (see Appendix H). The consent form equipped participants with information regarding the study and how data would be collated and stored. The participants were assured that the data collected was strictly confidential to be used solely for academic purposes. Importantly, data were sympathetically and carefully collected to avoid unwanted burden or added workload that may contribute to the pressure already associated with undertaking a programme of study on an initial teacher-training course. The research was participant-centred with convenient dates for meeting suggested by the participants. Interviews with the student teachers were conducted after school hours within the time frame advocated by the participants. The student teachers' were interviewed at a time of their own collective convenience at times and venues decided by the participants to facilitate their timetable and work schedules. Additionally, peer-mentoring intervention activities such as workshops and reflective group discussions were conducted at a time of convenience for the participants and were conducted for a duration of no more than an hour. The university tutors, who initially

participated in the needs analysis phase, were also interviewed at a time of their own convenience. The researcher disseminated all findings and feedback to determine accuracy and provide clarity on any components that were not understood from the data collected. Additionally, all participants were asked to observe whether the views collated, accurately reflected and represented their true and accurate views and expressions.

The participants' opinions and personalities were respected throughout the course of interaction. This was achieved by collectively agreeing a criterion for participation which all participants had to adhere too throughout the mentoring intervention. It was made explicitly clear to the participants that they could withdraw from the study at which ever point they may wish to do so. There was some acknowledgement from the researcher, that there could have been a conflict of interest due to the previous affiliation with the undergraduate students as a lecturer on their degree programme. However, due to the researcher's lack of conflicting interest within the actual ITT programme of study, the student teachers felt conformable in disclosing their thoughts and feelings concerning teacher preparation and peer-mentoring. Additionally, the student teachers were informed that they were required to complete open-ended questionnaires at pre and post phases of the mentoring intervention, in addition to short feedback questionnaires at the conclusion of the workshops to inform the evaluation and developmental process.

Permission was requested to use participant names anecdotally during interview recordings and within the written dialogues in the thesis. Participants were referred to by name in the collection of data during the focus group interviews, use of open-ended questionnaires and reflective entries. Tutors names and roles on the ITT programme were not mentioned in order to protect their professional identities and involvement within the programme of study. Important to the nature of the narrative and interpersonal approach adopted in the study, the participants gave their permission for their first names to be used, and were referred to by this within and throughout the duration study. Additionally, all the data collected was securely kept under a password protected computer and a secured cabinet during the process of analysis after which the data will be kept for a maximum period of two years and will then be destroyed, in adhering with ethical protocol advocated by the ethics committee at LJMU.

4.4 Research Design

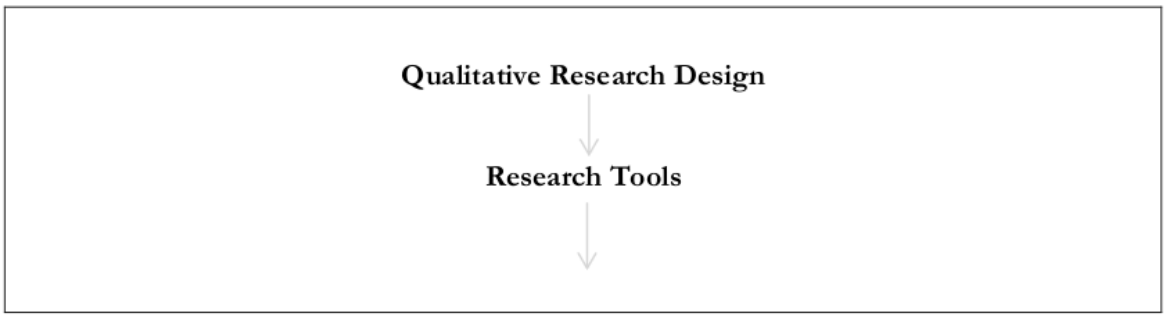
A strategy of inquiry provides general guidance concerning the process involved in designing research implements (Creswell, 2007; Creswell and Tashakkori, 2007). Importantly, Lankshear and Knobel (2004) posit that research design is a pertinent process through which research is undertaken within a specific situation or context, significantly, this may also determine or

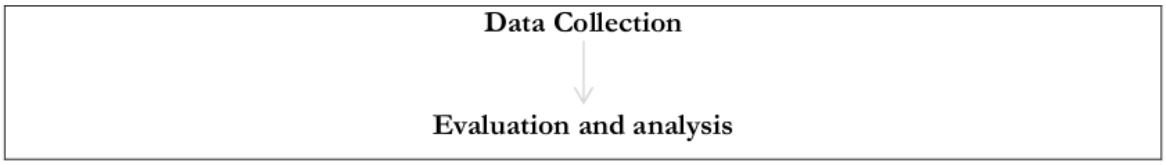
measure the effectiveness of the study. This study is situated within the qualitative interpretative method approach, where educational contexts and knowledge exchange are primarily explored through a casestudy.

Yin (2003: 13) conceptualises the case study as an empirical study, which broadly speaking is used to investigate 'contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon's and context are not clearly and entirely evident'. Within this study, the phenomenon for exploration was peer-mentoring, with regards to how this endeavour could facilitate reflective practices among student teachers within an action research framework. This study was therefore defined by a small group of student teachers from one university degree ITT programme of study.

The qualitative research method identifies inherently with the social sciences, and is embedded within naturalistic processes and inductive reasoning. The qualitative position adopted within this study acknowledges understanding a perceived reality through lived experience and research participant involvement, in addition to the meaning attributed to certain activities or behaviours within a specific context (Linde, 2001; Valadez and Bamberger, 1994). Thus, varying approaches can be utilised to achieve this end. However, the reliance on purely qualitative methods can be problematic due to the heavy interpretive nature of this approach (Cohen et al., 2011; Robson, 2002). Therefore, during the research design caution was implemented to ensure that the research adhered to the removal of researcher and subjective bias by utilising a robust qualitative approach. The design of the research follows a concurrent triangulation strategy where varying methodological tools (reflective pro-formas; interviews, questionnaires, peer-mentoring intervention and focus groups) were used to collate data (see Figure 4.1). After the phases of data collection, then followed the interpretation phase, where the findings were evaluated, analysed and discussed to derive understanding (Creswell, 2007; Dunne et al., 2005).

Figure 4.1 A concurrent strategy used to illustrate the process for the triangulated research design





(Creswell, 2007).

4.5 Research Methods

This procedure reflects the method through which data is collected, analysed, interpreted and reported within a study (Creswell, 2007; Dunne et al., 2005). This context signposts and acknowledges that the research method considerations involve a number of stages and phases to facilitate a conceptual framework. In designing a research framework, research themes and research questions were developed to navigate the research study (see Table 4.3) these are as follows:

Research Title: An exploration of peer-mentoring among student teachers to inform reflective practice within the context of action research

Research Questions:

1.) How can peer-mentoring and reflective practice contribute towards developing more collaborative learning with regards to student teachers' supporting one another through their teacher training?

2.) What are some of the challenges of peer-mentoring within a practical context during teacher training?

To consider this context, the following fluid sub-questions and stimulus were proposed to help navigate the main two research questions:

1. **Considering the impact of mentoring on student teachers**
   - How do student teachers conceptualise mentoring and how do they think it can be improved to assist student teachers in the beginning of their professional development?

2. **Using peer-mentoring to inform collaborative learning and discovery**
   - How can peer-mentoring contribute towards developing more collaborative learning communities with regards to student teachers' supporting one another through their teacher training?

3. **Measuring the influence and impact of constructivist thinking on teacher development and mentoring**

- How can cultures of collaborative learning be developed and how can their effectiveness/ impact be measured?

4. **Creating reciprocal learning experiences in mentoring through utilising peer-mentoring**

- What are some of the challenges of peer-mentoring within a practical context during teacher training?

5. **Utilising reflective practice to better inform the mentoring process**

- How can mentoring be developed to become a *'truly'* reflective process for educational practitioners (student teachers and experience teachers)?

Through the implementation of a qualitative approach, a casestudy was designed involving a group of four student teachers, with the aim of gaining an in-depth understanding of how peer-mentoring could inform reflective practice among student students, subsequently through an action research approach. The concept of a casestudy is strongly associated with qualitative research although it is used in a variety of ways (Bogdan and Biklen, 2003: 54; Stake, 1995). An important context to acknowledge, and an aspect that pertains to the effectiveness of the casestudy is the possibility for informative data collection from multiple sources within varying or particular contexts (Cohen et al., 2011). The effectiveness in this case was illustrated by the process of getting the student teachers' to evaluate their own teaching through reciprocal processes, in alignment with sharing their experiences of the issues they encountered during their initial teacher training. The approach towards this casestudy was built around a four-phase, sequential data collection strategy (Table 4.2) where qualitative data was collected throughout the research process.

Table 4.2: The Four-Phase Sequential Data Collection Strategy

Phase 1: Needs Analysis
Pilot open-ended questionnaire Considering data collection procedures Creating a criteria for participant inclusion Participant recruitment and selection Developing ideas around the development and content of the workshops Analysis of education policy and teaching documentation Pre-intervention questionnaire Focus group discussion sessions Teacher educator semi-structured interviews Professional insight from colleagues involved with initial teacher education Review of mentoring and reflective literature to theoretically inform the research process
Phase 2: Peer-Mentoring Intervention Workshops
Twelve student teacher led and themed workshops Disseminating best practice from the peer-mentoring reflective conversations Working within a community of practice Utilising the reflective pro-formas to inform the process Resource development to improve teaching and learning practice Written evaluative feedback
Phase 3: Reflective Practice
Student teachers reflecting on areas for improvement derived from reflective conversations in peer-mentee pairings Reflecting on areas for improvement Collectively deciding on best practice for dilemmas diagnosed in teaching practice Suggestions for how to measure effective teaching practice Reflecting on pertinent reflective and pedagogical literature Reflecting on significant improvements and knowledge gained within the workshop session
Phase 4: Evaluation, Mapping and Alignment of Mentoring Intervention
Written feedback summaries provided at the end of each workshop Feedback completed to measure and reflect on relevancy of collectively agreed content Reflective pro-formas Focus group discussions Researcher reflection on the peer-mentoring intervention Review of content throughout the peer-mentoring intervention Alignment of intervention to practical and contextual situations

In collecting data, a variety of sources for interpretation, evaluation and analysis was used to construct meaning. Some of the data collection protocols involved participants (student teachers) completing reflective pro-formas within the peer-mentoring pairings, and then disseminating these experiences within the peer-mentoring intervention (workshops) to inform the process. The participants were required to provide three potential solutions to each dilemma encountered

and three potential ways to maintain an area of strength or pedagogical competence. The student teachers were required to provide verbal feedback informally and written feedback to each other and the researcher at the conclusion of each workshop. The purpose of this was to determine the productivity of the mentoring intervention, and assess whether the intervention had been beneficial towards developing aspects of teaching and pedagogical competency. Importantly, the feedback gauged the following aspects such as determining whether shared and collaborative practices were effective; had knowledge been acquired and what were their overall thoughts in relation to measuring whether they were becoming more reflective about aspects of their teaching practice. The use of focus groups complemented the phases for data collection, in that this became a vocal point and another avenue for collective concerns and dissemination of experiences to be expressed within a communal setting. In relation to the fourth phase of data collection, (evaluation, mapping and alignment of mentoring intervention) this provided opportunities for further evaluation of the processes that were being utilised within the mentoring intervention to be reviewed and measured for productivity and effectiveness. Additionally, this also provided an opportunity upon these reflections to implement new strategies that would be beneficial towards the professional development of the student teachers, for example focusing some of the workshops around developing more subject specific knowledge, and then relating this to lesson planning, curriculum design and delivery.

Importantly, for the creditability of the intervention, responses from the feedback and comments placed on the reflective pro-forma entries were examined continuously to ensure that the intervention was beneficial and not replicative of anything on their formal programme of study, in addition to getting the participants to check all recording and interpretations for accuracy and legitimacy. Importantly, for the group dynamics to be considered organic, the notion of power had to be acknowledged, more pertinently the impact that the researcher had on the group as potentially someone that was maybe perceived as obtaining 'more knowledge' or ironically resembling what this research has been resistant too, a hierarchical expert-novice relationship. Therefore, the neutrality of the researcher became important, in attempting not to subjectively influence the process of mentoring and knowledge exchange.

To ensure that the student teachers were informed from a policy perspective, more specifically regarding the requirements and benchmarks needed to satisfy the award of QTS in accordance with the DfE, and various other policy and practitioner documents (CfBT; CUREE; Universities UK), a document analysis was undertaken to inform and ensure that the student teachers not only had access to this information via the researcher, but additionally, had an understanding of

what is required with regards to teaching guidelines and competencies, and expectations for continuing professional development. These sources were then utilised to triangulate the collated data, to ensure for validity and reliability of the research instruments. An important consequence and outcome for the student teachers involvement, was the significance attributed to being able to transfer the knowledge gained from the peer-mentoring intervention, and apply this towards the classroom context in supporting the development of pedagogical practices. The alignment of content, specific to their areas for development, acceptance of prior values and beliefs that influence teaching and learning practice, and utilising these contexts to inform personalised definitions of reflective practice and effective mentoring was required, and needed to be managed and considered throughout the research process.

4.6 Phases of the Research Process

This section details the four research phases that underpinned this research study. An examination of the various tools that were used to collect the data during each phase is presented. The piloted focus group questions and pre-intervention questionnaires were administered and trialled amongst the initial 14 research participants that had applied to undertake initial teacher training at their current place of study at a University in the North West of England, prior to the commencement of the peer-mentoring intervention. The significance placed on these two particular instruments for data collection were imperative due to these instruments being considered as the main focal point for the evaluation of the intervention throughout the research. As the researcher, was a member of staff at the university institution at that particular time, there was relative ease of access to the participants. In the first instance, these protocols were administered to determine relevance to the main study; gauge the level of understanding; assess the time taken for instrument completion; and consider where improvements or adjustments could be made before then finally implementing these research instruments and tools to collate data.

4.6.1 Phase 1- Needs Analysis

The following processes considered formed the needs analysis phase of the study which was conducted for the following purposes: data collection, determining sample frame and participant recruitment. These processes were conducted to inform the development of the peer-mentoring intervention.

4.6.2 Data Collection Procedure

A questionnaire is typically utilised to extract open or closed responses from participants, to determine or satisfy a particular outcome or agenda (Cohen et al, 2011). An open-ended questionnaire was utilised to support the initial needs analysis phase. Specifically, this was used to determine the potential participants' capacity to develop and analyse aspects of their own teaching pedagogy, in addition to measuring their understanding of reflective components. The explicit outcome of this was to determine whether the initial sample of 46 participants had the reflective characteristics required, with regards to demonstrating a desire to develop their teaching competence. Further, the responses elicited began to provide some potential ideas and concepts for the researcher to consider in the initial formation of the workshops that would formulate the peer-mentoring intervention.

The open-ended questionnaire comprising of five questions was provided by the researcher to a group of students, following an open invitation to a final year cohort of undergraduate students on a Physical Education undergraduate programme at a University in the North West of England. From the open invitation, an initial interest was registered by 46 undergraduate students. The questionnaire allowed for general questions to be asked concerning beliefs and opinions about reflecting on teaching practice and developing other components of pedagogy. The questionnaire was specifically designed to be easy to complete and not time consuming, as there was an acknowledgment by the researcher that an extensive questionnaire would limit the amount and quality of potential responses. The completed questionnaires were sent via email to the researcher, from this process a database of potential participants was created from the initial 24 responses to the questionnaire.

The questions presented to the participants during this specific phase, were refined from the initial pilot questionnaire for the purpose of developing a pre-intervention questionnaire. The questions which emanated from this were further developed as a result of the responses from the potential participants (n=24). These responses contributed to the further development and distribution of the pre-intervention questionnaires, which would be completed by the final four selected participants for the research study at the commencement of the peer-mentoring intervention. The purpose of the initial questionnaire in satisfying this particular phase of research was to allow for the development of potential workshops instruments, ideas and themes based on the variance of responses from the participants. This pilot exercise allowed for the collation of primary data in the first instance, with regards to informing and refining the reflective and evaluative research tools (pre and post-intervention questionnaires) for distribution

among the final selected participants. Focus during this phase was placed on obtaining the teaching and learning beliefs and values that the participants held, and determining whether some of these responses resonated with the characteristics associated with action research and reflective practice. Information provided also elicited responses regarding aspects of teaching experiences, and personal suggestions for continuing professional development in relation to developing pedagogical practices. From the responses provided, potential content of the peer-mentoring intervention was discussed with the remaining participants that had responded to the initial questionnaire, with regards to what aspects and content they thought were pertinent to the development and purposefulness of any workshop or focus group activities, in addition to inquiring about the formation of a community of practice.

Another phase of the needs analysis which was pertinent towards the initiation of a peer-mentoring intervention among a group of student teachers were the insights gained from a semi-structured interview conducted with two teacher educators. The importance of this interview, provided the opportunity for potential mentoring ideas to be critiqued and challenged against expertise, in addition to gaining an informed-practitioner perspective of the teacher training landscape and some of the challenges to consider when implementing student teacher professional development. The teacher educators were asked to identify some of the advantages and disadvantages of utilising peer-mentoring among student teachers, and perhaps more importantly how can the effectiveness of this practice be measured. Additional contexts considered reflection, and in particular what particular practices could be used to advance this with student teachers. Fundamentally, this was the most important aspect as reflection provided the overarching theoretical framework for this study.

Following the interview with the teacher educators, their professional guidance was required to provide some constructive feedback and professional guidance on a proposed structure for the workshops that would form the peer-mentoring intervention. The pilot for the proposed workshops were provided for critique purposefully to address issues, practicalities and concerns, in addition to gaining feedback regarding specific areas of the intervention which would be correlated with some of the areas of concern that would be highlighted by the student teachers (participants) immersed within the intervention.

After this process, the participants were finalised and the process began with a series of informative meetings, where the student teachers were briefed, provided a copy of the consent form, and presented with the refined pre-intervention questionnaire, which aimed to specifically gauge the understanding of the student teachers with regards to their definitions of mentoring

discourse. The final sample of participants were encouraged to openly discuss some of their reservations and concerns about engaging in a peer-mentoring intervention and commencing their initial teacher training. Specifically, the researcher sought to provisionally gain a minimum of ten specific areas that the participants felt that they could develop throughout the year. While ten areas were provided, the participants and the researcher acknowledged that this was subject to change dependent on which dilemmas or pedagogical factors the participants prioritised most within their peer-mentoring pairing and when discussed communally within the community of practice (focus group discussions). At this point, the participants that were excluded from the study who were not able to gain teacher training places, were invited to provide additional areas that they felt would be important to consider in developing the student-led content for the trainees. Importantly, this allowed for the initially excluded participants to be part of and inform the design and structure of the workshops at the commencement of the peer-mentoring intervention from September 2013. It was agreed between the participants and the researcher that these areas for provisional content could be changed at any time during the intervention, provided the decision was made and agreed collectively between the four participants. The focus group interview would provide the participants with opportunity for collective concerns or opinions to be expressed and verbalised. An important point to note, was that from the initial questionnaire sample of 46 from which 24 respondents replied, no comparative analysis was undertaken between this sample (n=24) and the final sample for the peer-mentoring intervention (n=4), therefore no intra-sample analysis between the participants occurred during this phase of the research.

Primarily, the reason for this was that there was no particular identifiable purpose for undertaking such a comparison, as it was viewed that this would not particularly provide any substantial findings towards the research, as the aim was not to identify participant patterns at this stage. However, an observable trend during the recruitment process for participants highlighted a significant interest from mature students (over 25 years of age), with nearly two thirds of the initial interest generated from this particular demographic. While no immediate comparative analysis was drawn, it was noted by the researcher that potentially this particular intervention was perhaps more appealing to mature students because they may have seen this as an opportunity to further inform and develop their professional skills set, as many of them had undertaken a pathway into teaching as a change of career or alternative career choice.

The final part of the need analysis which acted as an informative stimulus for the study, was the document analysis which consisted of documents referring to policy information and national

teaching benchmarks. Specifically, the documents were obtained from educational and consultancy service providers that work in partnership with the government to inform education policy and benchmarks. The documents that informed this phase of the study were as follows:

- **DfE (2012)** Teachers' Standards Guidance for school leaders, school staff and governing bodies
- **CfBT (2010)** Coaching for teaching and learning: a practical guide for schools
- **Universities UK (2014)** The Funding Environment for Universities: The impact of initial teacher training reforms on English Higher Education Institutions
- **CUREE (2005)** Effective mentoring and coaching

The reference to government associated documentation, and in the case of the DfE document, government specific documentation was an essential component with regards to providing legitimate and accurate information to the participants, in addition to allowing the researcher to familiarise themselves with the required benchmarks needed to satisfy and gain the award of qualified teacher status (QTS). The documents were also used to inform the participants from a policy perspective as this was an area, which they had suggested that they wanted to become more familiar with, as they felt that these documents informed aspects of teacher training dialogue within the UK education system. The documentation was important with regards to composing the content for the workshops; in alignment with the student teachers suggestions for what they felt were pertinent areas that needed to be considered from their peer-mentoring pairings.

All the documentation reviewed and listed are professional literature, which inform policy, teacher training standards or ITT programmes of study. This documentation was considered as important because this informs professional languages, policies and discourses concerning trainee teachers and teacher educators. The participants and the researcher recognised that documentary reviews provided ideas from stakeholder perspectives, and this could illuminate useful conceptualisations for the enactment of mentoring relationships and reflective practice within the Initial Teacher Education (ITE) context. The review of these documents also provided an opportunity to develop an understanding of government informed policies, with regards to teacher training. This analysis had some bearing on the influence of mentoring design, in attempting to ensure that aspects of the intervention satisfied government teacher training recommendations and benchmarks. In utilising some of these documents to inform part of the

needs analysis phase of the study, realisations were drawn regarding some of the differences in the provision of ITE providers; regarding government agendas and continuing professional development provision within the education landscape.

As part of this process, the researcher reviewed the various theories and literature surrounding this discourse, and identified different mentoring models and programs applied in various teacher education contexts in higher education and in schools. Relevant and feasible components were identified and considered for appropriateness and purpose in the context and culture of initial teacher training. These components were subsequently incorporated in the peer-mentoring intervention for the student teachers, together with the responses from the preliminary survey, interviews with the teacher educators and initial focus group discussion which was conducted with the initial 46 participants that registered their interest to be involved in the research study. These processes formed part of the needs analysis which was completed during the recruitment phase for participants for the research study.

4.6.3 Participant recruitment and selection

Participation in this research study followed a phased design as shown (Figure 4.2). During the process of designing and shaping the mentoring intervention, the researcher held numerous discussions with two professional colleagues who both had experience in leading action research within their professional capacities. Both held a good understanding of the teaching landscape, and how mentoring impacted this particular discourse. In the first instance, this procedure was followed not only to derive insights advanced by professional colleagues who were knowledgeable and experienced within the field but also to ensure that the researcher's particular perspective and stance was open to scrutiny and challenge and not merely imposed onto the student teachers and mentoring intervention.

Following this process, the primary research participants derived from a physical education undergraduate degree programme with 46 participants invited to participate in an open forum discussion and complete a questionnaire which formed part of the needs analysis that focused on aspects of reflection, aspirations about teacher teaching, and mentoring. Participants for the focus group discussion and questionnaire were final year undergraduate PE students embarking on undertaking initial teacher training. The final year students completed the questionnaires, and returned them to the researcher via email. Participants at this stage also had the option to complete the questionnaires, and return them, to the researcher in person. From the

questionnaires, which included open-ended questions dispensed to the initial 46 participants that registered their interest, 24 were returned. After receiving the returned questionnaires, the participants that had not completed the questionnaires were contacted with regards to whether they were still interested in being involved in the research. Reasons for not wanting to be involved in the study ranged from an inability to commit to the mentoring intervention for the period of an academic year throughout their potential initial teacher training, to not wanting to create additional pressure and work. Consequently, this admission meant that their involvement was not possible, and therefore, 22 participants were excluded from the study.

From the 24 remaining participants that had completed the open-ended questionnaire and registered their interest, an opportunity then arose to provide more information to potential participants following conversations with professional colleagues who had informed the researcher of how action research could be practically implemented, and some of the challenges that need to be considered. At this stage another aspect of needs analysis was implemented with regards to asking the remaining participants what their thoughts were concerning mentoring one another through their initial teacher training. Many of the participants within this phase of the study highlighted the usefulness of such a process, but additionally highlighted reservations about being in a position where they would be mentored by a peer that may have limited practical or subject knowledge equal to themselves. The remaining 24 participants would be reduced at this stage. The basis for selection was based on successfully gaining an initial teacher training opportunity. All the remaining participants at this stage applied for initial teacher training. The participants were made aware that their participation in the mentoring intervention was based on gaining a place on a full-time initial teacher training programme of study from September 2013. As a result of the remaining participants not all gaining teacher training opportunities, the final 24 participants would be reduced based on them not being able to fulfil the criteria for participation. The participants informed the researcher at the earliest opportunity whether they were successful or unsuccessful in gaining a place on an ITT programme of study, to guarantee their participation in the mentoring intervention.

A significant and pertinent factor at this stage of the participant recruitment phase and needs analysis was that of the 24 participants left, 14 had applied to their present university of study, in the North West of England to complete their initial teacher training where the participants had been recruited from for the study. This became a significant factor because the remaining 10 participants from the initial 24 remaining participants applied to external providers of initial teacher training (School Centred Initial Teacher Training; SCITT) and were unsuccessful in

gaining their places on initial teacher training programmes. Therefore, these participants were not able meet the stated compulsory criteria posited by the researcher to the participants; which highlighted that participants were required to be enrolled on a full-time initial teacher training programme of study to be involved within the peer-mentoring intervention, during the period commencing between September 2013 and August 2014. Of the 14 participants (students) that applied to the their present university of study in the North West of England, six participants were able to secure places on a physical education initial teacher programme, while the other remaining eight participants became reserve choices for the PE PGCE.

4.6.4 Pilot study open-ended questionnaires and considerations

At this stage, the potential eight participants that had not secured PE PGCE places to be able to participate in the peer-mentoring intervention, expressed that if they were unable to obtain a place on an initial teacher training programme, then they may have to forfeit or decline the opportunity to be involved in the research study. Additionally, some of the potential participants expressed that they may have to possibly consider other teacher training options which meant that geographically and practically this would make it challenging for the participants' to fulfil the requirements of the peer-mentoring intervention due to the frequency (fortnightly) with which the peer-mentees were expected to meet in a workshop environment to share and reflect upon their experiences within their peer-mentoring pairings.

Unfortunately, eight of the remaining 14 participants were not able to secure places on an ITT programme of study and this left the researcher with six enrolled full-time participants that were going to undertake their initial teacher training from September 2013. However, the eight participants that were no longer eligible to participate due to not securing an initial teacher training opportunity became a useful outlet during the needs analysis process, as they were asked for suggestions regarding what types of factors needed to be considered when attempting to create a bespoke mentoring intervention for student teachers. Additionally, focus group questions were piloted on them, as well as the penultimate version of the pre-intervention questionnaire, after it had been refined and altered. Therefore, although the excluded eight participants were not involved in the main study, they were used in pilot study phase. The questions for the focus groups and pre-intervention questionnaire were compiled with the guidance of professional colleagues that informed the study. Specifically, it was felt by the researcher that the experience of these professional colleagues with regards to mentoring, reflective practice and action research, would provide some important contexts for the participants to consider. Between the researcher and the professional colleagues 30 questions

were devised for the purpose of the focus and pre-intervention questionnaire. The questions were selectively filtered with the criteria for selection being based on relevance, succinctness and clarity of question, and ease of access and understanding regarding question comprehension and completion. At this particular point of piloting, the insights gained from the participants at this juncture (n=14) were informative and influenced some of contexts that were brought to the final version of the pre-intervention questionnaire before this was distributed among the final six participants. The purpose of the pre-intervention questionnaire was to gauge the level of prior knowledge concerning mentoring and reflection. Moreover, the researcher felt it pertinent to gain some of these views in attempting to get the student teachers to articulate their ideas, as these written ideas would form the catalyst for the development of workshop themes and concepts. Additionally, this also provided an opportunity for the researcher to gain an understanding of some of the pedagogical components that the student teachers felt were important. This process was also viewed by the researcher as a pre-evaluative, reflective instrument for the student teachers. The insights from the excluded participants came at an important juncture in the research and needs analysis phase, as this influenced some of the questioning that took place in the semi-structured interview, which was focused on gaining some insights from teacher educators regarding some of the practicalities of implementing peer-mentoring with student teachers. These insights helped to guide the construction of the post-intervention questions, and the semi-structured questions for the focus groups which sought to explore the development of student teachers' reflective practice within the context of action research and peer-mentoring. The use of these insights from the 8 participants that were unfortunately excluded from the study, allowed them to be part of the needs analysis and initial data collection process. From the information gained at this point, a conceptual framework began to emerge and develop with regards to formation of the workshops that would structure the mentoring intervention, with some proposed content, which was open to alteration dependent on the needs of the student teachers (participants). Thus, the emergent themes concerning professional dialogue around teaching and learning and reflection embedded within the framework along with the student teachers' descriptive, comparative and critical reflective conversations provided a useful catalyst for this enquiry in the analysis of data.

With the initial participant recruitment process completed, formal invitations were made to the remaining six participants that had secured their places on initial teacher training programmes of study, to be part of the research study. Initially, all six participants agreed to be part of the peer-mentoring intervention. Unfortunately, upon the commencing the peer-mentoring intervention, two participants withdrew due to personal reasons which were not made explicit to the

researcher initially. After some probing, the participants verbalised that while they would have liked to have participated in the research, the burden of attempting to successfully complete their initial teacher training and participating in peer-mentoring was not viable. The remaining participants were expected to provide consent to the research process. The participants were made aware of the required commitment alongside their initial teacher training. The researcher gained the permission of the teacher trainers/ educators on the ITT programme of study initially to ensure and in some cases reassure them that the student teachers involvement in the research would not conflict with their studies or the content provided on their ITT programme of study. Further, the participants had to agree to participate in the completion of reflective pro-formas, attend and participate in all workshops and focus groups for the entire duration of the peer-mentoring intervention and complete all evaluative questionnaires and peer-mentoring commitments (Appendix I). Importantly, the student teachers' (participants) were made aware that their reflections about the peer-mentoring intervention would contribute towards and inform the development of themes throughout the research with regards to the enactment and practical challenges of mentoring. Finally, participants were also made aware that their involvement would contribute towards the development of future workshops and materials needed for the process to be bespoke and specific to the developmental needs of the student teachers.

4.6.5 Sampling frame

Purposive sampling procedures were used to select the student teachers to participate in the peer-mentoring intervention and reflective practice process. Patton (1990) explains that purposive sampling is the deliberate selection of participants that identify with specific aims or objectives of a particular study or alternatively that exhibit traits or characteristics that align with the research undertaken. For this study, four student teachers were selected from a population of student teachers (n=46) for intervention purposes. This sample size was chosen for two reasons. Firstly, this size initially was scaled down from 46 participants to 6 participants, and then 4 participants, as two participants withdrew at the beginning of the intervention. At this point, it was considered sufficient that at this juncture, attempting to recruit further participants at such a late stage in the recruitment process would not necessarily provide any additional insights (Punch, 2009) and secondly, it was perceived that the final number of participants was actually more manageable for conducting the focus group discussions and monitoring of the reflective documentation to be returned in the designated time frame allocated for this particular purpose, as the organisation, evaluation and analysis of the completed documentation was solely

completed by the researcher. This was quite a pertinent consideration as the process was recognised as being exhaustive.

The participants were briefed about the proposed structure of the peer-mentoring intervention, at this stage participants were given the opportunity again to formally withdraw. Information was provided verbally and in a written format (Appendix H) with regards to what was expected from the participants, in addition to highlighting their eligibility for selection on to the peer-mentoring intervention. More specifically, this eligibility was based on all participants being enrolled on a full-time initial teacher training programme. The following additional criteria were used and applied to determine the initial sample of student teachers for participation in the peer-mentoring intervention:

1.) Potential participants were required to have a competent understanding of teaching and learning pedagogy;

2.) Participants were required to have a minimum of more than 400 hours of collated time within a school or college environment, in an assisting or teaching capacity;

3.) The participants had to be enrolled on a full-time initial physical education teacher training programme of study from September 2013;

4.) Participants were required to be able to commit to the peer-mentoring intervention for the duration of an academic school year (September 2013- July 2014);

5.) Potential participants had to demonstrate professional characteristics to the researcher which resonated with the study's aims and objectives, through demonstrating a desire and a capacity to improve aspects of their own teaching competency;

6.) Ideally, participants had to be over 23 years of age, as their prior beliefs and values would significantly influence the direction of peer-mentoring to be encountered. It was considered by the researcher that at 21 years of age, the depth of these prior beliefs and values could be quite limited, in relation to experiences that impact these personal contexts.

In setting the criteria for participant involvement and participation, the researcher deliberately selected a PE PGCE cohort for the purpose of this research. Initially, the rationale for this

derived from the researcher's need to be able to inform the process potentially from a subject point of view if appropriate, as the researcher was previously a physical education teacher in secondary and 14-19 education. Specifically, the selection of a PE PGCE cohort was chosen because it was felt by the researcher that from a knowledge and experience perspective, the trainees could draw on this practitioner insight where appropriate. Additionally, it was considered that the researcher would be able to best support the intervention from a base of familiarity with the processes involved in satisfying the standards and benchmarks for the award of qualified teacher status (QTS) in relation to an initial teacher training in physical education programme of study. Upon recruiting participants no formal training was required or provided. The only pre-determined requirements were set out in the criteria used to determine the initial sample of student teachers. It was felt that the intervention would provide an avenue to develop and train specific pedagogical components. Further, it was considered that the training to be encountered would derive from the participation in the workshops. Importantly, an understanding and competency was required. The level of competency regarding teaching and learning was measured by the researcher with regards to assessing whether some of the participants possessed some of the professional characteristics which resonated with the study aims and objectives, and aspects of practitioner-led research.

Upon selecting the final participants for the study (n=4) it was felt that they would best address the purpose of the research due to satisfying the initial sample criteria. While the process involved with the final selection of participants resembled a more eliminatory process rather than a specific selective process, the final participants enlisted did meet the required criterion which was specified by the researcher. Therefore, after going through the participant recruitment process, it was considered that the involvement of the finally selected participants would best facilitate and address the purposes of the research. Additionally, these participants also demonstrated professional characteristics that identified with the concepts underlying action research and reflective practice. More pertinently, and probably the most important criteria which needed to be satisfied, was that the finally selected participants were all enrolled on to a full-time physical education initial teacher training programme. This criterion was the most important aspect, as potential participants needed to satisfy this requirement to be involved in the intervention from September 2013. The final consideration, which occurred as a result of the recruitment process, was that two male and two female students made up the student teacher sample. While this was not specifically planned, this was beneficial and facilitated a balanced representation of the ideas from gendered perspective, which provided an aspect of equality to the intervention.

4.7 Phase 2- The Peer-Mentoring Intervention

From the needs analysis conducted the final participants (n=4) for the mentoring intervention were selected. The workshops which formulated the peer-mentoring intervention were conducted over a period of nine months during the Autumn, Spring and Summer terms within the academic school year from September 2013 to July 2014, where the researcher met with participants on a fortnightly to monthly basis. The workshops for practical purposes were held in the city where the students' PGCE and school teaching placements were located. The student teachers (participants) were able to attend all the workshops; with the exception of one occasion where a participant was not able to attend due to having to complete extra-curricular activities for the PE department they were undertaking their teaching placement in at the time. The structure and formation of the workshops which made up the peer-mentoring intervention are discussed in this section, in addition to the content included and the overall evaluation of the student teachers' experience of being involved in peer-mentoring and action research.

4.7.1 Peer-Mentoring Intervention: Workshop Format

From the correspondence from the initial briefing stage during the needs analysis phase and the responses from the pre-intervention questionnaires, information was explored and preferences for the construction and the design of the workshop were considered, with preferences given for time allocation, specific or emerging themes considered important by the student teachers, venues and resources. Thus, the structure, format and content was collectively driven by the participants and facilitated by the researcher, with input from this perspective utilised when appropriate and agreed by the participants in an attempt to eliminate and manage the potential issue of hierarchical power. At the beginning of each workshop the student teachers were required to compile a list of issues, strengths and areas for improvement, in relation to what they had discussed within their peer-mentoring pairings whilst mentoring one another. Towards the end of the workshops, participants were asked to suggest three areas that they would aim to develop with their peer-mentee. This was a practice that was replicated and completed throughout all the workshops. The rationale behind encouraging the participants to engage in this process was to facilitate a process which reflected a spiral of reflection, importantly; this provided a stimulus for discussion, where as a community of practice, ideas and experiences could be disseminated amongst the group of student teachers. The conducting of the workshop was navigated by the student teachers; however, where appropriate the agreed content was facilitated by the researcher. The content discussed throughout each workshop provided a linear

transition and progression on to other themes highlighted by the student teachers, importantly as mentioned throughout the research process, the reflective pro-formas were the catalyst for these progressions across the 12 workshops. Primarily, the reflective pro-formas were an informative tool to help stimulate and inform areas for consideration and development. From this process, suggestions were presented with regards to what needed to be considered throughout a particular workshop and how this could be collectively resolved within a community of practice.

From the initial discussions and responses from the pre-intervention questionnaires the following components and format was agreed collectively by the researcher and the participants:

1.) Twelve themed workshops, which were subject to adaptation dependent on the student teachers' specific pedagogical needs would take place every 2-3 weeks for a duration of 60-90 minutes, dependent on the workload of the student teachers' from September 2013 to July 2014.

2.) The workshops were held at a time and convenience of the student teachers' choosing, with the preferred preference collectively decided as either a Friday or Saturday.

3.) Student teachers were told that the completion of their reflective pro-formas in their peer-mentoring pairings was pivotal towards the success of the peer-mentoring intervention. Therefore, they were required to meet at least once a week in the peer-mentoring pairings to discuss what they had encountered in practice, and engage in collaborative dialogue to inform the reflective conversations in the workshops.

4.) The processes which underpinned the peer-mentoring were evaluated in the focus group interview discussions where the participants highlighted strengths, benefits and potential areas for improvement.

5.) The workshop process which formed the peer-mentoring intervention was a community of practice for the student teachers' to collectively disseminate, reflect and provide ideas for best practice, through the collaborative reflections and conversations that derived from their peer-mentoring pairings.

6.) The content from the workshop was designed by the participants' in a way where this would hopefully seamlessly crossover and transition into other areas for consideration highlighted by the student teachers.

7.) It was agreed that the content discussed within the workshops would remain confidential. The researcher maintained confidentiality by ensuring that the completed evaluative content, with regards to feedback sheets were given back to the researcher for safe storage, only to be reviewed where appropriate during the focus group interview discussions by only the researcher and the participants.

8.) The participants were given their option to withdraw at any stage, if they felt that the intervention was interfering with their PGCE.

4.7.2 Utilising reflective and evaluative processes to inform the peer-mentoring intervention process

At the beginning of each workshop, the student teachers provided reflections in their peer-mentoring pairings, as the reflections were completed fortnightly. The trainees were expected to provide a minimum of two pertinent reflections each, amounting to four reflections from one peer-mentoring pairing. The participants were provided with files to collate together all of the written materials provided from the workshops. The rationale for this was for the student teachers' to be able peruse at their leisure after the workshops in their pairings, some of the components and reflective content covered and addressed in the workshops. The researcher had access to all the reflections provided from the student teachers' primarily because they were required to submit the completed reflective pro-formas to the researcher. The researcher utilised the trainees' reflections as a stimulus to generate potential further ideas and concepts for the workshop related content and material. Additionally, the reflections also contributed towards the evaluation processes for the focus group, because of the daily insights with regards to pedagogical situations faced within the classroom and subject context. Throughout the workshop sessions the student teachers' were required to complete a worksheet, which were provided for the participants to detail their reflective conversations, more specifically, what problems had they diagnosed from reflecting on their practice, and then subsequently provide three possible solutions that could improve this particular teaching dilemma. At the end of the workshops, the student teachers' completed a written feedback sheet, which also included some questions. The participants were asked to provide responses on a Likert Scale from 1-5, detailing

whether they found the workshop to be beneficial, and more importantly, did the process allow them to engage in purposeful reflection that could inform teaching practice.

4.7.3 Student teacher led and themed workshops

Each of the workshops were based on the following agreed material by the participants and the researcher:

Workshop 1: (n=4) Differentiation- this workshop focused on creating awareness and diagnosing some of the issues associated with accommodating the varying needs of learners, more specifically providing practical solutions to some of the scenarios encountered that the student teachers' had faced during the earlier phase of their teaching placements. Focus was based on critical reflective approaches which could enable the trainees to unpick the more salient features of differentiation, more specifically, how they could collectively develop a set of practices for them to manage this particular type of teaching component.

Workshop 2: (n=4) Developing subject knowledge- this workshop examined some of the fundamental concepts associated with developing and improving subject knowledge, in relation to physical education, and the varying components which underpin this context. Additionally, the student teachers' highlighted a need for them to collectively improve on their knowledge of other sports, so that their teaching armoury was more versatile, as they felt that they were restricted with regards to being able to deliver or teach other sports. The workshop considered the underlying principles behind anatomy and physiology and how this is applicable particularly to students who chose this as an option for study at BTEC or GCSE level. The student teachers' collectively felt that this area for development needed to be improved, as they acknowledged that the theoretical components that underpin physical education, are just as pertinent as the practical components. Implications and considerations for developing these components as a collective was also considered with regards to increased confidence and developing a boarder range of subject-specific knowledge.

Workshop 3: (n=4) Utilising models-based approaches- This workshop focused on the utilisation of models-based approaches, with specific reference towards how to effectively implement such practices, as the trainees' had expressed a desire to utilise practices such as Teaching Games for Understanding (TGfU) and Sport Education. However, they collectively felt that their understanding and practical implementation of these concepts needed to be further developed, as they were not confident to trial this in a lesson situation where they felt they were constantly under surveillance. The focus of the workshop was concerned with the student

teachers' providing suggestions as to how they could imbed such models and innovative pedagogies into their teaching practice. Further considerations were made as to whether their collective suggestions were applicable in practice.

Workshop 4: (n=4) Considering inclusive factors concerning Adapted PE- This particular workshop focused on some of the components involved with designing an inclusive curriculum for all types of learners to be able to engage in physical education. Specifically, the student teachers' discussed and collated scenarios that they had encountered during their teaching placements to date. Within their community of practice, they were encouraged to provide examples of best practice and suggestions as to how this could be incorporated into lesson planning and delivery. The workshop also considered some of the reasons why PE practitioners ignore this context, in addition to considering why this had not been covered in their formal teacher training programme. Other factors included specific contexts for BME groups and young females as well, as the student teachers' considered this group as a demographic that can sometimes be neglected and are vulnerable to some of the barriers that imped learners from participating in PE.

Workshop 5: (n=4) Assessment, use of questioning and feedback- This workshop focused on the implementation of varying types of assessment, more importantly how questioning and use of feedback can support effective assessment. This context was acknowledged by the student teachers' as an area for improvement within their peer-mentoring pairings. There was some uncertainty, with regards to how they were able to measure the pupils' learning. This workshop targeted some of the practical challenges for assessing learning in PE, and how this could be managed, with the trainees' collating ideas situated around the use of questioning and providing appropriate feedback to feed-forward for future learning contexts. The student teachers' complied a resource (a pro-forma which detailed specifically, three areas for each component: assessment, questioning and feedback) which provided suitable practical considerations for the context examined in the workshop. This was redistributed between the participants for them to keep in their file and use to support their teaching.

Workshop 6: (n=4) Checking learning- This workshop was a follow-on from the previous workshop, where a focus group discussion occurred regarding the relevancy of the resources developed from the previous workshop. Specific focus was placed on whether the student teachers' were able to check learning more competently, and whether their suggestions for best practice were applicable and beneficial towards the context examined. This session was also used as an opportunity for the student teachers' to begin goal-setting for developing aspects of their

teaching and learning practice, and identify were significant improvements had been made, and which areas needed to be improved.

Workshop 7: (n=4) Reflecting on practice- This workshop focused on how the student teachers' defined reflective practice, and more importantly queried how they were reflecting on their own practice throughout this process. The participants were encouraged to provide definitions of reflective practice and provide three underlying components underpinned their definition. This also provided an opportunity for some informal reflection on the peer-intervention, with some consideration given towards how beneficial this process was towards the development of their teaching, capacity to work collaboratively and ability to reflect on their teaching practice. Importantly, as the overarching framework of the study, the student teachers' were encouraged also to reflect on each other's areas of strength and areas that they had developed as a result of the mentoring intervention. Finally, during this workshop, consideration was given towards how the reflective process could be made more effective and how it could be measured with regards to criticality.

Workshop 8: (n=4) Providing engaging lessons- This workshop considered what the student teachers' felt were the pertinent factors to consider when attempting to engage or provide engaging lessons for learners. The content in this workshop, also considered scenarios where learners were not engaged, this was informed from the reflections provided by the student teachers' and how this could be managed for future lessons. Collectively, from the respective suggestions shared between the peer-mentees, they disseminated their views among the community of practice, and these ideas and suggestions for best practice were further developed and contextualised towards the scenarios provided. Further consideration was given towards which aspects contribute to learners being disengaged, as the student teachers considered this context appropriate to examine in attempting to evaluate how they could engage their learners.

Workshop 9: (n=4) Considerations for working within a PE department- This workshop was initiated by the student teachers' in response to what they considered were the 'internal politics' involved with working in a PE department. For the student teachers' they considered this a pertinent issue and wanted to provide and consider a set of guidelines that would help them to manage some of the particular situations that they had experienced whilst on placement regarding the practice and professional conduct of some colleagues, with regards to their professional application. This was highlighted as important, as the student teachers' wanted to utilise some of the researcher's experience with regards to working in a PE department. The researcher was aware of the possible hierarchical and inflicted power dynamic, so an experienced

PE teacher was enlisted to support the workshop and engage with the student teachers. The student teachers' considered how they could avoid the 'politics' they had encountered and highlighted what types of unprofessional practice they needed to avoid to not become embroiled in such 'internal politics'.

Workshop 10: (n=4) Accommodating learners differing needs- This workshop recapped on a previous context that had been considered and explored in workshop four. The student teachers' felt that it was pertinent to evaluate some of the suggestions they had made for creating and developing a more inclusive curriculum. Importantly, they wanted to observe after implementation whether the suggestions they had collated were effective and beneficial. During this workshop, further considerations were made regarding how the suggested processes could be developed, this context was reflected upon at length, as the student teachers' had encountered a wider range of differing needs in their teaching placements since workshop four. From their teaching experiences on placement, the student teachers' highlighted new ideas and implemented an initial mapping of how these contexts could managed in alignment with pertinent and suggested inclusive literature, which provided practical considerations for PE teachers' aspiring to accommodate learners with differing learning needs.

Workshop 11: (n=4) Behaviour management- This workshop focused on specific interventions to manage behaviour within the classroom context. The student teachers' had acknowledged while they had not encountered too many challenges with behaviour, this could be due to the fact that their teaching placements had been vetted and in their opinion purposely chosen to provide them with the best opportunity to competently satisfy the criteria needed for them to pass their PGCE. Within this workshop, practical solutions were discussed and listed with regards to managing behaviour in relation to varying scenarios and situations that they are likely to encounter when they gain full-time employment in teaching. Importantly, discussions were initiated by the student teachers' concerning the exercise of professional judgement, and knowing how to manage certain behavioural situations which may be deemed problematic. The student teachers' collated and provided a behavioural resource for them to utilise, which highlighted some procedures and steps with regards to managing negative behaviour and maintaining positive behaviour within the classroom.

Workshop 12: (n=4) Classroom management- This workshop was a continuation from the previous workshop with some of the contexts in the previous workshop considered to be pertinent to this context. This agenda focused specifically on the structure and delivery of lessons, and how this impacted potential issues with negative or positive behaviour. The content

of this workshop included some extensive reflection regarding how the student teachers' were able to effectively manage their teaching environments. Some consideration was given towards some of the teaching strategies that had been implemented to ensure that this context could be managed. The student teachers then exchanged and listed aspects of best practice and evaluated on how these strategies could be improved and developed for implementation. Finally, an opportunity was provided for the trainees' to finalise and provide any other forms of best practice in relations to the other themed workshops, with regards to improving their teaching resources or developing further teaching instruments.

4.7.4 Development of Content

The development of content was pertinent to the effectiveness of the peer-mentoring intervention, therefore, an understanding of the theoretical principles which underpin reflection and mentoring was pivotal to the development of the intervention. The content was designed by the student teachers' in a way to reflect and align the requirements needed to satisfy their initial teacher training. The appropriateness of the intervention was determined by evaluative processes where the student teachers' were able to voice concerns on a feedback sheet at the end of each workshop. As considered in Chapter Two and Chapter Three, various contexts aligned to reflection and various models of mentoring were explored to help inform the development of content. While there was some acknowledgement by the researcher that these theoretical frameworks were important, the direction of the intervention was to be led in alignment with the areas that the participants' had highlighted as areas of concern, and this was of paramount importance towards the effectiveness of the intervention. Thus, the content was designed and navigated by the participants and facilitated by the researcher, as initially determined from the protocols utilised in the needs analysis phase (focus group discussion, semi-structured interviews and open-ended questionnaire). The development of knowledge and skills was considered as an afterthought, as more importance was attributed towards ensuring that the process was beneficial, reflective and encouraged collaborative engagement as a result of the peer-mentoring. However, through this rationale, pedagogical knowledge and skill components were developed throughout the intervention.

It is important to note, that some of the themes and contexts considered in the workshops, were sometimes replicative of previous and prior contexts examined by the student teachers. However, there was a desire expressed by the trainees' to build and scaffold on the knowledge they had acquired by revisiting themes and measuring or evaluating where improvements in understanding and practice had been made, and where further improvements could be made. An

important consideration was that due to the workshops being driven by themes, rather than theory and framework-driven, the content provided was flexible and adaptable in relation to the areas that the student teachers felt were important or needed developing. Throughout the peer-intervention the content was driven from the reflections of the student teachers within their peer-mentoring pairings. The dissemination of best practice and dilemmas in practice was important as the content through similarity in experiences was able to cater for varying needs, and differing levels of pedagogical knowledge and expertise. The adaptability and flexibility of the workshops allowed for the content to be accessible and engaging, and most importantly applicable to the context that the trainees' were situated in. The evaluation of this process was completed throughout, through written and summative feedback at the end of the workshops. The mapping and evaluation was considered in more depth during phase four.

4.7.5 Content and resource development

The development of the content and course materials for the workshops was created in collaboration with the student teachers' with the trainees' leading the agenda for the content and the themes for the workshops derived from the peer-mentoring conversations. Some of the content and material was also designed with input from professional colleagues, with regards to framing the appropriateness of the content. The design of the learning materials were developed in alignment with the contextual and situational realities faced by the student teachers, and attempted to accommodate the unpredictable nature of teacher training and the classroom and pedagogical landscape. Importantly, this allowed for the inclusion of topics and issues that were deemed significant or pertinent to the participants. Aspects of this were deliberated on and further discussed in the focus group discussions and peer-mentoring pairings, particularly in relation to sensitive or reoccurring issues.

4.7.6 Knowledge Application and Workshop Evaluation

The peer-mentoring intervention was not a certified process and therefore the assessment of knowledge remained informal throughout, with the rationale adopted that the effectiveness of the intervention would be measured by contextual experiences during teaching placement and how suggested best practice was implemented, and whether or not it was effective. As the workshop themes were created by the student teachers, a variance of knowledge application approaches were collectively suggested and agreed between the participants and the researcher. Suggested and utilised approaches to applying knowledge in the first instance included creating resource cards, information sheets and worksheets for documenting suggested best practices.

Additional methods were explored throughout the mentoring intervention, which were collectively considered to be beneficial towards the application of knowledge within the practical teaching contexts that the student teachers were immersed in. Thus, it was considered that the exposure or consideration of varied approaches to acquiring and applying the knowledge gained from the intervention would be of value and benefit to the student teachers.

4.7.7 Providing evaluative feedback

The utilisation of pre and post-testing approaches is considered to be aligned with the common sense approach towards research, in attempting to determine knowledge acquisition (Denscombe, 2008). Importantly, this approach is used as an evaluative research protocol to measure the extent of learning or experience. Thus, the suggested method was preferred in attempting to examine and measure the effectiveness of the peer-mentoring intervention, in addition to gaining insights regarding some of the inherent challenges associated with peer-mentoring. At the commencement of each workshop, a recap session was conducted where the participants were required to discuss three pertinent areas or actions that were covered in the previous workshop and how they had been applied pedagogically. At the conclusion of the workshops, the participants were then required to provide written feedback, and complete a Likert Scale questionnaire measuring the effectiveness of the workshop. Essentially, this was used to determine the knowledge gained, and whether the workshops were developing reflective practice and collaborative learning within a community of practice. The post-workshop activities involved the application of suggested best practice as discussed and disseminated by the student teachers during the thematic content. The aim of this was to measure whether the suggested practice for improving teaching was applicable and beneficial, in addition to assessing where reflection and learning had taken place and determining the relevancy of the intervention, with regards to continuous evaluation of the process (Appendix D). The written feedback was provided back to the researcher, and then copied and returned to the participants as their suggested feedback and insight was pertinent to the development and improvement of content in future workshops, as this aspect was decided by the student teachers to a significant extent. The process of applied acquired knowledge gained from the workshops allowed for the primary aim of self-evaluation and reflection on teaching and learning. During this period, participants were continuously encouraged to revise concepts and provide new contexts for exploration related to teaching and learning if this was collectively considered necessary by the community of practice.

The structure of the delivery was varied dependent on the theme to be considered in the workshop, which sometimes lent itself to a more directive approach from the participants, or a more critical examination of each other's teaching and learning practices. As eluded to earlier, the use of evaluative processes was integral to the development and purposefulness of the intervention, in particular the opportunity to assess whether the workshops were beneficial using a 5-point Likert Scale[1], with responses ranging from 'strongly agree' to 'strongly disagree'. In formalising this, the opinions of the participants were gathered, regarding suitability of questions or even the inclusion of more questions. However, it was felt by the participants that the questions and responses encapsulated what needed to be evaluated with regards to the learning that was taking place within the workshops. The lack of the detail and sometimes contextualisation of this instrument can sometimes create a vagueness associated with responses, as the options provided do not always reflect the experiences of the participants, hence why this criterion was discussed, continually evaluated and agreed beforehand with the participants (Punch, 2009). The design of the five-point scale as agreed by the participants' provided an informative descriptor of the possible experiences that they encountered during their involvement within the intervention (refer to footnote 1). The second part of the feedback form then provided an opportunity for the participants to provide specific written feedback, in an open-ended format, that allowed for variation of response and critique.

4.7.8 Working within a Community of Practice

From the beginning of the mentoring intervention, it was collectively agreed by the participants' and the researcher that the workshop would be situated in a mutually supportive environment, in alignment with the components that underpin a community of practice and socially constructed learning. This was emphasised throughout to ensure that participants' conducted themselves appropriately and were constructive in their suggestions for improved practices in relation to their colleagues and the researcher. Emphasis was placed on the significance of peer-mentoring to help develop reflective contexts for consideration. Additionally, the concepts which underpin action research were referred to as a point of reference, for measuring the productivity of

[1] The following descriptors were used for the Likert Scale: 1- I find these workshops useful and relevant to teaching practice, 2- The peer-mentoring and workshops are useful but could be more relevant to practical contexts, 3- The workshop are good, but several aspects are quite repetitive, 4- This is not particularly useful and is replicative of what I am doing on my PGCE, 5- This is not a useful process

evaluating personal practices. It was anticipated that where improvements were made regarding teaching, some of the contexts and content explored for improvement within the workshop can be attributed towards the participants' involvement within the peer-mentoring intervention.

The evaluation of the content in the workshops was undertaken at the conclusion of each session, with participants encouraged to provide areas for development that could be carried forward into the next themed workshop. Subsequently, the evaluations and feedback of the intervention which comprised of the workshops contributed towards the development of the content and choreographing of themes for the sessions. Specifically, suggestions were sought after regarding how all aspects of the peer-mentoring intervention could be aligned to contextual aspects related to teaching and learning. The continuous evaluation of this particular context ensured that the intervention was fit for purpose, and beneficial towards developing reflective and collaborative capacities among the student teachers.

4.8 Phase 3- Reflective Practice

An important and overarching theme which resonated throughout this research was the importance of reflective practice, and more importantly how engagement in this practice can influence teaching. As this study advocated the benefits of action research are important to practitioners that demonstrate a desire to want to criticality examine and improve aspects of their own professional teaching practice. Throughout the peer-mentoring meetings, workshops and focus groups the student teachers' were encouraged to reflect, knowing that this process was the underlying stimulus for the workshop content. Opportunities were provided for this to be undertaken before the workshops with participants' completing reflective pro-formas from their peer-mentoring discussions; during the workshops where the trainees' were encouraged to disseminate and reflect on best practice within the community of practice; and after the workshop when participants were encouraged to reflect on the workshops and provide feedback. Additionally, the student teachers' were also encouraging of each other to implement the ideas disseminated within the workshop concerning best practice during their teaching placements, and reflect on this process, and feedback to the group on how effective these suggestions for practice were when implemented practically. The participants' and the researcher endeavoured to ensure that throughout the peer-mentoring intervention, the process reflected a continuous spiral of reflectivity, some of the evidence collated for this purpose was also considered as supplementary evidence for their formal programme of study regarding how they were able to evidence their ability to reflect upon their own teaching.

4.8.1 Reflecting on improvements and knowledge gained within the workshop sessions

This process was also facilitated by providing the student teachers' with practitioner and theoretical literature, which aimed to create a balance between practical application and theoretical application of reflective practice. The participants and researcher acknowledged that it was important for there to be synergy between the peer-mentoring and workshop related activities, in addition to drawing links encompassing the idea of theory and practice (praxis), and making this relatable and contextual to the teaching experiences encountered by the student teachers. The use of reflective discourse to inform the student teachers and underpin their practice from a theoretical viewpoint was considered to be important, with the significance of knowing this aligned to helping them to complete the reflective pro-formas for peer-mentoring and the reflective assessments that were part of their ITT programme of study. Where relevant, the student teachers' set each other the task of retrieving reflective literature and extracting three areas from the literature that they felt were beneficial towards improving teaching and learning. This was important, because it was acknowledged throughout that the intervention, that it was important to be able to contextualise the practical experiences against what pertinent literature may suggest, in addition to utilising this as an opportunity to learn new pedagogical practice that could potentially enhance teaching and improve other components associated with learning. This was an important point of departure for the participants as they felt their solutions for best practice needed to be aligned to academic discourse, rather than being aligned to rhetoric. The development of reflection, became more refined, and encompassed more ideas concerning the development of teaching as the participants' began to observe improvements in one another's understanding and overall practice. Importantly, the student teachers' were able to track and measure their development from the commencement of the intervention to the conclusion of the intervention, where they were able to reflect on considerable gains made, and plan for how they could perhaps more significantly, maintain their ability to continually reflect on their own teaching, through either collaborative or individual processes.

4.9 Phase 4- Evaluation, Mapping and Alignment of Mentoring Intervention

The evaluative phase of the intervention was continuous and the processes and content were reviewed at regular junctures, specifically the end of the peer-mentoring workshops. However, specific focus and attention was given toward this dialogue during the focus groups discussion interviews, where components of the peer-mentoring intervention were evaluated and school placement experiences reviewed. During the focus group discussions, emphasis was placed on measuring the relevancy of the peer-mentoring intervention, more specifically gaining opinion

and dialogue on whether the intervention was improving aspects concerning teaching, reflection, pedagogical understanding and subject knowledge. The mapping of these considerations was an imperative consideration for the researcher, as it was vital to ensure that the content was aligned to pertinent contexts considered relevant by the student teachers' otherwise there was an anticipated danger that rather than the intervention be perceived as a developmental component, it would be perceived as an additional pressure alongside completing their initial teacher training. Throughout the process, procedures for evaluation were also collated through the feedback sheets provided at the conclusion of each session.

4.9.1 Focus group discussions

The focus groups were conducted at three separate intervals, during the autumn, spring and summer terms, and this represented the beginning, middle and end phases of the intervention. Consequently, the insights from the focus groups at these particular junctures proved to be invaluable, with regards to developing the mentoring instrument, and evaluating whether any positive teaching gains could be attributed to the peer-mentoring intervention. Additionally, the researcher felt that upon evaluation and reflection this particular mentoring intervention differed from other peer-mentoring initiatives, primarily because of the specific emphasis placed on the student teachers to guide the themes, ideas and workshop content that underpinned the mentoring intervention. While other peer-mentoring initiatives have focused on the potential for collaborative endeavour to develop professional competency as this intervention did, it was considered by the participants, the researcher and professional colleagues who had vast experience of mentoring and action research, that there were very few mentoring initiatives that place professional responsibility and accountability of the mentoring outcomes on the student teachers' within a specific community of practice designed to facilitate the purposes of collaborative activity and developing reflective practices in relation to developing one another's pedagogical practices. With regards to the professional colleagues that informed the intervention, this particular sentiment was valued and highly regarded, due to their vast experience of initiating practitioner-based interventions underpinned by action research protocols associated with self-reflection and improving teaching competencies.

4.9.2 Participant and researcher reflection on peer-mentoring intervention

The focus groups focused on diagnosing problems with the peer-mentoring intervention and highlighting challenges for the enactment of successful peer-mentoring. From the focus group discussions, this also allowed for the emergence of mentoring themes, which would provide the

conceptual framework for the research study, with regards to discussing the findings and categorising these insights into specific contexts aligned with mentoring and reflective practice. The focus group enabled and provided the participants with another point of departure to express and feedback concerns associated with their own experiences of teaching, and perhaps engage in a wide range of sensitive and emotive issues concerned with teaching practice and maybe their involvement in the research study. These discussions were a significant factor in the collective evaluation of how to align and map the content towards the specific criteria for satisfying the award of QTS and fulfilling the practical requirements for the PE PGCE. The written qualitative data and narrative data provided was collated and constantly referred to by the participants and the researcher to ensure that improvements for the intervention were aligned and mapped against the suggested feedback provided. This also became a reference point, and ensured that all improvements were implemented. The focus group was considered by the participants' as the most important focal point for expressing ideas and discussing issues associated with teaching and learning and being a student teacher. This became a pertinent catalyst for the content structure within the workshops. The evaluation of the processes throughout also ensured that where possible the researcher attempted to continuously improve the mentoring instrument, in addition to attempting to manage any inherent power dynamics by ensuring that the student teachers were positioned as the significant stakeholders in the peer-mentoring intervention process.

4.10 Facilitation Process

An integral component of this research resonated with the researcher having a detailed understanding of the reflective and mentoring processes, and an understanding of adult learning which stemmed from the researcher's professional capacity as previously a teacher in 14-19 education and as a university lecturer working with adult learners specifically. An important consideration for the researcher was the structural organisation of the workshop setting, which was left to the design of the participants in adhering to the premise for the study which was to ensure that the student teachers were the navigating the peer-mentoring process. The learning space was organised to replicate a supportive, holistic and nurturing environment, with the researcher assisting the process where needed and appropriate. The feedback acknowledged that the environment and culture created during the peer-mentoring intervention was an essential component towards the successful enactment of collaborative mentoring. The facilitation process is illustrated in Table 4.3 below:

Table 4.3: Format utilised for the workshop presentation and facilitation of learning within the community

Introduction
Presentation of three strengths and areas for improvement at the beginning of the session Welcome and considering pertinent issues for discussion Recap from previous workshop Reflection on applied suggested best practices from the previous workshop
Delivery
Contextually and practical delivery of content led by the student teachers Contextual application Reflecting on personal experiences to inform the community of practice in a supportive environment Considerations for future approaches towards teaching Reflecting on the further improvement of strengths and development of areas for improvement
Evaluation
Written workshop evaluation Reflection on the learning process Aligning learning to the practical context of the teaching environment Utilising the focus group discussions to inform and measure the effectiveness of peer-mentoring on reflective practice

4.11 Addressing and negotiating power dynamics between The Participants and The Researcher

Throughout the research, one issue which was acknowledged by the researcher as somewhat problematic, was the issue of power, more specifically, the potential for coercive, inherent, referent, expert and legitimate power. Throughout the process, at critical junctures the researcher was conscious that with regards to providing knowledge to the participants regarding reflection and mentoring, a contradictory position was being adopted, with regards to eliminating anything that may resemble a hierarchical structure. In the initial needs analysis phase of the study, due to their depth of knowledge regarding reflection and mentoring, the participants were reliant on the expertise of the researcher to navigate and signpost their ideas towards critically reflecting on their own teaching practices.

During the peer-mentoring intervention a continuous analysis of power revealed to the researcher, that the considerable influence on the direction, shape and ethos of the mentoring programme could be formed in an entirely subjective way. For this reason, the researcher sought to ensure that the student teachers were the main stakeholders in the process, by ensuring that

any decision made regarding the influence and mentoring direction of the intervention were collectively contested, discussed and agreed. The researcher acknowledged that reflection on their own practice was therefore paramount in attempting to adopt an objective, non-biased and non-influential position. Therefore the researcher felt it was important to unpack their own presuppositions involved in presenting new information, especially concerning factors that have to do with values, social norms or ideals, and that seem to present persuasive views. The researcher was mindful as were the participants, that failure to manage this could have resulted with the researcher being in a position to wield considerable power, with regards to shaping the specificities of the community of practice within which the mentoring intervention took place (Chao, 2009; Leech et al., 2010; Onwuegbuzie and Leech, 2007).

Having continuously considered how to manage influencing behaviour and organic bias, there was some acknowledgment from the researcher that inherently, power and control can sometimes unavoidably be inflicted into the dynamics of working relationships between the participants and the researcher, even though every considerable effort was made throughout to manage this where evident. Through an exploration of factors which may affect power relations, the researcher was able to indicate two significant factors that needed to be considered and managed within the research. Firstly, all parties needed to be willing and able to work within prescribed sets of rules regarding mentoring, which needed to be collectively agreed. Secondly, the success of mentoring intervention relied on there being clarity of expectation about the roles of the participants and the role of the researcher within the process.

The importance attributed to the consideration of social actors within the intervention regarding roles and the representation of the activities directly influenced the ethos which underpinned the intervention, that being that the student teachers were the main stakeholders within the mentoring process. In this case, the analysis of social actors and their collectively agreed responsibilities resonates particularly with the idea of representation versus passivity: who is presented as active and as setting the agenda in the mentoring intervention, and who is presented as a passive recipient of the scheme. In this case, neither position was adopted because of the emphasis placed on all participants, including the researcher being disseminators and recipients of knowledge, within a supportive and reciprocal environment, where power was evenly distributed between all participants involved within the research study. During the process, the researcher was reluctant to adopt the position of 'expert' and this was made clear to the participants, to avoid an over-reliance on the knowledge of the researcher, as the intention was for the student teachers to discover and create their own meanings from the mentoring

experience, without any subjective influence on how mentoring should be practiced and what it entails from a collaborative perspective.

Other facets of power which required negotiating was the potential for any individual within the community of practice, which was a small sample to become dominant over the other participants, or potentially become the group lead, by placing themselves in a position to represent the ideas of the group. This was managed by the participants and the researcher as a factor that could be referent and potentially coercive, with regards to influencing the thoughts and opinions of other participants. Therefore, this was collectively discussed at the beginning of the intervention where an agreed set of practices were discussed in relation to the respecting and valuing of all participants, in addition to an agreed expectation of equal input from all the trainees.

There was an acceptance by the researcher that at the point of external examination for the research study, the mentoring relationship between the participants and the researcher would be scrutinised, due to the nature of mentoring studies that generally involve an initial, hierarchical unequal balance of power, with research concepts initially concentrating primarily on the nature of the relationship (formal or informal) and its function (career development and psychosocial development) (Fox et al., 2010). However, the researcher was aware that at some points of research, the process could potentially reflect a hierarchical relationship, and this could be considered to have been built into the mentoring process, where the researcher was perceived as being in an expert position, and as being willing to induct the inexperienced student teachers into the learning environment concerning teaching, learning, mentoring and reflection. It was interpreted by the researcher that this could be considered to be achieved through the 'expert' drawing upon tacit knowledge and understanding of the norms and practices within the initial teacher training process, and using this to encourage participants to learn to work effectively within their community of practice. Not surprisingly, a common theme in studies of the mentoring relationship is the power of the researcher who may be deemed the 'expert' to ensure the mentee's success by passing on cultural values and norms which help them to succeed during their initial teacher training (Fox et al., 2010).

An important consideration which also formed part of the theoretical paradigm for the research recognised that the mentoring process is socially constructed, and therefore the relationship between the participants and the researcher needed to be tailored towards supporting the professional development of the student teachers, and making them autonomous social actors in this process, hence the researcher adopting the secondary position of facilitator within the

research. Issues of power in this particular mentoring intervention was not blatant, however, it is was accepted that from a peripheral standpoint this could be viewed as couched in terms of tacit understandings about the kinds of engagement, values and beliefs that may have been encouraged during exploratory phases of the research.

Negotiating this context also recognises that mentoring can be understood as a site of governmentality, precisely because the forms of engagement deemed as desirable are those which enable student teachers to become successful practitioners (Fox et al., 2010). As such, mentoring was collectively considered to harness a wider set of debates about teaching and learning and becoming a reflective practitioner. This suggests that power is always present in excessive, managed or reduced forms, however, how it was managed within this research study determined the extent to which the mentoring intervention was considered a 'powerless endeavour', as power was evenly distributed among all participants within a collegial environment (Manathanga, 2007: 218).

The final consideration made by the researcher regarding the issue of power, acknowledged the dangers prevalent in the mentoring process which centre on positioning researchers as experts, as this can potentially disrupt aspects of trust, which are considered to lie at the heart of good mentoring relationships and interventions (Bouquillon et al., 2005). An understanding of these issues allowed the researcher to be mindful of the boundaries between participants and the researcher, as some of these issues were crystallised around issues of negating pastoral and academic study support within the community of practice among the student teachers.

4.12 Utilising a narrative and biographical approach

The research data collated within this study was referred to as narrative data. The narratives collated represented the student teachers' feelings and experiences of engaging in a peer-mentoring intervention to attempt to inform reflexive processes. The narratives contextualised the findings for the study, in alignment with the research questions, and themes (dimensions) which navigated the study. Bruner (1996) remarks that humans create meaning from lived experiences, which capture the human condition, human intentionality, the vividness of human experiences, multiple perspectives and lived realities of participants (p. 29).

This research acknowledged that the narratives presented personalise assumptions and are evidence-based (Gibbs, 2007: 57). As the researcher, there was some recognition that such narratives capture the chronology of events as they unfold over time, importantly this enabled the researcher in this study to infer causality, coupled with the dramatic and dramaturgical power

of carefully chosen words (Cohen et al., 2011: 553). The narrative not only conveys information but brings the information to life and makes this dialogue tangible (Gibbs, 2007). One aspect of narrative dialogue which resonated and underpinned facets of this particular study, was the notion of deriving meaning from lived experiences through the reporting of personal experiences, dramatic events and even the simple unfolding of a sequence of activities, specific behaviours or people over time (Cohen et al., 2011). The research study identified with Gibbs (2007: 60) comments that narratives not only transmit information but additionally, align with individual's psychological needs in coping with life, or more relevant to this study, assist a group of individuals to crystallise or define an issue through a particular viewpoint or perspective. Similarly, Flick (2009) contends that this approach can help researchers to understand and comprehend the experiences of participants and cultures, and contribute to structuring identities (as is normally the case with life stories and biographies).

The researcher acknowledged that narratives and biographies cannot record all the aspects that transpire in practical experiences. Rather, as adopted within this study a specific focus should be based on a selected criteria, within this context, this related to the six mentoring dimensions initiated from the peer-mentoring intervention (student teachers conceptualisations of mentoring; evaluating early experiences of teacher training and peer-mentoring; personal improvement through reflection; establishing a community of practice; developing trust; measuring the effectiveness of peer-mentoring) that facilitated the study. Flick (2009: 347) explains that such focuses can be situated around key decision points in the story or narrative; alignment of key themes or dimensions; meaning to participants and reconstructing; key experiences or evaluating contexts from past or present perspectives.

As the researcher, textual units concerning the narratives and biographies were identified based on the criteria that the identified themes were fit for purpose in supporting the themes associated with the study. From this process, the researcher analysed and interpreted the narrative text for meanings contained within the text, developed a working hypotheses to explain what had taken place, checked these hypotheses to explain what was taking place, checked these hypotheses against the data and the remainder of the text, evaluated the text as a whole rather than discrete units, and ensured that different interpretations of the text had been considered and the ones selected were the most valid, accurate and secure in terms of validity to the text (Cohen et al., 2011: 553; Flick, 2009: 347). Within this study, the narratives are considered as powerful, human

orientated and integrated, significantly this is in alignment with the qualitative and interpretive approach to research (Packer, 2010).

4.13 Narrative discourse

Aspects of narrative discourse were extremely pertinent towards this study. Narrative orientations look for meanings and themes within narrative texts (Cohen et al., 2011). Bruner (2004: 702) states that an example of discourse orientations resonates with narrative text that has been constructed from field notes and reflective notes into an 'omniscient, authorial set of voices'. This study acknowledged that a narrative inquiry approach reports personal experiences or observations and provides fresh insights to often familiar situations or contexts (mentoring and reflective practice), similar to the previously examined contexts, explored from a different perspective within this study. Narrative discourse strongly identifies with the interpretivist approach, with meanings constructed through observations, experiences and language; indeed, difficulties can sometime arise in attempting to separate facts from observations (Cohen et al., 2011). Importantly, this research study acknowledged that this occurs when narrative data is utilised selectively and subjectively to report findings in a non-neutral way which is tailored to meet the researcher's conscious bias and subjectivity (Holstein and Gubrium, 2000, 2011; Packer, 2010). As with other forms of discourse inquiry, narrative inquiry is underpinned by a social constructivist paradigm, in which behaviours and their meanings are socially situated and socially interpreted (Silverman, 2013; Sparkes and Smith, 2013). Specific to this study, the mentoring experiences and reflective behaviours of student teachers have been situated and evaluated within a social construct to reveal the benefits and challenges of peer-mentoring in attempting to inform reflective practice during an initial teacher training (ITT) experience.

4.14 Interpretation and Analysis of Data

An interpretive phenomenological analysis approach was undertaken for this research, which in its nature does not pertain to one specific analysis strategy (Smith et al, 2009). Rather it is flexible, presenting an approach which focuses analytic attention on the participants, in an attempt to make sense of their experiences. As such, in analysing the data from this study, great attention was paid towards understanding the meaning participants placed on their own experiences as a means of reflecting upon their own teaching practice through the use of peer-mentoring and action research. The flexible research approach adopted allowed for a narrative inquiry regarding the student teachers own explanations and descriptions of being involved in a peer-mentoring intervention, thus, providing various points of departure for evaluation and

reflection from both the participant and researcher perspective. Additionally, it was imperative, as the researcher, not to place any personal interpretations on to the trainee's experiences. Therefore, throughout the analysis process, every attempt was made to accurately reflect the participants' views from transcription through to theme development. This was completed through careful use of language, ensuring that where possible, the participants own views navigated peer-mentoring processes used. When further interpretation and structuring was required, this was completed within the context of the study and the process of data collection in mind. In addition to this, interviews and focus groups were recorded to aid with the transcription and analysis process, and these were reflected upon to ensure all analysis was kept within context explored.

To do this, four stages were followed in the data analysis the process, similar to the interpretive phenomenological analysis processes outlined by Smith et al (2009). Smith et al., (2009) however note that these processes are merely a guide to analysis, and therefore, such processes are adaptable and flexible, and open to interpretation for the purposes of any research study. The stages followed for this research was as follows:

Stage 1: Reflective data collection

Stage 2: Transcription

Stage 3: Understanding the data

Stage 4: Theme development

4.14.1 Stage 1: Reflective data collection

The research process as a whole was reflective. All processes involved in the data collection were evaluated and reflected upon throughout the study and this aided with data collection. Throughout the data collection period, field notes, in the form of a research journal were kept. Notes were taken after each interview and focus group, and key points arising from the data were noted down alongside any situational factors thought to have influenced responses, for example, participant attention, changes in interview/ focus group format, environmental factors. In doing this, opportunities to reflect upon the research design were embraced and shared among the participants for further insight. This resulted in continual evaluation of the methods, allowing for any discrepancies to be removed, and for example, the consideration of any processes that may have been considered replicative of what the student teachers were

experiencing on their ITT programme of study. Furthermore, reflecting on the data directly after each interview and focus group, allowed for initial ideas about themes and key points to be drawn out. These were noted down, and formed preliminary ideas about findings. Smith et al., (2009: 82) state that it is important for phenomenological researchers to enter 'a phase of active engagement with the data', and through the research journal kept, it was considered that the researcher was able to re-connect with the participants via this means to ensure that any contextual meaning was not lost in the analysis process.

Moreover, through the process of reflection, it was determined that the narrative data from the interviews and focus groups would form the focal point of the research, as both processes were evaluative of the mentoring context in teacher education and initial teacher training. Upon implementing this process, the narrative data was then reduced for better understanding to be derived from the issues related towards contextual concepts, mentoring relationships and collaborations between student teachers, in attempting to develop reflective practice for teaching and learning. From engaging in a reflective approach aligned to data analysis, correlations from the qualitative narrative data were drawn with the research objectives. For example, factors responsible for collaboration among student teachers regarding peer-mentoring, determining the effectiveness of peer-mentoring, and negotiating and concluding whether this promoted higher order reflection with regards to improving teaching and learning practice.

Importantly, all the qualitative data was reduced into manageable text through themed, narrative and contextual methods where appropriate and required. For example, the interview data was functionally and thematically analysed and organised while reflective entries were left in their original contextual form to facilitate further ideas which could improve the effectiveness of the peer-mentoring intervention. In attempting to analyse the interview data, the transcripts had been carefully evaluated and read over, with all interviews digitally recorded, for accessibility to the provided narratives. This was listened to numerous times for clarification. This process allowed the researcher to immerse themself in the data collated. Following this, the data was analysed inductively as comparisons or matches were not being configured against pre-defined themes or codes (Cohen et al., 2011). Importantly, the data characterised was placed into coherent and similar texts aimed at facilitating the themes and sub-questions for the research study. Consistent and common ideas from the participants' views and opinions were described and developed as emerging themes throughout the course of the study (Glaser and Strauss, 2009; Margolis, 2007; Nguyen, 2009). Common views of the participants related to the emerging

themes were grouped, and organised into sub-themes under the emerging themes for the study. The themes and sub-themes were carefully re-examined and re-arranged in an iterative process, which was recognised as necessary to ensure an appropriate collation of participant insights into mentoring relationships within this study.

4.14.2 Stage 2: Transcription

Following the completion of the data collection, all focus groups and interviews were transcribed verbatim. On completion of this, transcripts were read, whilst listening to original recordings to ensure the accurateness of the transcriptions. All transcriptions were then grouped and grouped by emerging or recurrent issues, points of discussion or themes utilising a functional approach which supports the notion of constructing and making sense of lived experiences and realities (Bruner, 1990). This was considered pertinent in order to gain an understanding of the narratives collected during the data collection process. The data was at this point deemed ready for analysis.

4.14.3 Stage 3: Understanding the Data

To begin understanding and interpreting the data in relation to the research questions, all interview transcripts were summarised. This involved reducing down the verbatim transcripts into more understandable narratives. This transformative stage involved the presentation of data in themes or contextually as appropriate. As such, the data was organised contextually (Patton, 1990; Patton, 2002). Accordingly, all qualitative data were summarised and evaluated to verify findings, interpret inconsistencies and find out new meanings from the data gathered. To enhance the understanding and interpretations of participants' views with regards to peer-mentoring and communal relationships as being revealing life experiences, hermeneutic phenomenology was considered to be pertinent in this analysis (Heidegger, 1988; Van Manen, 2007). During the process of understanding the data, the researcher felt that hermeneutic phenomenology offered an opportunity for interpreting the emerging themes with reference to the collaborative mentoring practice which took place among the student teachers. During this process of analysis the participants own words were used in the summaries, and every effort was made to not paraphrase responses. As such, summaries reported findings in an understandable and readable format, allowing for findings to be understood fully, without the messiness and complexity of verbatim transcripts. Notes were taken during this process, regarding the potential for new themes to emerge (Smith et al., 2009), and summaries were grouped, themed and aligned in relation to the dimensions of mentoring which were created from the insights gained and

framed from needs analysis phase of the study (student teachers conceptualisations of mentoring; evaluating early experiences of teacher training and peer-mentoring; personal improvement through reflection; establishing a community of practice; developing trust; measuring the effectiveness of peer-mentoring). The last phase of understanding the data involved data integration. This process is associated with the presentation of data/results as a finished product either as an analytic note, a summary on emerging themes, or a casestudy report (Li et al., 2000). Thus, the qualitative data was rigorously unpicked and analysed for interpretation and discussion of the key findings to facilitate the research and to contribute to the overall recommendations for the study.

4.14.4 Stage 4: Theme Development

Once the data had been accurately transcribed, summarised and understood, a functional approach towards analysis synonymous with narrative inquiry was undertaken, which focused on shaping pedagogical teaching experiences into a coherent narrative that made the events easier to interpret and analyse by giving them meaning (Bruner, 1990). Separate analysis in the form of chronological organisation (Polkinghorne, 1998) which helped to focus on the contexts in which the narratives were constructed, took place for some of the data collated during the needs analysis phase. This approach attended to the *embodied nature* of the student teachers' relaying their narratives, from the contexts which the narratives were created; the emergence of supportive professional relationships and the chronological organisation of teaching experiences as they unfolded during their initial teacher training (Polkinghorne, 1998). This occurred through the utilisation of an in-depth analysis of the narratives presented by the teacher educators and the student teachers during the infancy of the study, which contributed towards guiding a significant number of the themes covered in the focus group interview questions and post-intervention questionnaire (developed from previous literature and the needs analysis findings). These categories related to the dimensions of mentoring, considerations for reflective practice and peer-mentoring and challenges associated with engaging in action research specifically concerning peer-mentoring. Narrative responses were grouped and organised by theme (dimension) for each type of issue or concern highlighted, allowing for similarities and differences in responses from the participants immersed within the intervention to be ascertained, as well as highlighting emerging themes arising from their experiences of engaging in peer-mentoring.

The interview data and reflective data were triangulated with the focus group data (Cohen et al., 2011; Robson, 2002). The focus group data was analysed using the same functional approach system, with the rationale for adopting this approach being the flexibility for allowing new themes to emerge. This was then cross referenced with the interview data to determine reliability in the narrative analysis instrument. In conducting this type of narrative approach to data analysis, six main themes were noted, and various sub-themes emerged. Triangulation of the data showed consistency in responses between the teacher educators, with regards to their concerns and professional judgements for peer-mentoring and the lived experiences of the student teachers being involved in a peer-mentoring intervention.

From this premise the findings have been presented and discussed within the conceptual context of mentoring dimensions and themes (see chapter five). Considerations were given towards exploring the experiences of the student teachers engagement in peer-mentoring and addressing some of the challenges associated with this process. From these considerations, key recommendations and outcomes from the themed findings were explored and summarised in an attempt to contextualise and fathom the experiences of the student teachers that were part of this study.

4.15 Ensuring Reliability

This study addressed issues of credibility, reliability and dependability by adhering to a set of strategies aimed at ensuring that qualitative data was collated reliably, allowing for the same results to be generated and replicated if the same instruments for data collection were administered again. The following strategies are suggested by Linclon and Guba (1994) and were used as a reference point to reliability:

- Stability of observations (whether the researcher would have made the same observations and interpretations of these if they had been observed at a different time or in a different place);

- Parallel forms (whether the researcher would have made the same observations and interpretations of what had been seen if he or she had paid attention to other phenomena during the observation);

- Inter-rater reliability (whether another observer with the same theoretical framework and observing the same phenomena would have interpreted them in the same way).

Additionally, the following processes advanced by LeCompte and Preissle (1993: 334) were considered pertinent in adhering to processes for reliability regarding the implementation of the research instrument:

- the status position of the researcher;
- the choice of informants/respondents;
- the social situations and conditions;
- the analytic construction premises that are used;
- the methods of data collection and analysis.

As the researcher, there was an awareness that the legitimacy of such suggestions regarding reliability are open to critique, however, this research study adopted these principles in attempting to maintain reliability through a qualitative research design. Cohen et al., (2011) highlight that in qualitative research, reliability can be regarded as the link between what researchers refer to as data and what actually occurs in the natural setting that is being researched, with regards to the degree of accuracy and comprehensiveness of the evaluation of the phenomenon being studied (Bogdan and Biklen, 2003: 48). Significantly, this does not suggest that uniformity could be maintained all the time; as the research was open to varying and adaptable changes and dialogues, including the idea that to researchers who are studying a single setting, they may come up with varying findings; however both sets of findings are just as pertinent, reliable and applicable (Cohen et al., 2011).

Importantly, this study considered Kleven (1995) and Kline's (2004) suggestion that qualitative research can address reliability in part by deliberating over three particular questions, concerning observational or interpretivist research:

1. Would the same observations and interpretations have been made if observations had been conducted at different times? (The 'stability' version of reliability).

2. Would the same observations and interpretations have been made if other observations have been conducted at the time? (The 'parallel forms' version of reliability).

3. Would another observer, working in the same theoretical framework, have made the same observations and interpretations? (The 'inter-rater' version of reliability).

4.16 Ensuring Validity

This research study, acknowledged the unconscious potential for invalidity and utilised suggestions advanced by Cohen et al., (2011) to avoid insidious and pernicious protocols as this can permeate at every stage of the research. The researcher was aware of the need to minimise invalidity by ensuring that confidence was maintained within elements of the research plan, data acquisition, data analysis, interpretation and ensuring its objective implementation.

Importantly, this study recognised that at the design stage threats to the validity would be minimised by:

- Choosing an appropriate timescale;
- Ensuring that there are adequate resources for the research to be undertaken;
- Selecting an appropriate methodology for answering the research question;
- Selecting appropriate instrumentation for gathering the type of data required;
- Utilising an appropriate sample (e.g. one which is representative, not too small or too large but specific towards the dimensions of the study);
- Ensuring reliability in terms of stability (consistency, equivalence);
- Selecting appropriate foci to answer the research questions;
- Avoiding a biased choice of research or research team (e.g. insiders or outsiders as researchers).

(Cohen et al., 2011).

This research study also recognised that there are several areas where invalidity or bias might creep into the research at the stage of data gathering; thus, this study proposed that this would be minimised by:

- Minimising reactivity effects (respondents behaving differently when subjected to scrutiny or being placed in new situations, for example, the interview situation- we distort people's lives in the way we go about studying them (Lave and Kvale, 1995: 226).

- Trying to avoid drop-out rates amongst participants;
- Ensure reliability of research methods;
- Ensure standardised procedures for gathering data or administering tests; address factors concerning the researcher (particularly in an interview situation); for example, the attitude, gender, race, age, personality, dress, comments, replies, questioning technique, behaviour, style and non-verbal indication of the researcher.

The researcher acknowledged that at this stage, the reporting of data invalidity can reveal itself in various ways. Therefore measures were taken by the researcher to ensure that this was minimised as much as possible, by utilising the following procedures:

- Avoiding using data selectively and under representatively (for example, accentuating the positive and neglecting or ignoring the negative);
- Indicating the context and parameters of the research in the data collection and treatment, for example, the degree of confidence which can be placed in the results, the degree of context-freedom or context-bounded nests of data (i.e. the level to which results can be generalised);
- Presenting the data without misinterpreting its intended message;
- Asserting claims which are sustainable by the data;
- Avoiding inaccurate or subjective reporting of data (i.e. technical errors or orthographic errors).

(Cohen et al., 2011).

4.17 Epistemological Issues

Epistemological issues in research such as validity, reliability and transferability are situated in cultural and historical realities which ascertain their usage and interpretation (Dunne et al., 2005; Punch, 2009). Significantly, Teddlie and Tashakkori (2009) highlight that it may be necessary to discuss these issues according to the research approach utilised. This study is underpinned by a qualitative approach. Therefore, discussion on epistemological issues would be centred significantly around inference quality and inference transferability as discussed below in the next two following sections:

4.17.1 Inference Quality

In adhering to the validation of instruments and results, this was considered to reduce researcher bias, in attempting minimise human influence which may corrupt questions or information (Dunne et al., 2005). Within this study, the transcripts of interview data were sent and distributed among the participants. Participants were encouraged and advised to indicate whether the transcripts reflected their opinions and views presented throughout their engagement in the peer-mentoring initiative. Participants had been encouraged to make or amend changes to their views if considered necessary. This process is often referred to as member checking or feedback, the rationale for such a process ensures that data utilised within the study is credible, consistent and reliable (Patton, 2005). Additionally, extensive engagement and discussion about the data with the researcher's supervisor, an external anonymous mentor and professional colleagues contributed towards the credibility of this study (Long, 2009). The idea and distinction of triangulation has often been inferred to suggest that researchers can compare results to lend validity to research (Dunne et al., 2005). The methodological instruments (interviews, open-ended questionnaires, workshops, focus groups and reflective entries) were utilised to triangulate the qualitative data in this study. For example, the instruments used highlighted that the mentoring relationships enacted within this study were characterised by collaborations within the mentoring intervention, while additional aspects considered how the data illuminated highlighted the extent to which collaborations were defined and considered productive, within the peer-mentoring framework used for this study.

4.17.2 Inference Transferability

Inference transferability is related to external validity and transferability. This demonstrates the extent to which conclusions can be drawn from a qualitative study, in which it could be transferred towards other varying contexts such as, people, settings, communities and time periods (Teddlie and Tashakkori, 2006; Bryman, 2004). It is hoped that the findings and implications from this study will help to facilitate or contribute towards explorations or debates centred on mentoring relationships among student teachers, in attempting to encourage autonomy and reflective practice and remove traditionalist, hierarchical forms of mentoring associated with teacher education (Le Cornu, 2009). Additionally, once disseminated to an academic, policy and practitioner audience, it is hoped that this study may provide the catalyst for changes and improvements to mentoring and reflection, as ideas and recommendations drawn from this study may inform other initial teacher education contexts.

4.18 Measuring and assessing the effectiveness of the peer-mentoring intervention: Post Intervention Follow up interviews, discussion and considerations

The four student teachers' immersed within this study were able to gain significant benefits from being involved in a collegial environment, where they were able to construct a community of practice and engage in reflective processes. Post intervention the student teachers' are all now in full time employment with the exception of one trainee as physical education teachers' having completed their newly qualified teacher (NQT) probationary period. The trainee who did not undertake their NQT year opted to undertake a sabbatical period and has moved to Seattle, America. An important factor for measuring effectiveness and impact of the peer-mentoring intervention, was determining post-intervention whether the participants were able to engage in formalised peer-mentoring constructs, or alternatively whether upon gaining employment they were reintroduced to more traditional, hierarchical orthodoxies of mentoring.

The common theme which has emerged from the participants post intervention is the lack of formalised peer-mentoring within their schools. The existing currency for mentoring within their respective professional workplaces resonates with more traditional novice-expert forms of mentoring. The participants' verbalised within the intervention that the mentoring they encountered external of the community of practice differed from what they had experienced within the peer-mentoring intervention. Importantly, for the participants they were able to measure impact by reflecting upon personal gains, in relation to developing pedagogically, an aspect they acknowledged previously upon evaluating the intervention as participants and presently, having now entered the post intervention stage and are in full-time employed teaching. Many of the developed reflective practices by the participants have been utilised to navigate themselves through their NQT year. The premise devised for developing such practices arose from the opportunity to engage in participatory action research, collaborative endeavour and nurture one another through their initial teacher training. Presently, in the absence of a recognised peer-mentoring format, the participants expressed the potency derived from assembling regularly to discuss issues aligned to teaching and learning, and perhaps quite pertinent to this dialogue; how collective engagement is able to facilitate the dissemination of good pedagogical approaches.

The following two sub-sections will firstly, consider and assess some of benefits derived from the participants' participation in peer-mentoring, specifically determining whether this was

effective in helping the participants to develop reflective practices; and secondly, assess post intervention whether the participants have been able to maintain collegial and reciprocal mentoring relationships in their professional work settings post their NQT year and beyond or alternatively, have they since been acculturated into more traditional forms of mentoring, which resonate with some of the hierarchical orthodoxies which have historically underpinned mentoring. In endeavouring to maintain transparency throughout this research, it is important to note that post intervention, 3 out of the 4 participants have completed their NQT year, with one of the participants opting to undertake a two year sabbatical after completing their PGCE. However, their insights upon competing initial teacher training are considered to be just as pertinent alongside the participants who are now in full time employment as physical education teachers, with regards to measuring the impact of peer-mentoring to inform reflective practice post intervention. These collective insights will be important in relation to measuring and determining impact. The terms student teachers, participants and participants will be used interchangeably to reflect some of the past and present dialogues and considerations derived from measuring the impact of this intervention.

4.19 Assessing the impact of the peer-mentoring intervention

The impact of the intervention on the participants resonated with a lasting set of reflective practices and approaches, which the teachers have used to signpost and navigate their classroom practices. The participants assessed the impact of the intervention through monitoring post intervention how often they engaged in reflective dialogue with other colleagues, whether through formal disseminations of teaching practices with other teachers or during informal discussions with a designated school mentor and departmental colleagues.

The participants identified some important benefits when reflecting upon their experiences whilst peer-mentoring one another, indicative of their experience was the opportunity to gain support and feedback from the strong professional relationships that had been developed throughout their teacher training. Identifying areas for improvement became an important yardstick for gauging improvement, specifically the opportunities afforded to them to disseminate ideas and gain collective feedback in supportive collegial environments. The participants were aware of some of the challenges which permeated this dialogue, with specific reasons situated around time and heavy workload schedules, which at times were detrimental to personal reflection, in enabling the process of feedback to their peer-mentee. However, it was acknowledged that once workloads were better organised and managed, more opportunities

arose for productive reflections and disseminations of pedagogical expertise to transpire. Aspects aligned towards the characteristics of a good peer-mentoring relationship were highlighted by the participants as pivotal, specifically the benefits aligned with familiarity and having a previous collegial relationship. This was viewed as an important aesthetic for developing and maintaining a productive and purposeful peer-mentoring relationship. This was also considered to be a contributor towards developing aspects of trust and openness with regard to sharing personal successes and reservations about teaching, particularly during teaching placements.

In attempting to navigate their way through teacher training, it was imperative to gauge the impact upon developing reflective processes throughout the process. The participants collectively shared the sentiment that such collaborative learning processes contributed towards helping them to reflect on the teaching which occurred in their respective lessons. Perhaps, quite pertinently, the participants felt that this encouraged a determination to improve and develop their pedagogical understandings and query aspects of their teaching when certain factors were problematic. In determining whether the peer-mentoring and community of practice was beneficial, the participants acknowledged the importance of being able to share experiences with someone that is encountering similar contexts, they felt this facilitated professional learning, and made them more cognisant of seeking opportunities to further extend their professional development. Their engagement in supporting one another through their teacher training was considered also through a pastoral lens, as the participants often felt that this was a continuous source of support, particularly where they felt unable at times to seek support externally from their peer-mentoring pairings and their established community of practice.

The reciprocal dynamic of the peer-mentoring relationships and the mutual benefits gained became a hallmark for the participants in assessing the impact of the peer-mentoring intervention, as they became more reflective about their practice, with clear praxis links drawn in formulating ideas concerning pedagogy, teaching and learning. Importantly, due to the reciprocal nature of the intervention, the participants were also able to provide and share resources with one another, and actively sought to collectively improve each other's strengths and areas for improvement where appropriate. The participants felt that importantly for them the most significant aspect of the peer-mentoring intervention occurred when they were able to openly establish areas for improvement aligned to trainee themed workshops and the focus group discussions, as they felt that this was an important aspect of developing their own practice. The rationale which accompanied this was aligned to disseminating ideas and supporting one another

as a collective in a supportive environment to make substantial improvements in their teaching, and pivotally challenge their existing pedagogical beliefs and their understanding of reflection, particularly concerning matters which occur within classroom practice.

4.20 Key Findings: Assessing the impact of peer-mentoring post intervention

In attempting to assess the impact of peer-mentoring, post intervention with the participants, a series of follow-up questions were articulated and presented to gauge and measure the impact of this particular peer-mentoring intervention. The importance of this is crucial now that the participants have completed their NQT year's and are fully immersed within professional teaching as early-career teachers.

Follow-up interview questions were targeted around impact and more specifically measuring the impact that engaging in a peer-mentoring has had on the participants in attempting to make the transition from student teachers to early-career teachers. Upon completing their initial teacher training three out of the four participants have gone on to successfully complete their NQT year and become early-career teachers. One of the participants as mentioned previously, opted to undertake a sabbatical upon completing their PGCE, however, it was considered pertinent by the researcher to still gain their perspectives post intervention, with regards to the measuring and assessing impact that the peer-mentoring process has had on them personally and consider some of the impact that this may have on them in the future with regards to when they eventually complete their NQT year. Their insights were still considered pertinent as lasting impact on reflective approaches post intervention could still be measured from their insights despite having taken a sabbatical period.

To determine the impact of the peer-mentoring initiative post intervention, a set of semi-structured interview questions were used. The participants provided some similar contexts for consideration such as workload pressures and time, as components that influence the implementation of formalised mentoring structures. Importantly, their experiences of the impact post intervention yielded personal narratives based on their subjective experiences in making the transition from trainee teacher to early-career teacher.

The participants spoke about how the intervention had impacted them personally in their current professional roles as teachers, in the case of one participant they related some of this context back towards some of their experiences during their initial teacher training and this was used as a reference point for them throughout the interview as they are not currently in professional

teaching employment. References were made with regards to the benefits that were gained from the peer-mentoring experience, with regards to developing pedagogically and working as part of a collegial environment to support each other during teacher training. There was some acknowledgment concerning the impact of the intervention on developing reflective processes, and these processes now becoming the reference point for navigating professional practice and development. The participants discussed varying aspects of the practices used within the intervention such as the workshops and focus group discussions as an important feature for developing a set of pedagogical skills and resources which they now utilise in their professional teaching capacities respectively.

The context for evaluation then shifted towards how some of the approaches utilised within the intervention had provided support for the participants throughout their NQT year and beyond into their transition as early-career teachers. For the participants the approaches used very much permeated their NQT year. The approaches used allowed the participants within the community of practice they constructed to develop a set of resources and practices from which they could draw on to help facilitate aspects of their teaching. The participants referred to this as an essential part of their transitional journey from participants to teachers. Most importantly, the approaches used were considered to be the stimulus for purposeful and regular reflective engagement. These considerations provided an opportunity to determine the impact of action research. Specifically, the participants were asked whether they advocated action research as a tool for teachers improving and examining their own practice. The participants collectively acknowledged the capital attributed to teachers examining their own practices. They recognised that such practices provide opportunities for teachers to assess where improvements can be made, in addition to developing reflective processes which can signpost them towards making new advancements in their approaches towards teaching. There was also some scope for considering the different types of knowledge which can emerge from working in a collegial environment which endorses critical examination and evaluation of teaching practices. This context also provided a stimulus for considering post intervention whether the participants had continued to engage in reflective processes to develop aspects of teaching. Collectively all the participants' including the participant undertaking a sabbatical acknowledged that they have continued to engage in reflective dialogue and reflective processes to inform aspects of their teaching practice. Reflective processes which developed aspects of teaching among the participants were considered to be the catalyst for engaging in reflective conversations with colleagues. While it was acknowledged that there was no formalised construct for reflective dialogue, it was expressed that these conversations take place informally among colleagues,

unconsciously and often spontaneously after periods of teaching engagement. The consensus gathered from the narratives provided indicated that confidence emerged from being able to discuss reflective ideas with other colleagues and disseminating concepts and reconsidering best practices.

In measuring the impact post intervention of peer-mentoring to inform reflective practice it was important to decipher whether the participants had been acculturated into any forms of formalised peer-mentoring within their current places of employment. All the participants with the exception of one who is currently on sabbatical highlighted that during their NQT year, they had been integrated and provided with formalised mentoring which was a compulsory components of their teaching initiation. Within the current place of employment, there was a collective acknowledgement that formalised peer-mentoring constructs were non-existent in their respective schools. Some of the discourse presented around this area acknowledged that time and excessive workloads were a contributing factor to non-existent peer-mentoring cultures. All the participants expressed that the only type of mentoring they have encountered post intervention resonates more with traditional forms of mentoring which resemble expert-novice constructs. These contexts provided a basis for examining whether peer-mentoring influences reflective practice. There were several narratives which indicated the importance attributed to peer-mentoring, more specifically the collegial attributes that help to inform reflective practice. The participants highlighted that collaborative endeavour very much underpinned peer-mentoring and this provided opportunities to reflect as part of a collective and consider how reflexive processes informed the community of practice, with links drawn towards how this impacted pedagogical constructs.

The participants viewed peer-mentoring as a vehicle and underpinning factor for facilitating reflective engagement. However, this facilitation was then mapped against whether they were presently engaged in formalised mentoring programmes. The collective response posited was that all the participants were not acculturated into formalised mentoring programmes. Varying responses suggested the following reasons and themes for why this may have occurred; time, excessive workloads, school cultures and professional attitudes towards pedagogical development. Personally, for the participants due to managing their own personal workloads they expressed difficulties in engaging or initiating a formalised peer-mentoring programme, they highlight time, as perhaps the most significant factor which affects participation in mentoring programmes.

An aspect of the peer-mentoring experience for the participants which has punctuated their practice presently now as teaching professionals was the opportunity to participate in a student teacher-led community of practice. It was put to the participants' whether they would encourage early-career teachers within their own professional environments to engage in peer-mentoring and a community of practice. There was a collective and overwhelming consensus, in which all the participants agreed that this particular endeavour would be very worthwhile for early-career teachers, particularly as they would be sharing and possibly experiencing similar issues in the infancy of their professional teaching journeys. However, this particular context once again retorted back to some of the implications in relation to how issues related to workloads and time may affect this. From this context, it provided a catalyst for exploring some of the challenges which the participants may now encounter, now they are not part of a formalised peer-mentoring programme. The challenges posited illustrated feelings of isolation, particularly now that the participants do not have a consistent peer-mentoring and collegial construct to disseminate ideas and personalised feelings in relations to teaching and some of the problems which permeate this context. Pastorally, the participants expressed feelings of missing the collegiality which accompanied being part of a peer-mentoring initiative, specifically being able to confide in a close professional colleague experiencing similar challenges. The participants then considered what they felt was the most important aspect of engaging in peer-mentoring, and how this may have influenced them pedagogically. The collective narratives presented all indicated the most important aspect to be collaborative learning and specifically, engaging with individuals that are immersed in similar experiences. The opportunity to discuss these issues and collectively devise best practices to inform pedagogical development was considered to be a pertinent factor, which the participants indicated has gone on to underpin facets of their teaching and professional attitudes towards collaborative learning and reflective practice. At this point, it became important for the researcher to determine where benefits had been derived and how the impact could be measured between both the researcher and the participants. There narratives in this post intervention follow-up interview provided some key indications in relation to how the peer-mentoring experience encountered impacted the participants transition from participants to early-career professionals. At this point the researcher felt that gaining recommendations was another important way of critically evaluating the intervention and determining where further improvements or considerations could be made for any future formalised mentoring programmes.

The participants highlighted some pertinent considerations with regards to providing recommendations for student teachers who may wish to engage in formalised peer-mentoring.

The participants highlighted this as a worthwhile activity which supplements developing pedagogical and reflexive components. They also highlighted the benefits associated with engaging in collegial and supportive professional environments through community of practice concepts. The reciprocal aspect of peer-mentoring was also an extremely important aspect for the participants as the absence of power, in favour of egalitarian ideals was considered to be pivotal in establishing a supportive learning and pastoral environment. However, the participants were very cognisant of highlighting some of the challenges of peer-mentoring specifically time and pressurised workloads and environments which imped the implementation of such collaborative endeavours. They placed emphasis on the impact that time has on such interventions with remit to developing reflexive practices, they also recognised that as a student teacher the workloads and paper trails with regards to lesson planning, schemes of work and maintaining professional development portfolios could make it difficult to perhaps fully commit to such mentoring interventions. As a counter to this particular dilemma, the participants suggested that managing time and workload expectations is imperative for productive and purposeful collaborative mentoring engagement.

The final part of the follow-up interview, provided some concluding considerations for evaluating the impact of peer-mentoring post intervention, with regards to how this has impacted the participants transition from student teachers to early-career teachers. In evaluating and determining impact it was important to decipher some of the benefits from the participants perspective of being engaged within a community of practice and teachers' researching their professional practice through action research mechanisms to develop pedagogically. The participants highlighted several benefits from being engaged within a community of practice, specifically the feeling of collective pastoral support, provided from being part of a collegial environment which endorsed equal parity amongst the participants and continuous collective reflection on teaching practice and personal development. Action research was collectively considered by the participants to be the vehicle for initiating an examination into teaching practice. The participants advocated action research as a professional development tool, endorsing its capital for improving teacher's practice and developing reflective practices, which compliment a spiral of reflexivity. The participants highlighted that a benefit aligned with continuous examination of their pedagogical practices was the opportunity to engage in deep and meaningful reflection which moved away from some of the surface level criticisms of reflection in education. Reservations highlighted by the participants regarding action research was the time required to make this a worthwhile activity and the possibility of this particular process

distracting teachers from their daily teaching. However, it was concluded that the development of personal practices also positively impacts other teachers' practice.

4.20.1 Post intervention impact summary

In drawing final conclusions in relation measuring and determining the impact of the peer-mentoring intervention now that the participants have transitioned from student teachers to early-career teachers there are some clear indications that the intervention has developed reflective and collaborative learning processes. There is also evidence to suggest that the spiral of reflectivity that action research engenders has now fully been completed, as the three of the participants are now immersed within professional school cultures, with the additional participant looking to undertake their NQT year from September 2016, having then completed their sabbatical. As a vehicle for developing reflective practices, peer-mentoring was considered to be a purposeful construct, with clear links drawn between theory and practice (praxis). While the challenges illuminated regarding time and workload remain problematic for formalised peer-mentoring to be implemented within schools, it is important to note that school cultures for developing staff professionally are imperative for formalised professional mentoring cultures to develop. Additionally, due to such school cultures, all but one of the research participants has been acculturated into more traditional forms of mentoring, particularly during their NQT year. This was important, for determining whether the participants were able to maintain peer-mentoring constructs in differing professional environments. Positively, for future considerations all the participants recognise the potency of peer-mentoring to inform reflective practice as something that can significantly support student teachers through their initial teacher training. Where possible there is a desire amongst the participants when the opportunity presents itself to implement similar mentoring structures in either formal or informal capacities. Action research has been endorsed post intervention as the catalyst for improving and examining existing teaching practices. Overall, the peer-mentoring intervention was determined as successful by the participants as it provided them with a opportunity to challenge their existing beliefs and understandings of pedagogy, reflection, mentoring and collaborative learning. While the challenges need to be considered for future implementations of collaborative mentoring, this particular intervention, with these participants has achieved its aims of utilising peer-mentoring to inform reflective practice through action research.

4.21 Possible Limitations

Within this research certain methodological protocols were acknowledged as limiting. The utilisation of a casestudy approach was restrictive, and meant that only one group could be

studied in-depth through one initial teacher training cohort at a university in the North West of England. The limitations also aligned with using this approach are that case study approaches are subjective in their implementation and interpretation; therefore, sometimes causing uncertainty whether the research instrument has been implemented correctly or objectively. Another consideration is that the utilisation of a purposive sample can undermine the creditability of the research due to perceived selective orientations. Additionally, results are not generalisable across other similar contexts for exploration, thus, findings from the qualitative data findings and reports are subject to varying interpretations. An acknowledgement of these considerations and limitations is essential in adhering to the reflective process of being a researcher, particularly with regards to this methodology and the nature of this particular research study.

4.22 Summary

Primarily, the purpose of this chapter was to describe, rationalise and provide a justification for the general procedures, data collection protocols, research design phases and methodological constructs which underpinned this study. An overview and consideration was provided with regards to the philosophical assumptions, which underpin research, in addition to, providing a rationale for selecting an interpretivist framework as a vehicle to navigate this study. The choice for implementing a qualitative approach and sequential data collection strategy was also discussed as it aligned with an interpretive paradigm and assisted in the collation of qualitative narrative data, for the purpose of this study. The qualitative data was collected by means of documentary reviews, field notes, semi-structured interviews, focus group interviews, open-ended questionnaires, reflective pro-formas and a casestudy on a small sample of student teachers. The justifications for decisions made in terms of methods, sampling and data analysis were also provided and considered. More importantly, the qualitative data collected was analysed utilising an interpretive phenomenological analysis approach which encompassed Polkinghorne's chronological organisation method and Bruner's functionalist approach contextually, as this approach was considered synonymous with narrative inquiry. In concluding the chapter, research reliability and validity and epistemological considerations related to this study have been discussed and explored. The next chapter presents the qualitative findings from this study.

Table 4.4: Summary of Research Themes, Sub-Contexts and Stimulus Questions

Research Stimulus Sub-Questions	Research Themes (Dimensions of Peer-mentoring)	Teacher Training Sub-Themes	Data Collection Strategy
Considering the impact of mentoring on student teachers: How do student teachers conceptualise mentoring and how do they think it can be improved to assist student teachers in the beginning of their professional development?	Defining mentoring	Mentor Selection	Field Notes Reflective Entries Interviews Focus Group Discussions Interviews Workshops
Using peer-mentoring to inform collaborative learning and discovery: How can peer-mentoring contribute towards developing more collaborative learning communities with regards to student teachers' supporting one another through their teacher training?	Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention	Mentor roles and responsibilities	Field Notes Reflective Entries Interviews Focus Group Discussions Interviews Workshops
Measuring the influence and impact of constructivist thinking on teacher development and mentoring: How can cultures of collaborative learning be developed and how can their effectiveness/ impact be measured?	Studying teaching for personal improvement through reflection	Mentor-mentee relationships	Field Notes Reflective Entries Interviews Focus Group Discussions Interviews Workshops
Creating reciprocal learning experiences in mentoring through utilising peer-mentoring: What are some of the challenges of peer-mentoring within a practical context during teacher training?	Establishing a Community of Practice	The mentoring programme	Field Notes Reflective Entries Focus Group Discussions Interviews Workshops
Utilising reflective practice to better inform the mentoring process: How can mentoring be developed to become a 'truly' reflective process for educational practitioners (student teachers and experience teachers)?	Developing Trust within Peer-Mentoring/ Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study	Potential for initiating and implementing peer-mentoring among trainee and student teachers	Field Notes Reflective Entries Interviews Focus Group Discussions Interviews Workshops

Chapter 5: Research findings

5.1 Introduction

The purpose of this study was to explore the implementation of a peer-mentoring initiative among student teachers in attempting to inform reflective practice. Reflective practice has been defined as: a disposition to enquiry incorporating the process through which student teachers or practitioner's structure or restructure actions, knowledge, theories or beliefs that inform teaching for the purpose of personal professional development (Zwozdiak-Myers, 2012). Two research questions and sub-themes guided this study:

1.) *How can peer-mentoring and reflective practice contribute towards developing more collaborative learning with regards to student teachers' supporting one another through their teacher training?*
2.) *What are some of the challenges of peer-mentoring within a practical context during teacher training?*

Informed by the review of literature (see chapter two), the conceptions of reflective practice presented will contribute towards revealing some of the challenges presented, in addition to measuring the effectiveness of peer-mentoring among student teachers. To unpick and answer the two research questions and underpinning themes, narrative data was gathered and collated from teacher trainers (university tutors) that have experience of teacher mentoring. Student teachers were interviewed about their peer-mentoring experiences within their ITT programme of study through utilising, focus groups discussions/ interviews, reflective entries and analysis of documents. The data was analysed through an interpretive phenomenological analysis approach and utilised continuous comparison as an instrument for evaluation. The student teachers' feedback from the workshops, focus groups and reflective entries, provided opportunities improvement to be considered and implemented. Many aspects of this evaluative process were facilitated from whichever categories and themes emerged throughout the peer-mentoring intervention. The results of the study relate specifically towards the impact of collaborative learning, with regards to informing professional and teaching practices, mentoring relationships, challenges of peer-mentoring and reflective practices.

All the participants involved within this research study were immersed within a PE PGCE programme of study, in either a teacher trainer or student teacher capacity. Both teacher trainers interviewed were experienced classroom practitioners, with over thirty years of experience

between them within the teaching profession. The student teachers selected within the study shared similar characteristics with regards to their views on professional development and improving teaching practice.

5.2 Professional learning support

An essential component of any type of mentoring intervention is how this facilitates and supports professional learning (Denscombe, 2008; Rhodes et al., 2004). In this study, mentoring on teaching and classroom practices focused on pedagogical practices, situated around lesson planning, teaching strategies and dissemination of good teaching practices. Importantly, the practice and collaborative support was facilitated between the student teachers' through weekly peer-mentoring meetings and fortnightly intervention workshops, where these aspects were discussed and documented in the reflective pro-formas provided to the student teachers. Other aspects considered within the peer-mentoring pairings and mentoring intervention discussed the dissemination of teaching resources, classroom management skills, dilemmas in practice, collaborative teaching and teaching observations.

Each dimension of peer-mentoring and the student-led workshop content which facilitated reflective practice provided a focal point for analysing evidence gathered from student teachers' reflective entries and focus group discussions. Narratives from interview transcripts (teacher trainers and student teacher focus groups) were drawn upon to illustrate emerging themes, which explored aspects concerning the student teachers' induction into the teaching profession and their experiences of engaging in a peer-mentoring intervention to inform reflexive processes.

Such terms utilised such as him, his, her, she and first names are used interchangeably throughout this section to sustain and maintain fluency and not interrupt the flow of the student teachers' narratives regarding their experiences. These words and their names are to be conveyed neutrally in their reference and are not intended to convey gender bias (Capel and Moss, 2005: 437).

Research findings have fluidly been categorised within dimensions of peer-mentoring and reflective practice in which student teachers can demonstrate a capacity and commitment to:

- Defining mentoring
- Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention
- Studying teaching for personal improvement through reflection

- Establishing a Community of Practice
- Developing Trust within Peer-Mentoring
- Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study

Furthermore, other contexts examined during the needs analysis phase of this study which supported the development of mentoring dimensions included the perspectives of teacher educators regarding the following components:

- Mentor Selection
- Mentor roles and responsibilities
- Mentor-mentee relationships
- The mentoring programme
- Potential for initiating and implementing peer-mentoring among trainee and student teachers

Evidence to inform and provide answers for both research questions are embedded within each section, with supporting themes highlighted in chapter four (see Table 4.4), underpinning the types of reflective conversation and narratives expressed. The areas considered facilitated the types of reflective conversations which were addressed throughout the mentoring intervention. Significantly, this section presents data predominantly pertinent to both the research questions, sub-themes and contexts which have navigated the study. The main research findings of this study are drawn together in a brief summary, which concludes the chapter.

Table 5.1 below summarises and highlights the key findings which emerged from each theme that was considered or aligned to mentoring practice within this study.

Table 5.1: The key findings from the Peer-mentoring Intervention in relation to the dimensions of mentoring (themes) considered

Mentoring Themes	Key Findings
Considerations towards the mentoring process	The process of support is imperative towards finding ways to develop skills to promote high quality teaching. The needs of trainees need to be identified early on within the mentoring relationship. Practitioners of mentoring need to ensure productivity and effectiveness.

	Participants in the mentoring process need to display the motivation to want to help and improve student teachers.
Mentor Selection	Schools need to consider the selection of teachers for mentoring. The process of mentoring a trainee can sometimes be viewed as an unwanted additional responsibility. Selection factors regarding mentoring are dependent on the ethos and pedagogical culture of the school. School must endeavour to demonstrate a commitment of towards developing mentoring cultures and improving early-career teachers.
Mentor Roles and Responsibilities	In the first instan ensuring that trainees receive the right level of support should be the responsibility of the initial teacher training programme leader. Teacher educators should be aware of emerging situations which may affect or threaten the development of a student teacher. Importance should be attributed to defining the role of a mentor from the outset of the mentoring relationship, and making the process clear for all parties concerned or involved within the mentoring process.
Issues concerning mentoring	Issues such as the delivery of feedback can affect teacher competency and confidence. The significant influence of a mentor on the beliefs and values of teaching practice and pedagogy whether positive or negative. There needs to be acknowledgement between the dichotomy of informal and formal feedback processes after the process of formal teaching observations.
Mentor-mentee Relationships	Importance is attri uted to sharing similar dialogues in relation to experiences of teaching to strengthen student-teacher and mentor interactions. The professional experiences of teacher trainers are a factor in the influencing of student teachers. The mentoring process should encompass the opportunity for student teachers to study and reflect on their own teaching.
The mentoring programme	The participation of teacher trainer in the mentoring process

	allows practitioners to revaluate their pedagogical practices and engage more critically about reflection. Mentoring encourages a spiral of continuous reflection. Mentoring can be a mutually beneficial process for both the experienced practitioner and early-career entrant into teaching. Institutions should engage in formalised training for productive mentoring. Time is a context for consideration in the successful enactment of mentoring.
Potential for initiating and implementing peer-mentoring among trainee and student teachers	The potential for peer-mentoring is useful in that aspects of this practice allow for mutual criticality. Commonality of experiences among student teachers is an aspect that very much facilitates reciprocal endeavour. Issues considered as problematic relate towards student teacher possessing limited experience and knowledge to be able to guide one another through the process of initial teacher training. Peer-mentoring if utilised effectively has the potential to enable student teachers and support them in becoming professionally autonomous.
Defining mentoring	The process of mentoring involves mutual understanding. Mentoring identifies with a community of practice where ideas concerning best practice are disseminated, evaluated and reflected upon. Mentoring provides opportunities for pastoral engagement, particularly with two student teachers sharing similar experiences during their initial teacher training.
Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention	Student teachers felt that time was a significant factor in attempting to engage in peer-mentoring. The use of reflective pro-formas and themed workshop activities were important in aiding purposeful reflection. Developing familiarity is an essential component in the development of peer-mentoring relationships, which inform pedagogical dialogue. Mentoring which represents a hierarchy, specifically expert-novice approaches were not well received among the student

	teachers.
Studying teaching for personal improvement through reflection	Through engaging in the peer-mentoring intervention student teachers were able to collectively measure gains and improvements towards teaching. The process of reflection encourages the development of confidence in teaching. The ideas situated within the community of practice facilitated collaborative support for the completion of assignments and coursework, knowledge exchange and dissemination of best practice.
Establishing a Community of Practice	The development of a community of practice encouraged a dissemination of ideas, practices, knowledge and teaching resources within the peer-pairings and themed workshop activities. Student teacher became aware of the 'competitive' aspect of teacher training with regards to lack of sharing best practice with trainees from the PGCE cohort. Student teachers identified that aspects of the peer-mentoring intervention could be more structured.
Developing Trust within Peer-Mentoring	The student teachers regarded trust as being the most important component in developing a peer-mentoring relationship. Openness and honesty in the presentation and reflective evaluation of experiences was also considered pertinent.
Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study	Exhaustive paperwork and administrative processes can impact on the time available to engage in productive peer-mentoring. Such challenges can affect the development and measurement of teaching as activities are perceived to become monotonous. Through collaborative engagement student teachers were able to engage in reflection and develop pedagogical practices which could be measured against their suggested areas for improvement and development. Continuous engagement in reflection allows student teachers to develop and engage in a spiral of reflexivity where pedagogical processes are individually and collectively evaluated and examined. Effective communication considered as a key component in the successful facilitation of peer-mentoring.

Measuring and assessing the impact of the peer-mentoring initiative post intervention	Student teachers consider peer-mentoring to have successfully informed reflective practice. Post intervention the student teachers were acculturated into more traditional forms of mentoring which represent a hierarchical structure (expert-novice). Action research is considered to be a good reflective tool for examining teaching practices and endorse this process for all teachers who share a commitment to improving pedagogically. Communities of practice provide opportunities for student teachers to be immersed within a collegial and supportive environment. The participants actively student teachers to engage in similar professional collegial environments. Reflective approaches developed during the peer-mentoring intervention, have been supported the participants throughout their NQT year in making the transition from student teachers to early-career teachers. Initiating peer-mentoring within schools could be challenging due to existing school cultures, senior management attitudes towards staff professional development, significant workloads and time implications. Recommendations by the participants indicated prioritising time and managing workloads for successful mentoring engagement to occur.

5.3 Conceptualising and framing Mentoring Practice within the ITE context

During the introductory phase of the study, conceptions of mentoring were sought from the teacher trainers involved in initial teacher training to help frame and construct a working definition of this phenomena, which would contribute towards facilitating some of the mentoring discourse and practice enacted within the study. The following sub-themes were considered:

- Mentor Selection
- Mentor roles and responsibilities
- Mentor-mentee relationships
- The mentoring programme
- Potential for initiating and implementing peer-mentoring among trainee and student teachers

5.3.1 Considerations towards the mentoring process

Initially, the study sought to draw some of the considerations involved in the process of successful mentoring. The teacher trainers highlighted varying reasons, with regards to the importance of personal development, commitment to mentoring and considering the wider professional landscape for student teachers during their induction into the teaching profession:

> *I suppose.... I feel that a mentor or the process is about supporting a trainee, in the most positive way to develop their skills to become a high quality teacher. So, I guess it's a supportive role. A little bit of leadership maybe but more so about supporting a trainee... (Teacher Trainer, 1).*

Through descriptive and reflective discourse the second teacher trainer raises a series of points which allowed for some examination of the factors that influence the mentoring process:

> *Currently… for me it's about mentors being able to support and guide trainees that are able to identify what their needs are. I think mentoring is most effective when the initiative is with the trainee, rather than the mentor… (Teacher Trainer, 2).*

Immediately, an early consideration for the mentoring process which is a continuous theme and challenge throughout the study is time:

> *Time is golden here (within the mentoring process)... Making the effective use of the 5 minutes with… 'I've just got a question can you help me?' Yes. Or there's an issue for and in fact as recently as today, looking at the idea of what constitutes a mentor meeting with a trainee... So, it basically follows three levels. There's the instructional one – where do I go? Who do I see? What do I do?... (Teacher Trainer, 2).*

Further considerations illuminate:

> *… And then there's the sort of assessment role – 'how well am I doing this?' And if there's some performance measure then, 'where do I think I am?'… And 'does my mentor agree with me or challenge me?'… So, in the functional aspect, mentoring has all of those in its ball park as well as elsewhere… But certainly mentors have that as part of their responsibility… (Teacher Training, 2).*

These two excerpts suggest that decisions which inform the mentoring process have more to do with the mentor's approach towards the process, with an essential factor reflecting the motivation to help improve the teaching practice of an early-career or student teacher. Some of these expressions seem to elude that student teachers need to be guided by their supporter teachers or mentors to enhance their personal and professional development. However, the

narrative data presented also suggests that mentors need to provide guidance to student teachers based on their specific needs. Essentially, tailoring or measuring the type of support provided throughout the mentoring process is based on the teaching confidence and competence of the student teacher. Thus, ideas posited identify with some of the understandings which underpin the apprenticeship model of mentoring and the constructivist strand of comprehension.

5.3.2 Mentoring selection

The teacher trainers explained that the process of mentor selection within ITT is a varied process, with the university provider, only being responsible for overseeing certain aspects. The following narrative exemplifies descriptive discourse as the teacher trainers reveal the specific details in the mentoring selection process:

> *I don't select the mentor for a school. The school selects the mentor, so the professional mentor in school will decide who is going to be subject mentor for their different subjects that warrant trainees in. So, I don't have the say over that. What I might have a bit more of a say over is what school we use based on the quality of the mentor in there… But in terms of selecting a mentor for PE, for example, within a school I don't really have anything to do with that, it's the school that determines that mentor… (Teacher Trainer 1).*

Additionally, other aspects also considered the liaising which takes part on behalf of the university provider, with regards to supporting the selection process for mentors, in particular consideration was provided towards the impact of time on school teachers' ability and capacity to engage in mentoring. Teacher trainer 2, cautions that schools must consider at length who they enlist to provide mentoring to trainees, with formalised structures deemed imperative for successful mentoring to occur, particularly in the case of early-career and student teachers':

> *I think there are lots of issues around that (selecting)… but a school that knows where it's going in this and selects its mentors with care, and supports them, it's hugely noticeable that… that process is in place where as opposed to mentoring, 'Jason you're the mentor this week'… And it happens by happy accident. That's not coherent and that doesn't work… (Teacher Trainer, 2).*

The excerpt provided details further issues which sometimes contribute to the undermining of the mentoring process within school environments. Generally, the implementation of mentoring from this viewpoint identifies with an unwanted additional responsibility for already over-burdened teachers with significant workloads. The importance attributed to such practice often stems from the ethos and culture from within the school for developing and improving teachers,

and from senior leadership teams commitment towards professional development of teaching staff:

> *… there's the position in schools where for many mentors it's a job that's added onto their current practice - like it or not, yes… you're doing it because you're the person to whom this has fallen this time. And sometimes it rotates around colleagues. I think there are wholesale maxims around how things are done rather than what they're done. That falls back to, I suppose, the school's approach through their senior leadership team… as to how much they value initial teacher education and the role of the mentor; if they see it as a dedicated function – has the mentor been trained? Do they know what they're doing? Are they expert, in some senses, about, with the expectations of what the programmes require? … Maybe what the teacher in training requires – how do they address that? If there are any issues, how do they address it? Are they skilled in making the judgements of analysing lessons and recommending strategies? Or are they less sure about that? Are they OK about the notion of what is included in the new teaching standards? How are they interpreting those? … (Teacher Trainer, 2).*

Importantly, this judgement highlights the sometimes lack of commitment shown by schools in developing and fostering effective mentoring practice, which support student and early-career teachers. From the narrative provided this supports the notion that schools are significantly responsible for the mentoring culture that exists. Prioritisation from the school very much informs teacher attitudes towards mentoring, thus, the importance attributed to providing sufficient training and professional development for potential mentors is of significant importance to schools in attempting to retain and effectively support student and early-career teachers.

5.3.3 Mentor Roles and Responsibilities

In the following narrative, the teacher trainer describes some of the attributes required for successfully undertaking mentoring, by suggesting and reflecting on some of the roles and responsibilities for mentoring. They reflect personally on their educational disposition with regards to being a facilitator of teacher training and mentoring, with reference to roles and responsibilities, in particular the values and where this positions their mentoring practice in the wider professional landscape:

> *… As a Programme Leader, I guess overall (the aim) it's to make sure that every single one of my trainees is receiving the mentoring they should be and the training that they should be within their school. And… I'm quite hot on that really in that trainees know if something's not quite right they just need to get in touch with me…*

… So I see my role as overseeing the quality across all the schools that I'm using for my trainees. And there's very clear process for that to take place and if a trainee's having an issue or whatever, they will feed back to their Liaison Tutor first and if they can't sort it out it will then come to me and to be honest I have done that; I have had to go into schools to deal with situations; I've had to deselect schools because of poor mentoring. ..

… And I'm very happy to do that. You know, at the end of the day, I care about the students and that's it. What the schools fail to understand is a) it's a partnership, not us and them as in you pour all the information in them and then they come and teach, that's how some schools see it. So it is a partnership which they fail to kind of understand and I think that's really, really important and I think they need to understand that they're not getting a fully qualified teacher. They sometimes see them as a supply teacher… (Teacher Trainer, 1).

In response to this narrative, ideas regarding the roles and responsibilities of mentors were listed, and further discussions prompted this response:

… Every single one of those is the role of the mentor. Absolutely… no question. My role I guess, as Programme Leader, let's forget my role as … because I'm also obviously also a Liaison Tutor, so I have a role as a Liaison Tutor but I have a role above that, that's Route Leader; so, if I'm thinking of Route Leader… I'd say engaging the mentee in reflection is a massive part of my role; providing emotional support is definitely my role … and probably assessing the mentee's teaching. Those are probably for my role as Route Leader. But I do believe it's all of those anyway… (Teacher Trainer 1).

From the narrative data provided, it appears that the roles and responsibilities of the mentor can vary widely, dependent on the context. The teacher trainer eludes that from the perspective of a facilitator this role will vary in many ways. Several aspects embedded within personal conceptions and practices are embedded in the above narrative, in which references are made towards engaging in the role and responsibilities of a mentor through a range of practitioner lens. She indicated her role with regards to professionally being aware of the varying roles and responsibilities undertaken by mentors within an education context in guiding student teachers through their induction into professional teaching.

This narrative provides a distinction between the mentoring that takes place among teachers and the mentoring that facilitates professional development in student teachers. The teacher trainer suggests that effective mentoring is most effective when undertaken within a collegial premise, with practitioners working collaboratively to facilitate productive mentoring, which aims to develop student teachers during their training:

… So mentors, and good mentors, would work with colleagues and with their teachers in training. So that's on the one hand. Mentors, on the other hand, have got a significant role in developing their teachers in training with their critical question (Teacher Trainer, 2).

Further narratives explore a third aspect of mentoring within teacher education, with regards to the roles and responsibilities which underpin this context, more specifically, ensuring that the mentoring process is relevant for all concerned, this is considered as a pertinent responsibility for this particular teacher trainer:

… And… I suppose the third element of mentoring in teacher education as a responsibility for how it works… is making that judgement against whether it's adequate and sufficient. And we touched on this earlier about the adequacy and sufficiency of experience and evidence. If it's recent, relevant and authentic and it fits the bill then stop there, don't over-egg the pudding. That is, you know, you've got that bit well and truly in your schema, in your mental mind-set, rather than 'well, just do it again!'… (Teacher Trainer, 2).

Conceptualising the role of the mentor reflects multiple identities which are characterised by the idea of collaboration. This seems to be a reoccurring theme throughout the narratives provided, however this excerpt encapsulates some of the salient features that underpin effective mentoring:

…But to encapsulate the role of the mentor, I think two things come out as being strong. The first one is that idea of collaborating. Without that collaboration, built on a strong relationship, then really it's not going to work as well perhaps. And like collaboration with the trust that goes with it, in a true collaboration in that if we were to share a lesson, then it would be equally well if you had the lesson plan and I taught or I had the lesson plan and you taught or we taught it together. And there were various other … it was a continuous and seamless event but that wouldn't happen unless we'd had a dialogue. So lots of other things fit in because of that collaboration and it's not as easy to just tease one out like spaghetti – and you pull and other things come out in the same way. And… the other one I suppose…the idea that in terms of curriculum subject knowledge. Because there's always going to be and it's the one on the extreme left-hand side, there's always going to be that wonderful child that asks you the awkward question. They're there; it is their function in life… (Teacher Trainer, 2).

A key finding which underpins collaborative mentoring relationships are the opportunities for disseminating learning and practice around effective teaching and learning, particularly in the context of supporting student teachers. Importantly, the above narrative posits that such relationships also provide the opportunity for critical reflection, regarding teaching approaches with this reflection allowing for improved pedagogical approaches or practice to occur.

5.3.4 Issues concerning Mentoring

The narrative data within this context revealed some of the issues which can prove problematic for successful mentoring to occur. These issues were highlighted as factors which affect the teacher competency and confidence of the trainee, with specific reference towards how feedback is provided and delivered to facilitate purposeful reflection-on-practice and improvement:

> *I think… there are many issues with mentoring and there are issues for the trainee involved in the first place, in terms of how they receive feedback from their mentor and how they cope with it and how they deal with it and how they then either use it or don't use it… But in terms of mentors, I think there's a massive difference in the way different mentors work and I think their own views on what they should be doing, I don't think that's particularly clear at all. And something… What I try and do here is… I try and encourage mentors, for example when they've been observing a trainee teacher, they have the feedback afterwards, a lot of… certainly the more old-fashioned mentors sit the trainee down and tell them what they did right and wrong… (Teacher Trainer, 1).*

The teacher trainer acknowledges that mentor influence can sometimes affect mentoring practice and this is not always beneficial for the recipient (mentee). Dissonance is also highlighted with regards to the specific role to be adopted by the mentor, and whether this engages with formal or informal structures with regards to the feedback process undertaken after formal observations.

5.3.5 Mentor-Mentee Relationships

The narrative excerpt presented acknowledges that for the teacher trainer, a significant part of participating in the mentoring experience derives from sharing similar dialogue, with reference to experiences encountered within the practitioner landscape and the professional environment. Therefore, the interactions with the trainee are underpinned by a respect for the previous experiences of the teacher trainer and how those experiences help to navigate dilemmas in practice:

> *… I think a massive part of being able to deliver a teaching training programme or run a teacher training programme etc. etc. is based upon prior experience so, so often I'll draw on my own experience when we're looking at an issue or a situation that if I hadn't been in teaching I couldn't do any of that... But even not just teaching to be honest, Jason, I think like I was in the army and I lived in Hong Kong for five years and travelled for a year around Australia and all of those experiences add to my ability to do the job I'm doing now. It's not even just teaching in schools; it's so many other things we do. I think having a rounded person as a teacher or as a teacher-educator is really good… (Teacher Trainer, 1).*

Importantly, this also supports the notion that the experience of teachers is considered to be a factor which could positively or negatively affect the enactment of collaborative mentoring within an ITE or classroom context.

Further considerations, acknowledged the importance of discussing the recent contexts which impact teaching, from the perspective that teacher trainers (university tutors) should spend more time within the school environment to keep abreast of recent classroom practices and challenging behaviours, in gaining some scope for how this can be managed within the classroom context. This is something that is considered as 'capital' by the mentee, as the dialogue expressed then reflects commonality in experience shared rather than from a retrospective disposition:

> *I think even now ever since I've been here I've always said that, as lecturers, we should spend … we should have built into our programme a certain number of days each year that we work in a school. I think it's really important. Now obviously, it's slightly different in that we do liaison visits to schools; now that's not teaching a class, no; but what it is doing is it's seeing the type of behaviour that goes on now, the strategies that are used to prevent that behaviour or to deal with that behaviour, the way children react to different stimuli, etc. So we do get to see that, it's not like we're here in our ivory tower and we never go out; we do go out on a regular basis to see students teaching however, I don't think there's anything as good as actually going out there and teaching and I do think that's important that we should do that, yeah I do... (Teacher Trainer, 1).*

This finding indicates that the experience of the teacher trainer is imperative towards informing the practice of a student teacher. Resistance is also offered towards the idea that teacher trainers should be disassociated from the school classroom context, with some acknowledgement that recent conceptions of the current teaching paradigms strongly informs dialogue between the student teachers and teacher trainers.

Another narrative presents a somewhat different view regarding the construct of mentor interactions, with an entirely different focus for positionality regarding the context considered. The focus for this narrative engages with formal and informal mentoring practice. There is some retrospective consideration given towards previous mentoring practice as being 'structured and formal'. However, a modernist perspective now embodies mentoring interactions which are equally as purposeful, but more informal as the excerpt below posits:

My practice (mentoring) was very formal. It is now very much more informal. It was about yes, here are the things that mentors do and this is how we operate. Didn't last long as formality… It was probably about two or three formal mentor sessions. And I said, 'well hang on, this isn't meeting your needs'… The role of the mentor should be to support, guide, counsel and question what the trainee is doing. So, therefore, I say this in the mentor meeting thing, the various functions and dimensions of the role in terms of offering support, in terms of aspects of training or whether it be the judgement and the domestic stuff. Those seem to feature very much in the idea of OK, that's what the mentor does and I'm thinking that happens far more effectively when the relationship is one of informality rather that formality… (Teacher Trainer, 2).

This disposition reflects the importance for exploring reflection, particularly within a teacher training capacity as someone that is responsible for the imparting and distribution of knowledge. One key feature of effective mentoring as student teachers' study their teaching, is the capacity for the teacher trainee to also be able to study and reflect upon their own practices, by demonstrating a capacity and commitment (as evident in the excerpt above) to link theoretical principles and practices underpinning pedagogy within their own teaching practice (Eraut, 1994; Stenhouse, 1975, 1983). The premise for student teachers to draw knowledge from a range of sources as they seek to improve their teaching is not only exclusive to trainees, but teacher trainers also.

Further narratives consider the conceptualisation of defining and describing the mentor-mentee relationship, with definitions engaging with some of the theoretical concepts which underpin critical reflective perspectives:

OK… So, which ones best describe the current state of the relationship between me and my mentees or trainees … I would love to say it's critical friend because I will ask a critical question. But I'll also be supportive in the critical sense of if you have a question, please don't not ask it, do ask it. Because… the critical friend raises the question and then perhaps reflects the question and genuinely in a sense of not just bounce the question back but OK, what have you done to resolve the question that you just asked…? (Teacher Trainer, 2).

Considerations also acknowledge the process of feedback and how this specifically facilitates critical reflection from the perspective of being the critical friend to the student teacher:

So, the critical friend to me is crucial in the role of a mentor and whereas I'd love to think that instructor and counsellor and manager and partner are all involved in this, they are all involved when mentors give substantial feedback and it's not just the… what but it's the how it's done. Because feedback for me has no use whatsoever unless it does one crucial thing, it feeds forward, it begins to change attitude. I've got several issues around… well, we said this, have you done that? Well actually, no, it's the opportunity for the teacher in training to show me they have… (Teacher Trainer, 2).

Importantly, the catalyst for the critical friend is underpinned by a reciprocal approach, one that is not always facilitated in the traditional hierarchical expert-novice approach towards mentoring, where the experienced practitioner tends to lean towards more autocratic delivery, in the process of professional collaboration and knowledge distribution to improve teaching and learning. With regards to traditional hierarchy that has sometimes permeated mentoring, the teacher trainer, eludes that most approaches require flexibility, and an acknowledgement of fitness for purpose regarding the implementation of such approaches to be effective:

… There are some mentors that do the instructional thing really well and some teachers in training that need that instructional stuff. And that's fine and where it works – brilliant because it's meeting need. And so mentors can often swap roles with a different placement, and say this instructional role won't actually fit the person's need and I think the idea of flexibility… in there is really important because if mentoring is to be effective at all, it has to respond to mentee or trainees' needs, it can't just be… 'I'm the mentor, this is what I do'. I only do it this way. That doesn't work… (Teacher Trainer, 2).

This professional dialogue, according to varying practitioner and academic commentaries is one of the most pertinent facets of mentoring. The need for flexibility is somewhat of a stimulus for productive mentoring and reflection-on-teaching in considering areas for improvement from a dissemination of ideas position, not an instructional position which does little to consider the perspective of the student teacher. Importantly, this excerpt facilitates the conception that mentoring should be student-teacher centred with constructive ideas posited for areas of improvement, and not mentor-centred.

5.3.6 The mentoring programme

This context addressed some of the principles which underpin the mentoring programme/ framework in relation to discussing some of the benefits and problems that can be attributed to mentoring. This narrative highlights some of reflexive processes engaged in by the teacher trainer

in evaluating their own teaching practices within the school environment or context. Ideas are also expressed concerning the content of lessons and how the lack of engagement in critical reflection as an in-service teacher, has now changed since adopting the role of a mentor in a teacher training capacity:

> *… as a mentor because when I first started here and I was a mentor and I started going in and watching student teachers teach, it made me realise how bad I had been as a teacher in school. Because… I saw lessons that were virtually the same as lessons I had taught when I was in school and I thought they were atrocious and I looked at it and I thought… 'oh, my God!'… This is horrific… (Teacher Trainer, 1).*

For the teacher trainer, her induction into the mentoring process, allowed her to reconsider her pedagogical practices and approaches through a spiral of reflection to better inform student teachers, in addition to improving personal teaching practices. This resonates with some of the earlier narratives and dispositions referring to supporting student teachers from previous teaching experiences:

> *… This is the first time I've ever taken a step back and reflected upon what's happening in front of me… It made me think what is PE about, what do I want from PE, what should I be seeing in front of me if I'm watching PE? When I was a teacher in a school I never did that. When I was a teacher in a school, we had on the timetable netball… so I planned my netball lesson and in my lesson it said they were going to be in threes and then in fives and then we'd have a game and then we'd do this. And my evaluation of that lesson was, 'did that happen? Yes, it did'. 'Were they smiling and happy? Yeah, they were.' Job done, I've had a great time and everything's gone well. And I never once took a step back and thought, 'actually, is this PE? And is this what I want for PE?'… So, for me, being a mentor has changed me phenomenally… (Teacher Trainer 1).*

This particular context, proved to be quite emotive with the teacher trainer highlighting that mentoring has been the catalyst for making them a very reflective practitioner with regards to teaching and learning and analysing whether successful mentoring comes at a professional cost:

> *… Cost of mentoring? Not really, I think it's a fantastic thing to do. I think it makes you very reflective as a person. I think if you're a good mentor it makes you a very reflective person... (Teacher Trainer, 1).*

Other narratives from the second teacher trainer also explore the benefits of mentoring, by encapsulating the functionalism of how mentoring can be beneficial to both the mentor and the mentee within this process:

> *Benefits (of mentoring) are huge… Not just in terms of benefits to the trainee, which are sort of functionalist in some senses and enabling and straight into the area of coaching on the one hand… but for the mentee, fine… but for the mentor they're actually more critically reflective of their own practice. To have someone ask you… 'well, why do you do that?' and then to go away and actually think why do I do that in that way? Is there another way? To have that opportunity to see different people working differently and to have the sort of metacognitive skills to say 'well actually I want to change what I do now as a result of seeing that'… There's huge benefits there. (Teacher Trainer, 2).*

This illustrates the potential of reflection to be of mutual endeavour in the case of the mentor and mentee. The narrative provided also informs the reflective dialogue which could occur between the mentor and the mentee. This premise resonates with the overarching theme within the study which posits peer-mentoring and collaborative endeavour as a mutually beneficial process for stakeholders within the mentoring relationship. This disposition also suggests that student teachers value being given the opportunity to engage in reciprocal dialogue concerning their own development, particularly when discussing classroom practice and contexts associated with this. Additionally, this also illustrates that the provision of enabling environments where constructive criticality and reflection are embodied, help to enable environments of parity and equality between the mentee and the mentor. This resonates as a necessity for fostering and enabling student teachers' personal and professional development.

Considerations were provided towards how the mentoring provision could be improved regarding the current programmes of study for initial teacher training. This excerpt highlights a clear institutional commitment and endeavour towards improving this practice:

> *… I am fortunate in one sense to be a holder of advanced mentor recognition with the LJMU programmes so within initial teacher education there is a mentor recognition scheme. Yes, I think there's a huge potential for that to be significant for teachers in schools, to recognise their critical performance with teachers in training. The down-side is how that evidence can be gathered in conjunction with a full timetable, teaching, assessing, learning, parents' evenings, consultations and all the things that go with it. It's, again, the effective use of time. So, programmes fine and yes I think that every mentor should have*

a recognition of the quality of their training but also recognition of the quality of their performance. It would be insufficient of me to say, 'well, OK, I've done the level one mentoring course but I've no evidence of putting it into practice'. Mentoring is an active process, not just a theoretical (Teacher Trainer, 2).

The importance attributed to reputable training and formalised mentoring recognition internally from an institution or from an external quality assurance provider, is pertinent to the disposition presented. Conversely, this narrative does explore some of the more problematic considerations with regards to effective placement of time, primarily because of the evidence gathering that is required to gain recognition or status as a competent practitioner of mentoring and reflective practice. Interestingly, distinctions are also made between the practical contexts of mentoring in implementation and the theoretical aspects which underpin mentoring; both are viewed as separate identities.

Another narrative illustrates that while the are some problems that permeate such developmental practices, such as financial and time implications, mentors could engage in observational practices to help better inform the mentoring process, where evaluations of practice can be undertaken, in refining the mentoring provision provided. This teacher trainer explains their implementation of an intervention to help towards improving mentoring practice:

… I run one session on it (mentor development) and it's very, very useful and if we can get mentors in to perhaps observe a lesson that's been filmed and we all complete an evaluation form and look at… you know what we've all kind of seen in that same lesson etc. etc. So I think it's really useful but unfortunately it doesn't work because we get so few mentors coming in and we pay. You know, the school is paid or, if it's after school, the mentor gets paid for coming... (Teacher Trainer, 1).

This commitment to developing mentoring practice also promotes the types of reflective conversations that practitioners are often criticised for not engaging with, with regards to improving the mentoring provision available for student teachers undertaking initial teacher training. This has been a point of contention, with some commentaries highlighting a 'disconnect' from rhetoric to reality and praxis, with specific reference to the expectation for student teachers to improve their pedagogical practices. However, contrastingly, this invite for improvement, has not always been extended beyond student teachers' as a mutual endeavour for teacher educators to also reflect and improve.

5.4 Exploring the potential for initiating and implementing peer-mentoring among student teachers

The potential for peer-mentoring among student teachers to foster reflective practice was considered in the concluding phase of gaining the teacher trainers' perspectives. This was particularly pertinent as their perspectives had informed some aspects for consideration regarding the study area. Specifically, thoughts were required for the potential for peer-mentoring. Aspects concerning practicality and implementation were considered, with specific reference to student teachers being able to mentor themselves through their induction into professional teaching, with no existing previous experience to facilitate their professional artistry, pedagogical learning or development, in attempting to move away from a traditional paradigm of mentoring.

The following narratives present some thoughts and considerations for the implementation of peer-mentoring within education. Reflection upon personal dispositions is presented in relation to particular aspects of pedagogy and supporting collective endeavour among student teachers with regards to sharing similar experiences within a teacher training context. The excerpt below recognises the potential for peer-mentoring as an aspect of mentoring:

> *…As an aspect (peer-mentoring) of mentoring in action - why not? Is it useful? It's going to be because let's take it from the top down. Two colleagues new to a situation can be mutually supportive. They can discover who, where what, when? What do I do? How do I do it? What's useful about it? What's not useful about it? They could be mutually critical. 'Yeah, that's a really good idea – can I borrow that?' 'Yeah, what do you think of that - didn't work very well did it?'… 'Well, actually I thought if at that point… was the point where it went ace, so yes'… And there's a synergy of age perhaps. So, yes, I think peer mentoring is a really sound idea. The down side for me is actually where the peers don't get on! Where they do get on I think it can really be an enhancement for both. Where they don't get on it's a disaster for both. So I think peer-mentoring certainly has a place but I'd be very, very cautious about who I pair as peers… (Teacher Trainer, 2).*

Another approach considers the promise for peer-mentoring in education, within the context of student teachers informing one another's practice:

> *… I think it's really important. I think it's really beneficial to the trainees; I think we do it on the PGCE as it is already… so for example, the trainees are coming in a week on Friday to do a file-check*

day and they'll each be in pairs and one will assess the other person's file and discuss it and the other person will have a chance to explain why they've got what they have in there etc., etc. So, we already use peer mentoring anyway… and I think we can use it an awful lot more and I went to a conference recently in actual fact where I saw some phenomenal practice that I'm going to steal, well not steal because that's what the conference is all about but I'm going to try next year with my students and that is each student will film a lesson and then in one of the sessions they come back to uni they'll have a peer and they will observe each other's lessons and provide feedback for each other; and I just think that's fantastic stuff. I think that's exactly what we should be doing when we consider peer-mentoring… (Teacher Trainer, 1).

The presentation of ideas in this excerpt indicates a commitment to practice and in particular existing practice that already facilitates peer-mentoring constructs within initial teacher training within this ITT programme of study. Importantly, further narratives suggest some resonance for the potential for developing peer-mentoring among student teacher as a productive endeavour, however, caution is posited towards trainees undertaking such practice during the induction phase of their progression into teaching:

… I'd say partly yes (student teacher could guide each other through their trainee year) but certainly not on their own, no. I think, you know, there's an awful lot that we can see, you can learn from everybody… it doesn't matter what age they are or anything so yes, it has a place to be there (peer-mentoring), but certainly not on its own, not as the only form of mentoring… (Teacher Trainer, 1).

However, further explanations suggest that in the capacity of a Newly Qualified Teacher (NQT), this could potentially be a very effective process, which facilitates the dissemination of innovative and current ideas concerning teaching and learning:

…I think wholeheartedly (peer-mentoring could work), yeah because… a) they remember very recently what they learnt and what they went through and b) they're current and up to date with everything they've done and c) they're actually passionate about it still… (Teacher Trainer, 1).

Additionally, this illustrates that there is some potential for peer-mentoring; however, the relationship dynamic between student teachers is pivotal in the arrangement of peer-mentoring pairings. Significantly, this also encapsulates the idea of student autonomy in becoming stakeholders in their own professional development through similar lived experiences within an initial teacher training programme of study.

The commonality of experience is an aspect of peer-mentoring which provides the reciprocity needed to facilitate a productive collaborative dialogue. This context is supported by a further narrative which explores the capital attached to student teachers having the professional capacity and competence to mentor one another:

> *… Certainly in terms of a commonality of experience, yes they do (student teachers). There is a shared domain experience there… It's that continuum… but yes… In terms of peers, I think they can mentor each other. Where it falls down for me and the two aspects where it does… is if there's a problem that they can't resolve – neither's had either the opportunity or the experience to discover this and so therefore they will need to seek outside support and two, the adequacy and reliability and maybe in some sense the validity of the assessment that may have to be made and I say may have to be made because in the notion of what is now NQT induction, it's a changing beast with the new teaching standards. So in one sense I think there's a dimension for peer-mentoring which is a really grand idea and would work really well but there are two aspects there that would cause some tension… (Teacher Trainer, 2).*

This illustrates that peer-mentoring has many benefits, particularly with regards to viewing mentoring from an alternative perspective, that from, the view of the student teacher. However, there are some considerations given towards some of the more underlying features of peer-mentoring, which could be problematic. This particular context centres on experience and how limited experience could in contrast have a negative effect on student teachers, as they may not be sufficiently equipped to diagnose or manage problems inherent within their teaching practices.

One of the many stimuli for peer-mentoring is the encouragement and promotion of professional autonomy among student teachers, in attempting to enable teaching exploration of pedagogical practices. Importantly, the novice role that is undertaken by the student teacher can promote a heavy dependence and reliance on the teacher trainer for affirmation of correct practice; this can be a significant contributor to stifling independence within the trainee. The development of self and professional autonomy is an important indicator for measuring the effectiveness of peer-mentoring. This narrative attempts to capture and summarise some of the practical considerations for measuring the effectiveness of peer-mentoring to promote professional autonomy:

… Right, let's take this notion of the journey for teachers in training and I'm going to catch this in three words. First one's familiarisation, yes and peers can certainly help in the familiarisation phase. You can share the pain, the gain the sorting out of the who, what, when, where and why? How a curriculum works, how a subject works, how children learn and all of that as peers… Absolutely – peer-mentoring could be great in supporting that. Phase two is about collaboration and we've discussed a little bit about OK what collaboration is, well peers could well be collaborative but bear in mind their collaboration may be limited to their domains of experience. Therefore, how do they recognise what's just beyond their capacity? They may be mutually self-supportive and that's the limit of their support… (Teacher Trainer, 2).

Further considerations; acknowledge that, among student teachers, the premise for just support as a single defining factor is simply not enough to challenge constructs of teacher preparedness and promoting autonomy:

…Yes, I'll support you, you support me – we're OK, aren't we? And there's not enough challenge there. So outside, reference to challenge, have you thought about this? What about that? May not enter their discussions and then finally there's the phrase that you use and that about being autonomous. And autonomy whilst, on the one hand, it can give you the idea of yes, I'm independent; I don't need any more support. While actually professional autonomy turns that really on its head – 'I know where to look' for help, support etc… (Teacher Trainer, 2).

Within this particular dialogue, the emphasis placed on the avocation of professional autonomy, measured against knowing who to consult in the remit of the knowledgeable other, in this case potentially, a more experienced practitioner, is a point that is recognised as also an important and essential aspect of developing professional autonomy. This narrative summarises some of the considerations for the development of professional autonomy through peer-mentoring, and the idea that conscious and unconscious competences, are a result of routine teaching practice and experience:

… In essence… professional autonomy should promote the question… 'I know who to ask. I know what question to resolve. But I'm able to do that; I'm empowered to do that'. At the stage where 'yes, I know I can and I will'. Rather than… 'I don't know'… and I suppose on the other hand, is this wonderful idea about conscious competence and unconscious competence. Conscious competence – I know I'm OK and I know I'm doing a decent job. Unconscious competence is… does it flow, it goes, it

works, almost by habituation, by a matter of routine and yes, you see it in the skilled professional who can do something unconsciously... (Teacher Trainer, 2).

This narrative provides some considerations which are important for enabling student teachers, rather than disabling them. Importantly, the promotion of professional autonomy may contribute to oversights regarding the scaffolding process of learning, which involves some more directional learning specifically from more experienced practitioners. The narrative illustrates that the overriding component which best facilitates the improvement of the student teacher is the production and development of a set of skills and qualities which form their professional artistry and pedagogical approaches towards teaching and learning:

In developing… this professional autonomy… You recognise those qualities. It is about not just the repetition but it's about the idea that yes, they've developed a set of skills, they've developed a subject knowledge base, they've developed an approach to teaching and learning, making relationships with an audience, or individual that actually begins to change frames of reference, that changes thinking and when you see skilful professionals doing that it is a work of beauty… (Teacher Trainer, 2).

The narrative data provided indicates that mentoring relationships between supporter teachers and student teachers within this study can be interchangeable where reciprocity is advanced, and hierarchy is rejected from the outset of the mentoring relationship between both parties. Significantly, both teacher trainers highlight areas of mentoring discourse which can be informed by continuous reflexivity, in attempting to provide better mentoring practice. The importance of best practice is highlighted through developmental mechanisms which help to reduce feelings of hierarchy. In particular, the acknowledgment of the concepts which underpin collaborative endeavour, recognising that the indicator for this stems from teacher trainers promoting or enabling a culture which embodies collective input in the development of teaching and learning among student teachers. The sub-categories provided at the beginning of the chapter allowed for the teacher trainers to examine their own mentoring practices, in addition to informing what they believed to be effective mentoring practice, and considerations for mentoring engagement. Additionally, the narrative data also indicates the involvement of student teachers in the mentoring process as pivotal for developing professional autonomy. Importantly, considerations and perspectives are given towards this particular autonomy being purposeful for the student teacher engaging in a process where, appropriate information and support are given from a more experienced practitioner.

To evaluate their own teaching systematically, student teachers were encouraged to gather evidence, on a fortnightly basis, from a range of sources and perspectives as they conducted their reflections on their teaching practice. Importantly, these reflections were used to inform future planning, content for workshops and areas for improvement. The data collection technique (reflective documentation) utilised by the student teachers' for gathering evidence and the purposes they identified, was pertinent in facilitating their collaborative and personal development. Essentially, the peer-mentoring pairings and reflective entries examine the purposes that the student teachers' identified for gathering evidence concerning their own teaching. Importantly, this evidence was used to discuss practice as part of a collective, which embodied a community of practice approach to evaluate and reflect on practice to inform future planning regarding teaching and learning practice.

The next phase of the results and discussion process, details the student teachers experiences of engaging within an initial teacher training programme of study and a peer-mentoring intervention to facilitate reflective processes to inform teaching and learning practices. The experiences of the students' teachers were considered as a collective, in the form of focus group discussion interviews over nine months within an academic school year during their PGCE year, intermittently, in October 2013 and, March and July of 2014. Reflective pro-formas were used fortnightly to document experiences relating to peer-mentoring. This informed and facilitated the thematic content for the community of practice workshops, with specific themes provided by the trainees and the researcher for primary focus in the development and consideration of teaching and learning practice, and how this could be best informed by collaborative endeavour in the form of peer-mentoring. In attempting to try and encapsulate the experiences posited and encountered, the responses have been characterised into mentoring dimensions. These themes will be the sub-structure from which narratives are presented in attempting to explore the impact of peer-mentoring among student teachers to inform reflective practice. The contexts explored aim to answer the research questions formulated for the study.

5.5 Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention

As the student teachers' reflected upon aspects of their induction into the teaching profession, the reasons for informing their values, decisions and processes illuminated a commitment to study their own teaching and develop professionally and personally. Initially, early engagement with the peer-mentoring intervention, led to a collective concern of over-loading with regards to the information being provided. Early narratives cite slight apprehensions towards the teacher training process:

> *…I'm finding it … it's gradually getting better as we are getting further down the process. At the beginning I think the amount of stuff that got thrown at us, in terms of information, it was a massive information overload, whether that's on purpose I don't know…. But at first it wasn't enjoyable and there was a few questions in my head whether this was possibly the right route for me to go down… (Phil).*

> *… Going back on what you said, I felt the first couple of weeks there was almost like a fear-factor put into us, they gave us so much information, like behaviour - what they expected pastorally, not just like your teaching and it kind of made me feel 'wow, there's a lot more to it than just going out there and teaching it', which I knew anyway but not to the extent. And it almost built it up too much and when I actually got in the placement I was like oh, hold on, it's not actually as bad they've made out. So, I didn't enjoy that, I felt the placement was definitely the most valuable thing about it… (Leanna).*

> *… Mine's kind of similar to the previous two. The first two weeks in uni was really, really long and drawn out and it was just like information overload. And that's probably not the best way for me to learn. So a lot of stuff just went straight over my head and speaking to other people as well it was similar for them… And when the placements come round it was, you know, the thought of going into placement and coming away from them long days was a breath of fresh air. So obviously you're in there for four days and then you come back in on a Friday and everyone discusses like you know what they've been up to, what they've done. But then at first, similar to Phil, I was kind of questioning whether or not this was the right course for me, the right path for me. Obviously, it's something I want to do but I'm just questioning now whether I'll be doing it long-term, how long I'd be doing it for to be honest… (Luther).*

Further narratives considering and evaluating experiences at the early stages of the programme of study also highlight some dissonance in the messages conveyed to student teachers during the introductory phase of the course:

> *…OK… so just like Luther, the main problem is like it's not consistent across the board. So one lecturer will tell you OK this has to go here, you have to do this and another lecturer will say this has to go here, this has to go here. But it was completely the opposite of what the first person told you. So like I said the workload at the start was horrendous here and now they're finally having an hour break. Some of the stuff was irrelevant or some of the stuff was repeated maybe four or five times, taking up five hours, which could have been done in an hour. Do you know what I mean? But overall, I love it… (Becks).*

During this stage, early challenges began to emerge with regards to collating time for implementing peer-mentoring within the pairings; these narratives highlight some of the early challenges of engaging in the peer-mentoring process:

> *… OK, I'll start … so, the first week, the way I looked at it I didn't really know what I was doing but now that Luther has filled in (reflective prof-forma)… I have an idea of what to do. The only problem is, I'm finding it hard to get the time to do it and actually work with Leanna like … so basically the best way to do it would be merged together but like we've just not had time like been able to find time to do that. So then we need to think about making time available to do that… (Becks).*

> *… See I think if there was (peer-mentoring)… as part of the course… if time was allocated where we were maybe, we got pulled together. You had to do it, you were there. Because… at the moment me and Luther, we're just relying on when, we're in university on a Friday, we're definitely going to be together so we'll discuss everything then, how things are, so we'll go through everything – how we've been feeling and all this kind of stuff then…(Phil).*

Conversations at this stage then considered how events during teaching practice could be documented to measure and track personal development, in addition to facilitating the study aims to foster reflective practice through peer-mentoring. These narratives highlight the commitment to measuring and documenting teaching practice, by the student teachers:

… I mean it feels like too much just because we've got loads of stuff but in reality you think how much you've done in two weeks, if you wasn't doing it every two weeks it would be such a big summary that you don't think you'd get the benefit of the breakdown of what actually happened. So I think the timespan of when we're doing it actually in reality isn't … that's not bad at all, it's just whether we can allocate the time ourselves… (Leanna).

… I think bi-weekly is a good timespan to work off. Anything longer I think could be too much in terms of forgetting stuff especially if you're not writing down like … two weeks is good enough… (Phil).

This was a particularly interesting set of narratives to evaluate, as this became the catalyst for demonstrating a commitment to both the study and improving teaching practice through engaging in reflective practices. Implicit within the decision to engage in a reflexive process was the need to facilitate a personal interest towards gaining more knowledge and understanding in varying areas of teaching and learning discourse. As a consequence upon drawing on areas of improvement this stimulated the student teachers' awareness and recognition of the need to improve aspects of their teaching pedagogy. Some of the ideas presented recognised that the reflective pro-forma and the workshops, with the heavily focused collaborative and discursive aspects were useful in stimulating reflective conversations:

… We've just had conversations anyway and then when we've met up to talk about it, it's been like, we've spoke about that, it's sort of just trying to remember what we've had the conversation about and then talking about it in more depth maybe… (Phil).

… So, in a way it's like you're reflecting but you get on with it so it's almost put it more in action because sometimes when you're writing evaluations and that again I'm just going through the motions, I have to reflect. But when I'm actually talking to someone it really makes me think… (Leanna).

Further narratives explain how the process has helped to stimulate and navigate the process for reflection, as explained in this excerpt:

… I think it's definitely helped me to reflect and what to look out for. Also I think it's helped me on the other side of it, so for example, one of Luther's strengths is definitely stuff like literature, writing and organisation and planning so it has been really helpful for me because I've had someone to talk me

through that. Whereas I'm not as good at getting practical work done, he (Luther) is really strong at that so it's helped me out… (Phil).

Comparisons are then drawn between the formal mentoring processes, with regards to the student teacher assigned to a supporter teacher who undertakes the role of mentor during the teaching practice, in comparison to the more informal construct of peer-mentoring within the group of student teachers assembled for the study:

… He's (in-school mentor) definitely helpful. At the moment it's extremely informal and it's been really for me to push the issue… it's helpful in terms of subject knowledge and school-based stuff. So we've got all the stuff to cover such as essays and filling out all the forms. That's all on me… that's where peer-mentoring really helps… I think as you have some to converse with about it all, in your pairing… (Phil).

Further considerations illuminate more practical limitations with peer-mentoring with regards to experience, knowledge and similarity in mutual concerns and challenges:

… I think it's totally different because Luther will never see me, not unless we record it, he'll never see me teaching and he hasn't got the knowledge that the teacher has in school… has got to give me feedback on how I'm delivering a lesson. Whereas we're on the same page in terms of what level we're up to so we can discuss how we are getting on. I couldn't discuss that with a PE teacher because he knows a lot more than me… (Phil).

One of the peer-mentoring pairings then alludes to the importance of familiarity in developing a peer-mentoring relationship which embodies professional development, criticality and reflection. Specifically, they highlight within this excerpt the productivity which derives from previous familiarity:

… I think there's ways to go round that. I think if it was an actual thing before it started, I think if you got put together and you know there was ice-breakers, not ice-breakers, but there are ways round that. But if think it's helped a lot more that me and Luther do know each other and have worked together before in the past and we can talk and communicate a lot easier… (Phil).

Further anecdotes posit that:

> *… I think it will always help won't it… if two people have known each before because then you don't have to spend time breaking the ice and getting to know each other… (Luther).*

The critical aspect of the reflection and peer-mentoring is also acknowledged, through the lens of previous acquaintance:

> *… And also I'm not scared to give him maybe a little bit of negative feedback whereas someone I didn't know I might be a little bit, how are they going to take that?' Whereas I know Luther will take it… (Phil).*

This particular narrative details some of advantages to engaging in a process which embodies critical reflection, underpinned by a constructivist paradigm. In this excerpt, reflection is framed around mutual dialogue where both stakeholders share a commitment to reciprocal practice, rather than one that resembles a hierarchical, novice-expert approach:

> *...Yeah, well it's good to see like Leanna's strengths and what areas she feels that she needs to improve upon. So then maybe her areas of improvement could maybe be my strengths. So I'll be able to like help her and tell her, giver her advice on what she needs to do to get that like knowledge or whatever she needs to do. Or the other way round, if it's an area of development for me it could be one of her strengths so she could help me. It all does tie in … you know, yeah … (Rebecca).*

The strength attributed to collective dissemination of problems or dilemmas inherent in teaching practice, was a reoccurring theme within the peer-mentoring initiative:

> *…Just to add on to the end of that one from Rebecca, even if you know there's a problem and… was kind of stuck for solutions, if the two of you are working together to solve that problem then it's much easier, it's less pressure and the chances are you going to find a solution together rather just on your own… (Luther).*

Importantly, conservations also acknowledged that the peer-mentoring helped towards not over-burdening the designated in-school subject mentor, for fear of possibly causing frustration, over-reliance or dependability:

… And also we are trying to impress our subject mentors as well so you don't particularly want to be hassling them with … asking for … or showing maybe a weakness to them sometimes because you know you're trying always to get them to look at you in the highest light… (Phil).

Further narratives support the above excerpt, with reference to teaching practice consistently being observed in every aspect, as the rewards to be gained, from exemplary practice could result in potential employment, should practice be deemed as 'high quality':

… Sometimes I feel like it's a really long job interview because this is the reference you're going to use when you apply after the process. You could potentially get a job in that school if a position comes up; they're more likely to employ somebody they've seen for three or four months than someone that they've seen on a one-off, if you do a good job. So although I want to improve, in the back of my mind it's like if an opportunity does come up, you know, you're going to try and want to take it… (Leanna).

Significantly, stemming from some of these conversations, ideas then considered mentoring relationships within schools, more specifically, whether they advocate reciprocity or reflect more hierarchical structures of mentoring. Interestingly, the student teachers identified with the experience of the mentor as a significant factor in guiding their practice, and developing their teaching and learning approaches. Additionally, ideas were also posited which detailed the reassurance from subject mentors, that they also still make mistakes even as experienced practitioners:

… My mentor (in-schoool) always tells me that she's still learning and she still makes mistakes. So like if I feel a lesson hasn't gone as well as I thought she will like pick me up and say 'well, I could have had that problem, you know it's not just you because you're training'. She's had like what 30 years' experience, it could still happen to her. Every day is a new day, every day's a learning day no matter how long you've been in the job. So… whereas the experience side does come over because she can give me so much advice, that way. So, it'll come across that way that she's ahead of me but I don't mind that because I'd rather her give me the advice and show me the direction forward… (Rebecca).

Contrastingly, some aspects of mentoring practice were analysed from the perspective or productivity to the student teacher, regarding specific types of support. In particular, this narrative highlights an oversight of some aspects of mentoring needed to support the trainee:

Yeah they try and do too much. So maybe you know one of his strengths is having a negative effect on the department. So because he's head of PE, he's really busy so when he's mentoring me sometimes he kind of … he's got the knowledge, the subject knowledge but sometime he's a bit late with doing certain tasks for me… (Luther).

Within this context, a further narrative posits some reluctance to value the previous experience of student teachers'. This narrative reflects some of the hierarchical practice which still affects the practice of mentoring within the teacher training context:

… I always feel like you're always looked upon as a trainee so even though you might have certain knowledge or certain experience, they don't really find that out, they're just looking at me as a trainee. Which is obviously below, they're a qualified teacher, so obviously they're looking down on you, not in a bad way but you know they're qualified with so many years' experience and I'm a trainee sat round. So regardless of any experience I've had in the past or what modules I've done on my undergrad or anything, I feel like I'm always going to be that trainee so whether or not any suggestions … And you can come up with ideas if you've got a specialism in a certain sport, you can come up with ideas for drills or games but in terms of more of the running of the PE … I don't think they'd listen to that side… (Luther).

This narrative highlights some of the dissonance which can often occur between the mentor and the mentee. This particular context draws attention towards the value of student teachers as being significant stakeholders within the induction process. More specifically, the acknowledgement of the experience, that trainees' bring towards the professional environment, as these prior experiences directly inform values and opinions held about teaching and learning.

Contrastingly, one of the student teachers recites how their prior experiences have been utilised productively to help inform colleagues about knowledge on a particular specialist area:

Because… obviously they know that football's my specialism and I think they've read on my profile, they almost all come at me with like ideas because none of them have actually got a specialism… (Leanna).

The student teacher further posits the comfort and confidence they derive from such experiences and reliance on their specialist area:

Yeah… This is quite comforting in a way that they actually come to me and that and to the point actually where they let me do the after-school club by myself without them there. The argument… where they're not meant to leave you but then because of my qualification they kind of can by law anyway so it doesn't matter… (Leanna).

This practice facilitates aspects of reciprocity as the student teacher becomes a stakeholder in the facilitation process for learning. This clearly demonstrates the value attributed to involving student teachers within the planning process, and more importantly, viewing them as equal partners in knowledge delivery and construction.

Further narratives indicate that schools found this to be beneficial, with some cases advocating a change of curriculum provision in discovery of a student teacher possessing specialist knowledge about a subject or game activity:

… Yeah totally agree with Leanna on that. Because they found out football's my specialism; they didn't have it on the timetable, I was like timetabled to do for example, hockey, they took it off and put football in for me to do it… (Rebecca).

When queried as to why they were asked to do this, the following response was provided:

… Because no-one else would teach it. So the girls could get it. So they took off hockey, which was a weak subject for me which would have benefitted me to do it. Whereas I was doing my strongest subject, which is good to practice but it probably didn't benefit me because I've done it so many times… (Rebecca).

The contrast to such experiences is highlighted in this narrative, which expresses a lack of choice, flexibility and variety, in exchange for having to adapt your skills and practices to the existing curriculum provided, in comparison to the other student teachers who had their expertise acknowledged and accommodated:

… It's exactly what they've just said but in terms of like specialist, I'm in a school where they don't do any of the sports I've ever done before so they do rugby and hockey every single day and I've never played rugby or hockey so if find it really tough. I would have like to have maybe that bit of a comfort blanket, bit of a safety net, where I could specialise and sort of have that to prove it to them that I'm really

capable of doing an excellent lesson… whereas at the moment I'm stressing out trying to find drills and stuff for stuff I've never done before and teaching things. So you're saying your mentors are adapting to that, mine aren't. Mine are just like this is how it is and this is what you're going to do…(Phil).

However, while this may have proved difficult in the interim, there is some acknowledgement that this type of exposure to subject areas of weakness, will prove advantageous in developing teaching and learning practice and subject knowledge:

… But like I said, I've had to learn and adapt and it's something I'm going to benefit from in the long term because my knowledge in that subject's going to be improved… (Phil).

This indicates some good practice by the subject mentors in attempting to modify the existing curriculum to the strengths of the student teacher, which will have derived from consulting with the trainee prior to undertaking teaching and engaging in the timetable for activities and subjects provided. Importantly, the student teachers eluded that this practice was facilitated initially by peer-mentoring discussions, which then were had with the subject mentors in attempting to encourage creating sessions which worked towards their strengths as practitioners. However, evidentially, there is some evidence to suggest that inflexibility is still posited in varying constructs, with some departments reluctant to accommodate trainee teachers. Confidence and ability to teach then become directly affected as a result of such standardised practice and curricula.

The contexts posited in exploring early experiences of the student teachers upon their induction into teaching illuminates some important areas. The narratives provided clearly show that collaborative dialogue and discussions with subject and peer-mentors was significant in guiding early practices. These findings strongly suggest that the collective perspectives facilitated through the peer-mentoring pairings were a key factor in developing aspects of teaching for the student teachers. Some of the findings within this context also highlight that the student teachers judged the effectiveness of their own teaching by focusing on how their teaching influenced their understanding and teaching delivery, particularly in relations to utilising different approaches, experiences, strategies and expertise. Student teachers highlighted within this phase of the peer-mentoring initiative that more structured approaches with regards to their time management and the researcher enforcing reflective entries to be maintained fortnightly, would be beneficial towards facilitating effective peer-mentoring. Importantly, the collaborative practice in the

infancy of this intervention enhanced and developed student teachers ability to monitor differences between them. This particular observation was informed by evidence gathered from a range of lived and verbalised narratives. The findings provided also suggest that the student teachers' recorded personal thoughts, perceptions and modifications to their plan of action with regards to developing teaching practice in a systematic way, not only to guide the development of this research but also to keep a record/ diary of events for reference purposes, in attempting to ensure information was not forgotten. This was pivotal in facilitating and exploring reflections about teaching practices and experiences through peer-mentoring one another.

5.6 Studying teaching for personal improvement through reflection

At this point, it became evident that improvements in teaching practice were becoming more evident. At this particular point of the peer-mentoring intervention, aspects were considered around how personal improvement was being measured and reflected upon with regards to teaching practice. The student teachers focus at this stage, centred on developing teaching competence and confidence to teach:

> *… Oh, being at school. I think just developing all the skills that I've mentioned previously. Majorly improved on confidence and that's from seeing success and having good lessons and being able to reflect on what I've done and realising too, that's pretty important. I would say nothing majorly but confidence has definitely improved since that enjoyment because I felt like my confidence improved going and doing better lessons and that's definitely improved my enjoyment really all-round… (Phil).*

This particular narrative focuses on the development of skills through reflexive processes. Confidence has been instilled by observing the impact and success of lessons, and specifically targeting areas for improvement. Significantly, this stage of the intervention also brought about contrasting experiences for one of the student teachers who cited 'disagreement' with their school mentor as an obstacle for measuring further personal improvement:

> *… In school, probably the opposite to Phil there to be honest, since November, even before November. I just didn't settle in the school, at the placement I was in. I disagreed with a lot of stuff, things the mentor was doing. Not in a bad, bad way but just the things he had me doing. I thought it could have been done a little bit different. My mentor in uni kind of agreed with me a little bit. But obviously we get told mostly everything comes in phase three. So you've just got to see it out a little bit. But obviously*

the more you're there, November/December/January you just kind of like feel, start questioning whether or not, could you do this for the next five-ten years? Fifteen years? Obviously, the opposite too Phil, your confidence goes down a little bit and you think, 'I'm wasting my time a little bit'. So obviously… the mentor they try and mentor you, point to what they want to see, stuff like that… (Luther).

Aspects of the experience to date at this stage had begun to make the student teacher question, whether this was the correct career choice, at this point it was not particularly evident, that this impacted directly on confidence to teach, as their level of enjoyment and fulfilment was becoming affected. Specifically, at this juncture, the student teacher refers to their own experiences of undertaking mentoring capacities. Aspects of the mentoring dialogue between the school mentor and the student teacher at this stage highlighted some dissonance in practice:

… So he had me teaching my weaker areas but obviously I've mentored people myself over the years and I learnt to do it with a bit of success. So I would have rather have had a mixture of strong and weak areas, rather than just 90% weak areas, even though it's going to develop my subject knowledge, you've got to think of your pedagogy skills, so if you're going into a lesson and all you're thinking about is your subject knowledge, you're not really going to develop that behaviour management or, you know, the transitions or little things rather than pedagogy. So that's probably the reason why I disagreed with the activities he had me doing to be honest… (Luther).

Importantly, this clearly posits the lack of parity in equally focusing on areas of strength and areas for improvement. The student teacher identifies that at this stage, confidence was decreased by focusing specifically on areas for improvement. Although there was some reflection towards developing subject knowledge, other aspects were considered to be neglected in focusing just purely on subject knowledge. Within the above excerpt the student teacher highlights an over-emphasis on pedagogical traits, and a lack of emphasis on other areas which completed a rounded picture of the teaching professional.

At this point, whether through a positive or negative lens, confidence related to teaching delivery becomes the underlying theme of this particular context. Other narratives illuminate the confidence that is built over a period of time and the relationships that are developed as a result of developing this confidence within teaching. Another underlying theme also acknowledged the development of subject knowledge as an area which was constantly an area for improvement:

… Probably the same as Phil. Definitely noticed more confidence like in lessons with the younger age group as the relationships were being built, whereas I found it a lot harder with the likes of year tens, especially the school I was in because it's quite a deprived area, just like a lot of issues with the kids and they just weren't interested in P.E., even the GCSE lot. But towards the end they started to get over that. But definitely subject knowledge was definitely improving, still areas where it needs developing, which is definitely going to happen in this school anyway. So, yeah, overall a good experience and I was happy with how it went… (Becks).

During this phase of the peer-mentoring intervention, discussions became more specific regarding the impact of reflection-on-practice. Specifically, evaluations were sought from the student teachers at this point, regarding how peer-mentoring has contributed towards facilitating reflexive processes which inform teaching practice. The narrative provided highlights some of the positive considerations for collegiate practice in contributing towards improvement of teaching and reflection upon that teaching:

… Yeah well, I think like it's good because it lets you actually sit down and think 'right, I've actually done this, I've done this well'. 'OK, I need to improve on this'. And then by talking to whoever you're working with, it actually allows you to tell them what's happened as well as them being able to give you feedback and advice and how you'll … or, you know, how would you maybe check literature or look at resources? So, it does give you help and guidance so that you're just not by yourself, you know, you've got other people to help you there… (Becks).

Importantly, this excerpt demonstrates quite clearly, how peer-mentoring can be utilised effectively to foster components of reflexivity. The collaborative nature of such practice allows for the dissemination of ideas and the sharing of dilemmas that may arise from teaching practice. This narrative was particularly pertinent, as it embodies many of the concepts that underpin this study, with particular reference towards sharing experiences and collectively conducting a process of professional enquiry to inform development of teaching and learning.

However, in alignment with some of the emerging and reoccurring themes situated within this study, time continues to permeate and potentially challenge the effectiveness of this particular peer-mentoring intervention. This response represents some of the challenges to peer-mentoring:

… Just time, especially now we're in school full-time, we're not in university every day. So before, me and Leanna would have sat down and like that Friday we're at uni and done it together, whereas now we're having to send emails back and forward to each other which is obviously a lot harder because we can't have face to face conversations like that… (Becks).

As time became a challenging aspect for successfully implementing peer-mentoring, adaptations were introduced to manage some of the challenges presented relating to time. Consequently, for a short period while the student teachers were not able to meet at university whilst on teaching placement, conversations and peer-mentoring dialogue was facilitated through phone conversations and email dialogue.

Further narratives explored the coursework and the more academic requirements of the ITT programme which involved the completion of assignments. This became quite an important aspect, as the ideas which underpin communities of practice really began to be encapsulated within this context discussed. Ideas based on the reciprocal nature of peer-mentoring also concluded that the intervention was useful in encouraging knowledge exchange where participants could provide and gain knowledge. This narrative, in particular facilitates the constructivist paradigm which underpins this study, with the student teacher highlighting the benefits of engaging with someone who is going through a similar experience, at a similar time:

… Yeah, just to agree with Rebecca there, you know you can talk about things like certain literature or to do with an assignment, bounce ideas of each other and stuff like that but Phil might have certain levels of subject knowledge and stuff or he might have done something in the past and he can pass that on to you a little bit and vice versa. But also as well because like you know, depending on what school you're and who you're paired up with, I wasn't paired with anyone at first but, not in my second school, so you're just kind of like, you're just on your own. So apart from like the people in the school, the teachers and stuff they don't really know … they know what course you're on but they don't know like the ins and outs of the course… (Luther).

The experience explained also engages with student teachers supporting one another to navigate their way through their ITT programme of study. This particular narrative also exemplifies the importance of having the opportunity to engage in collaborative endeavour. This is recognised as imperative within this excerpt as the student teacher highlights that within the school context there may not be opportunities for trainees to converse with other trainees or members of staff.

Therefore, having an external opportunity in the form of peer-mentoring to engage in teaching and learning dialogue and reflection becomes important for establishing good practices, and collective problem-solving:

> *… Well, yeah because whereas some people might be paired with someone in the school, you know, they'll be able to kind of talk to each other throughout the day, throughout the week, whereas there was times where I was getting up in the morning, going to school, doing work after school and going to bed. So apart from the people in the school, I weren't seeing anyone at all. So the peer-mentoring was good for that as well. So you know, obviously you can talk to Phil, kind of bounce ideas off each other, just figure out where you're up to in relation to where he's up to… (Luther).*

Further narratives also highlight peer-mentoring as a beneficial activity which really supports and encourages reflective practices regarding teaching:

> *… Yeah, exactly the same. I think the peer-mentoring really, really helps. However, since the last time we met it's time because we've been moved onto a five day week, we didn't see each other for five weeks… (Phil).*

However, as highlighted earlier, time was still proving to be a challenge in attempting to initiate successful peer-mentoring, as student teachers found it challenging to place time aside for weekly meetings as they were required to be in school placement for a Monday to Friday period:

> *… So we used to come in every Friday, that's when we'd discuss things. We had about a five or six week block where we didn't see each other but because I was coming in and doing work in the library doing work at night, I was seeing PGCE students so that's when we'd talk about things that, you know, what went well and what didn't go well… (Phil).*

Other reflective conversations with temporary colleagues within the schools have also supported reflective conversations, which have helped towards feelings of integration within the department team and the school:

> *… I've been placed with somebody and because we share a lift on the way home after every day we've just found that we'd naturally say, oh you know, 'how was your day?' You know the questions like 'what went well?' 'What didn't go well?' And that has helped me like just in the past week in the new*

school, it's helped me massively really just to be able to reflect on things that happen in the day and like what you've enjoyed and stuff and being able to recognise what you did enjoy and why you enjoyed it… (Phil).

5.7 Establishing a Community of Practice

The next context considered at the half way stage of the mentoring intervention with the group of student teachers, acknowledges some aspects concerning the community of practice. More importantly, how the group of student teachers were able to share and disseminate experiences within their constructed community of practice:

…Well, especially when, I don't know if this is right, but especially when we're in uni, we'll at times be in groups and like take lessons as a group and then we might discuss as group there and then, 'OK this went well'. Or, 'this didn't go so well'. And then other people can pitch in and say 'OK, well you can do this?' You know, or 'I have resources for this' or 'I've done a lesson like that'. And we are quite good as a group sending lesson plans or sharing or developing resources with each other in our peer pairings and workshops. We have like 'what's app groups' and stuff so we like text and send emails, and share best practice in the workshops, so we are good as a group like that; able to share things, as a group… (Becks).

The community of practice initiated for the group of student teachers immersed with the study, also allowed student teachers to make some observations concerning the 'competitive' aspect of being involved in a PE PGCE programme through the themed content in the mentoring workshops, with some conversations highlighting some reluctance from student teachers on the programme of study to engage in collaborative practices, in favour of more individualistic practice:

… You do notice like the people on PGCE, who are just out for themselves… (Phil).

… Obviously I think there's only a small number out of the whole batch but like at the end of the day there's competition to get the job… (Phil).

Further commentaries posit that some of these behaviours maybe instinctive for student teachers' in an already competitive environment:

… I think it's just instinct, I think it's just natural instinct from people to be either, whether it's a bit like defensive or a bit like holding back or stuff because we don't want to give or show especially… I possibly might have done that myself because we had a 'Get That Job Day' just before Christmas and three people had to be interviewed… (Phil).

… So, yeah maybe it's just instinct but like on the whole people do share quite a lot. Like me and Luther talk a lot, basically a lot of subject knowledge and stuff, like he was asking me before about hockey and I've sent him some resources that I had… (Phil).

This narrative suggests that the academic staff within the programme also contribute towards the competitive environment that has been generated:

…Yeah, yeah just to add onto what Phil answered your question there, 'has anyone kind of guided that competiveness?' Well, some of the lecturers do but we're all in groups so there's you know like three mentors, they might have about, you know, twelve trainees in each group so they can get a bit competitive as well. Obviously, with a bit of humour. But you know that could add to it as well to be fair… (Luther).

Importantly, there is some acknowledgment from Phil that he would be reluctant to share some of his ideas and positions in a simulated interview activity, in attempting not to give an advantage to fellow colleagues within the programme. However, within the peer-mentoring pairings and the community of practice, there was a willingness to share resources and subject knowledge to collectively enhance teaching and learning practices, particularly within the themed workshops:

… and I know for a fact that I wouldn't put myself forward because I wouldn't want the whole group to see how I'd answer some of … how I'd answer some of the questions. I mean if I'd answered the question really well I wouldn't want to give away that edge… (Phil).

Collective discourse concerning peer-mentoring also highlights that some of the mentors within the actual programme of study are not considered approachable with regards to accommodating student inquiries related towards teaching:

But from the peer-mentoring what I've learnt is like some of the mentors aren't approachable so just in terms of … they're nice people but like there's this standard you've always got to work at. So like if

you go to them with a certain issue sometimes you get hit with, you know, 'go away and find out' or 'you should already know that'… (Luther).

This particular narrative highlights some of the positive features attributed to peer-mentoring in that the commonality of experience between peer-mentees, removes hesitance in asking questions concerning practice that perhaps teacher trainers may not display patience with. The collaborative dialogue that had been engaged in was a direct influence on this particular judgement, which also identifies with some of the more traditional approaches towards mentoring that contribute towards student teachers feeling unable to ask questions, seek information or query observations regarding teaching practice.

Further narratives posit an unfair expectation on student teachers to be sufficient in knowing certain types of knowledge. This narrative explains the experience of asking lecturers for information and support:

... Sometimes it like… what lecturers you can go to and ask certain questions. And sometimes you're just better off just running it by someone else in the library first, i.e. Phil, because he's my peer-mentor. So some things I'll just ask Phil, 'do you know anything about this?' Or, 'have you done this?' 'Have you filled this form in?' Or, you know, 'what's the deadline on this?' Because obviously if you go to some of the mentors, they automatically just expect you to know it because you're a trainee, you're on the course. But obviously you've got a million and one things to do. It's easy for some things to kind of slip behind. Obviously the way some of the mentors work, obviously they want you to work at a high standard to be fair to them but sometimes they're not as approachable as they could be to be fair… (Luther).

This highlights some of the variances in approaches to mentoring posited by teacher trainers and existing teachers in schools. There are some fair consideration towards mentors attempting to promote and encourage independence and autonomy among student teachers. Some of the opinions provided also highlighted the importance of relationship building during school placements in attempting to encourage effective teaching. This narrative explains how within the forthcoming school placement, considerations turn from building relationships to subject knowledge, and how this impacts teaching practice:

… It scares me a little but I feel now, moving into my second placement, that I'm working so much more, even just being there a week I feel I'm going to get so much more support and I'm going to observe outstanding teaching, whereas because I'm in a different context, in a completely different environment of school, whereas my last placement it was all about building the relationships with the pupils. It necessarily didn't matter on your lesson content, it was whether you had them relationships with the pupils, if they were going to participate or if they were going to enjoy your lesson. Whereas this time it's going to actually be on my subject knowledge because if I click my fingers they are going to jump, which is what I need because I need to develop my subject knowledge, which is obviously going to take me onto my NQT year. So yeah… (Becks).

However, when discussions begun to explore other student teachers experiences within the group, there was still some disappointment towards some of the mentoring practice implemented by the university tutors, with regards to not acknowledging the prior experiences that the trainee may bring to the existing context. Unfortunately, this still characterises many student teachers' experiences in ITT programmes of study:

…To be fair, I'm just kind of looking forward to moving onto better things whether it's NQT year or, you know, supply or wherever it is it may be to be honest because I haven't really liked the trainee relationship you have with your mentors and stuff because… no matter how good your subject knowledge is or the experience you may have, you're still a trainee… (Luther).

Further discussions among the community of practice attempted to try and illicit more positive experiences. However, the honesty encouraged and the opportunity to vent frustrations is evident in this particular narrative, where the student teacher expresses to the group that there is more of an emphasis on the errors which may blight teaching practice, rather than a focus on the positive aspects which inform teaching practices:

… The lessons I've enjoyed the most are the ones I had where no-one's been watching me. They're the best ones because … because you're a trainee, they've always got something to say; even if you do a good lesson, if one little tiny thing happens in that lesson it's magnified like ten times over. So it's kind of like, you just get a bit fed up with it to be honest… (Luther).

While some of the points verbalised were purely anecdotal and subjective, this does demonstrate that where support is provided for student teachers', consideration must be given towards how

feedback and observations are delivered and implemented to ensure that teaching confidence is not affected. Importantly, the narrative below indicates that where sensitivity is not maintained, this can adversely affect teacher attrition, lesson enjoyment and motivation which may then impact on other varying aspects of teaching and learning pedagogy. The trainee highlights that teaching in this capacity is rather restrictive and stifling:

> … *So it's just a little bit frustrating (teaching), so I'd rather just, you know, just put my own stamp on things a little bit and just get rid of the trainee title to be honest… (Luther).*

Within the community of practice, the student teachers also verbalised some examples of bad teaching practice within the respective PE departments where teaching placements were being undertaken. Importantly, from these observations of poor practice some of the student teachers felt that there was a lack of parity and reciprocity being demonstrated by some of the existing teachers, who according to some members of the group tended to focus significantly on weaker areas of practice, which sometimes left some of the student teachers with feelings of demotivation. The narrative below indicates some of the imbalances of practice which aggrieved the student teachers during placement:

> … *It's the nature of being it but like, for example, I've watched a lesson and I've been watching a teacher and I've thought, 'you're winging this lesson'. The kids aren't doing what you want; it's a total disaster. I'll teach the same class a week later a lot better, not perfect, but a lot better; say 80% of the class goes smooth, that other twenty, it's just getting hammered home. 'You need to do this, you need to do this'... I think it's a bit harsh. Sometimes you think like because you're a trainee people kind of like, they don't take into account whether or not you've got certain qualifications or certain other experience… (Luther).*

A further narrative discussed within the group highlighted further poor practice, with some indication that student teachers' were considered as supply/ cover teachers. Conversely, this experience also encouraged autonomy in the decision-making process, and this was considered to be confidence building:

> … *In placement one I've looked back now and realised how many times I was used basically as cover. I think I've proved to myself first and foremost that I can actually teach and then from that it just got really relaxed where I would just go and take a lesson; 'Phil can you go and do that lesson there'. And*

I really enjoyed that and I felt I did develop as I had loads of freedom and I could discuss with the Head of Department, say 'they're a bit bored of doing that, do you mind if I move on and do some handball?' And he'd go 'Yeah, fine. Brilliant. Just do it'. But from going from that to this school, my new placement, I've realised that I have missed out maybe on being mentored to a high standard and what the benefits of that could be. Because just in like the first week in this school placement it's just miles different in terms of the teaching that goes on, practice, the whole department ethos and school ethos it stems down to the kids and it's just … it's got me really excited for this placement really… (Phil).

However, the above excerpt also details upon reflection, the missed opportunities to engage in a high standard of school mentoring, in addition to the benefits that would have accompanied high quality mentoring provision. This is quite a significant aspect, as the lack of mentoring directly influences choices and judgements made with regards to teaching and learning. Importantly, this is where peer-mentoring could become a vehicle for reliability in that the constructs of the mentoring relationship tend to be reliable, as the effectiveness of peer-mentoring is measured purely on the trust developed among individuals within the mentoring relationship.

The next context considered an aspect concerning making the peer-mentoring intervention more specific, with regards to meeting the needs of the participants, as the researcher was mindful that participants may want to achieve certain objectives from the peer-mentoring. In presenting this opportunity, the reoccurring theme continued to be time. However, the participants recognised the potential for peer-mentoring as an instrument that has supported and facilitated reflective practice:

… I think the main problem that we've identified is time. Potentially there's been allocated time; as we've identified that being the problem, that's the solution really. Because when we are together good stuff's happening in terms of mentoring and support. We said earlier, it's difficult to do but we do have quite a lot of days in university so you know if there's allocated time for that we're not relying on ourselves to go out and do it… (Phil).

The aspect of time is something that became problematic with regards to the mentoring enacted within this study among the participants; this meant that emphasis was placed on maximising time and opportunity when student teachers were together in communal settings such as the workshops and focus groups discussions. Specifically, it also meant that from the earlier phases of the peer-mentoring intervention where pairings where spending an hour together on a weekly

basis, more time was spent collectively to address the lack of contact. Significantly, this meant that contact periods during peer-mentoring meetings were longer, and more productive as student teachers' realised that time was restricted by teaching placements and other external commitments.

There was some acknowledgement that among the peer-mentees, that their free time could have been used more productively, as this time was not always used effectively, to engage in collaborative activity:

> *I think… providing that time… because when we are together in university there's a lot of time that is wasted and when you look back on it you're baffled at some of the stuff that you've done and you think this could be good time, not to be left on your own and go 'right you've got the afternoon off – go and do it!'. Actually making sure you do get together… (Phil).*

Importantly, the student teachers were asked about opportunities to engage in peer-mentoring with other trainees on the ITT programme of study. Collectively, the group mentioned that there were no opportunities for peer-collaboration with other trainees enrolled on the PE PGCE, with initiatives for peer-mentoring and collaborative endeavour advocated independently by the student teachers. This narrative highlights the motivation towards professional enquiry:

> *… It our own initiative and on our own inquisitive nature really just to find out how other people are going on because you do find that when you are passing in the library or, you know, you do talk like how things are going… (Phil).*

Structurally, one of student teachers wanted there to be more 'cues' with regards to what needed to be discussed and how ideas could be mapped to further inform teaching practices:

> *… But I think if it was more structured and, you know, you had maybe more cues, what you needed to talk about, it could benefit it really… (Phil).*

In terms of the actual intervention, this was quite a pertinent point, because the study was methodologically designed to be a continuous developmental framework that did not operate within the confines of structure. The study was tailored to specific emerging themes to ensure that the peer-mentoring intervention was not prescribed. A more important consideration resonated specifically with meeting the unique needs of the student teachers, as and when issues

or aspects of practice needed further investigation or consideration. Therefore, adaptability became an important feature in attempting to balance the structure that some of the student teachers' required, alongside the fluidity of maintaining a framework which was flexible and adaptable in accommodating the need of the group.

Contrasting dialogue suggests that the peer-mentoring intervention was working well, for this particular trainee. Some consideration is given towards the unconscious, less structured mentoring that takes place among fellow trainees on school placements, at similar stages of the teacher training process:

> *… I think it works well really because obviously because me and Phil have been doing it for a while now so you get to know each other, you get to know each other's experiences, where you've come from, kind of like you know, where you want to go with the placements. But in terms of like the windows of opportunity, if you're paired with someone in a school then naturally that could happen because you're with them five days a week… (Luther).*

> *… Saying that though it's also you're both in the same school there so like with me and Phil we've always been able to compare our schools and get an idea of different experiences which is beneficial as well. But of course if we were in the same school, you know, you'd have probably more insight into what each other were doing and what we should be doing, so pros and cons… (Luther).*

The idea of mentoring being a multi-faceted and flexible activity is one that resonates with some of the narrative dialogue presented above, where trainees add to their professional knowledge by discussing and disseminating experience within a community of practice to gain an understanding of how varied experiences may contribute towards the development of teaching and learning practices. Importantly, some of the narratives presented also highlight the impact of dialogue when conversing with individuals that have shared or are sharing similar experiences. Essentially, the thinking that pervades this alludes to the point of comprehension being reciprocal, in attempting to explore mutual understanding of key concepts and principals. Within this process hierarchical thinking has attempted to be removed from the knowledge construction process.

5.8 Developing Trust within Peer-Mentoring

Within mentoring discourse, trust is an essential component for developing professional dialogue, which embodies honesty, emancipation of thoughts and criticality, particularly with regards to engaging in reflective practice. Among the student teachers', it was collectively acknowledged that the element of trust was an underpinning factor in engaging in successful peer-mentoring, in addition to developing reflective conversations with individuals that are immersed in similar experiences. This particular narrative encapsulates the emphasis attributed to trust in developing the mentoring relationship:

> *… I think a major thing as well with the peer-mentoring is that you do trust the person that you are mentor of or being mentored by so that's also … because obviously with the likes of me and Luther and Rebecca and Leanna, we've done our undergrad together so we've automatically got that sort of like relationship. However, you come from a different city or different project that's got to be a lot harder so if it there was … the university maybe putting on, you know, it was part of the peer-mentoring initiative like we done that would help massively… And also lots of like team bonding type things… (Phil).*

A further narrative indicates that aspects around trust-building and team-building could also be significant factors in developing trust mechanisms:

> *… Why can't it be sort of, you know… the peer-mentor, doing that kind of thing (team-building)?... Even if it's just for a session, you know it will help improve like… mentoring relationships and practice and stuff …. I think trust is a massive thing… (Phil).*

Other conceptions of peer-mentoring outside of the group were also posited. Specifically, differences were contrasting between the experiences of Luther and Becks, where discussions highlighted the benefit of being able to converse with other students involved in a trainee capacity:

> *… I've never really had the problem or the issue of not ever talking to anybody. My first placement I was paired with someone so like we shared a car, we're talking all the time but now… I'm in placement I'm not paired with anybody but I live with two girls off the course so we're constantly peer-mentoring; we're constantly talking about work, about lesson plans, if we all need any help. The three of us… we all specialise in three different sports so we always help out with that. So I always have someone to talk*

to. Whereas Luther, you know, is maybe at times going home not having that connection with anybody. Sorry Luther. Yeah… (Becks).

5.9 Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study

This particular stage of the study evaluated the peer-mentoring intervention, and experiences on the ITT programme of study as a student teacher, through a reflexive lens. The narratives presented in this section reflect upon some of the experiences collated from the student teachers' in the final focus group interview, which details some positives, challenges and further considerations for the effective implementation of peer-mentoring among trainee teachers. The opening narratives considered some of challenges faced across the year, with the participants explaining some of the difficulties encountered during their year within initial teacher training:

… Been really, really hard and time-consuming, especially with the paperwork. I mean I think the experience is … the teaching's been great most of the time but the paperwork has really put a downer, a dampener on it and I feel if you had less paperwork, you'll enjoy your teaching better and you'll actually be a better teacher… (Becks).

Further narratives explain some of the challenges with the amount of paperwork student teachers' were required to submit and complete. This sometimes impacted on time for peer-mentoring among trainees:

… Yeah, I totally agree with that (Becks comment). I think I'd improve so much more if I wasn't focussed on paperwork. Especially these last two months because we're focussing on getting to the end and making sure we have all the evidence, so my teaching has taken a back foot and I've actually kind of left it there to the point where it's like… 'ahh, I've actually got to go out there to teach and I haven't planned it fully' because I'm too busy getting evidence for what I've already got… (Leanna).

Further explanations indicate how this impacted on teaching practice:

… The paperwork's especially not been my strong point anyway, as Becks said, it has put a dampener on things and that my teaching has taken a back foot, which is a shame because although I feel I've

improved a lot, there could have been so much more improvement if I'd just focussed on that for once… (Leanna).

… Yeah, totally agree. All the things you've got to do it takes away from the teaching. So yeah I agree with everything they've said. For me personally as well the experience it was kind of frustrating at times because I'm nearly 29 and I've done stuff in the past, I've had jobs and had responsibility in the past and I've had people working underneath me as well. So obviously to go in as a trainee, you kind of get babysit a little bit… (Luther).

The ideas presented suggest that in attempting to stay abreast of paperwork and administration, aspects of teaching suffered, with difficulties encountered, involving opportunities to measure teaching effectiveness and improvement. Significantly, such challenges also impeded opportunities for reflection and mentoring as activities became more monotonous. This directly can become a demotivating experience, which often contributes to feelings of disengagement, and early-career teacher retention.

In detailing some experiences some of the trainees it became evident that previous experiences were not acknowledged, with one of the trainees citing that this aspect became quite frustrating over a period of time. In particular, aspects concerning practice and how trainees were treated became an issue for contention:

… You know, I've had an experience in the classroom and the teacher will say 'oh do you want to do the register?' So, it's been very frustrating. You know, the school I'm in now didn't even give me a set of keys, they wouldn't trust a trainee with a set of keys. Little things like that slow you down. You've got supply staff coming in for the day who don't know the school, don't know the kids and they give them all these keys and stuff like that. They're qualified to be fair to them but yeah, just little things like that it's frustrating. It's kind of like you've got to take a step back to go forwards and stuff so that's what's frustrated me… (Luther).

The ideas presented contextualised some of the considerations for experiences related to peer-mentoring, in particular on the PE PGCE. Importantly, the study sought to gain opinions regarding the student teachers' experiences of mentoring each other. This proved to be quite enlightening as their insights would become pivotal in forming future considerations and

recommendations. Reflections of the peer-mentoring intervention illuminated the following responses:

> *… Sometimes it was easy enough especially when we're in uni doing the workshops and peer-mentoring each other and we got to work together. It was easy to like to remind each other or sit together and actually do it but obviously when we are on placement, which is most of the time; it's actually getting time on top of the PE work to do it but apart from that yeah… (Becks).*

Repeatedly, the following point is raised as a contentious factor, the implication for setting time aside for the productive mentoring to occur:

> *… I totally agree, because obviously me and Becca mentored each other so I said if we'd been in each other's company every time we'd done it then it would be better. I mean the good things of it was… it was nice to know Becca was going through the same sort of stuff I was and if she was going through something I had previously gone through or understand I felt like I could kind of give her a bit of reflection and also kind of think about what I'm saying so, I kind of think, 'yeah I'll actually take that on board myself'… (Leanna).*

This narrative demonstrates the dexterity of the peer-mentor in varying capacities to facilitate mutual and professional collaboration. Importantly, opinions are also verbalised about the monotony of having to complete endless paperwork to satisfy course benchmarks and departmental objectives:

> *… I agree with the two points there. Just to add onto that, the nature of the course, it's quite, it's quite intense and there's, you know, a million and one things to do, to consider. You've got paperwork for literally every single little thing; tracking documents, lessons plans, you've got all kinds to consider so it's easy that you could miss something or … you know, something could get put to the back of your mind and then you might forget certain details so it's good to have your peer-mentor there where you can just say 'have you done this?' or 'when's the deadline for this?' Or 'what have you got to put on that form?' I suppose you could do that with other people as well but because your peer-mentor has got that structure there, it's a lot more kind of supportive you can bounce ideas off as well, lesson plans, lesson resources, just general ideas… (Luther).*

The aspects related to significant paper trails became a point of contention, which the student teachers' found to be challenging and an obstacle towards effective teaching practice. In light of this, further clarification was sought to better understand this context:

> *…So every lesson you have to have a lesson plan and when you're at your peak, which is after Christmas, you could have up to twelve lessons and each lesson plan is started as three pages but by the time you type it up they exceed 6-7 pages; going from just your objectives to the activities, explaining everything about it, differentiation and all that. That's just the lesson plan, which can take you an hour plus for each one especially at the beginning… (Leanna).*

The excessiveness of the required planned lessons proved problematic, with some descriptions provided around the daily rigour of the administrative aspects of teaching:

> *… A normal day, the ultimate maximum I'd say between two and three every day and then you have to evaluate it … evaluate and reflect it and when we do our evidence you have to have an observation sheet and highlight how that links in to meet the standards. And then we have all our essays on top, which was six essays, which was pushed even further back for the lesson plans and it's just repetitive as well… (Leanna).*

Other contexts also document additional weekly required paperwork, which contributes to feelings of being distracted from the development and reflection of teaching and learning practice:

> *… And you've got weekly meetings every week. You've got, at the end of each phase, to try and document the goal-setting you're meant to do every week, you've got a goal-setting sheet you've got to do every week… (Luther).*

This particular point of discussion then raised questions concerning how beneficial this administrative process was towards student teacher development:

> *…There's a lot of paperwork and to be honest, sometimes, is it for our benefit or is it for someone else's?... (Luther).*

… I mean there's aspects of it, maybe the weekly meeting, things like that, maybe the goal-setting, goal-setting's always good, but I mean to the extent that we were doing it … (Luther).

The querying of such practices resonated with the student teachers as a deterrent for getting involved within the teaching profession. This aspect of the teaching administration was considered to be time-consuming, with the student teachers' collectively emphasising that this detracted from processes which encourage trainees to engage in meaningful reflection, rather than routinised reflection to serve a particular purpose or satisfy a benchmark.

One of the main considerations for measuring the impact of the peer-mentoring initiative was to gain some narrative around enjoyment and purposefulness, in relation to reflection about what specifically was beneficial about engaging in a mentoring intervention aimed at attempting to inform reflection and reciprocity:

… For me it was kind of, I was in both schools on my own so you kind of get lost a little bit. You know, you have your ups and your downs and you don't really know where other people are up to so you might be thinking, 'I'm falling behind' or 'I'm not doing as well as other people' and when you get to speak to the people, namely your peer-mentor, you get to find out… kind of the reality of what's going on… (Luther).

… Because obviously I was like in this little bubble where I didn't mix with anyone in university because we'd had like four or five or six week placements, I wouldn't see anyone else. Again, if you're in contact with your peer-mentor and the community of practice you get to realise they're going through the same thing… (Luther).

Other narratives concluded similar aspects of benefit regarding peer-mentoring, with one of the student teacher's identifying the opportunity to discuss strengths and areas of improvement as a comforting factor, in knowing that their peer-mentee was experiencing similar successes and challenges in practice:

… You were able to see what her (Leanna) strengths were so if they were the same as mine or if her weaknesses were mine... so that I kind of, like had you know, I wasn't just thinking 'oh it's not just me'… you know, having those issues… so Leanna was maybe also having them, you know what I mean?... (Becks).

… Yeah, just that it was good to see that we're kind of in the same boat most of the time, you know. We always really had the same … we were doing the same stuff or had the same like areas of improvement… (Becks).

Conversely, within their peer-mentoring pairing, Leanna shared similar sentiments with Becks with regards to their experiences on their PE PGCE. She cites commonality of experience as an important factor within the peer-mentoring process. Again, this resonates with some of the concepts which underpin this study, in recognising the importance attributed to student teachers mentoring one another through similar experiences, as the experiential elements would be the same:

… I think what helped as well for both of us; we knew each other before-hand so that helped. We kind of knew each other's personalities, knew how to help each other and how to get the best out of it. I think knowing beforehand did benefit and then coincidently I followed the same placement school as Rebecca was originally. That helped even more, so when I was taught about something she could help me so much because it was specific, she was like, 'it was all about the pupils, the environment', everything about it she'd already been there so that probably helped me even more with that, which I'm guessing is slightly different to everyone else… But yeah, again it was just good to know that someone else was going through the same thing… (Leanna).

Other commentaries posit the effectiveness of peer-mentoring in supporting academic progress and collegial endeavour throughout the PE PGCE:

… Just having the support there of… the needs, a little bit of help with something going on and using his strengths; his strengths is academically he's like really good so … which is one of my weaknesses, so at the beginning I've highlighted that. It was good because when we come to assignments, Luther's been there to support me with either, whether it's like literature or if it's sort of like just talking over ideas and stuff like that. That's probably been the main thing over this year which has really helped me… (Phil).

Importantly, some of the considerations made regarding aspects of support were pertinent in evaluating some of the discourse around collaborative dissemination of practice. The idea of reciprocity is also heavily facilitated throughout this narrative, with contexts highlighting the importance of reflective discussions which facilitate better teaching and learning practice.

The underpinning theme for the research study heavily identifies with reflective practice, in particular practice which helps to develop meaningful reflection. The following narratives evaluate some of the discourse surrounding reflection. Specifically, how peer-mentoring, collaboration and reflection within professional settings and contexts are encouraged. The following narrative details some of the inherent practice which informed collaborative processes and reflection among peer-mentees:

> *… When we actually do see each other, that's what it is, it's reflective and it's a natural process because we do know each other so we will automatically be more reflective but it's just when we do see each other, which is quite, it's quite infrequent really. Especially in the last like phase of (academic year), which probably could be the most important… (Phil).*

Contrastingly, further narratives highlight the importance of being able to engage in reflective conversations with other practitioners outside of the peer-mentoring relationship:

> *… Obviously when we have met up, you know, you are reflective over it, you think about it on a daily basis. Reflection, it's tough between your peer-mentor because you don't see each other and that's when you'd have … you know, you find other people sort of to reflect with but to highlight how important and how significant it could be, it does help to have other people that you sort of can talk to… (Phil).*

In recognising some of the limitations of the peer-mentoring initiative, it was pertinent to discuss how this impacted the effectiveness of collaborative and reciprocal learning. Time became the defining limitation, which proved to be a reoccurring theme in attempting to implement peer-mentoring. Additionally, limited interaction at the beginning of the intervention became problematic for the student teachers' engaged within the process:

> *…I can't really see any other limitations apart from the time, as you say and also the time that we didn't see each other… (Becks).*

Thus, it seems clear that time constitutes a huge challenge to the enactment of collaborative mentoring relationships between peer-mentees. As hinted by the participants, time factors may hinder the supporter teachers and student teachers to plan together or execute actions jointly. It can also reduce morale when field experience is considered as too time consuming:

… Yeah, I just want to say I think time is the biggest one (challenge). There's not enough time allocated or put aside to actually do this, which I think would be beneficial but other than that the only thing which would be is if you didn't have that relationship with the person. So, for example, if I got put with a random person and I just got expected to be a mentor I think that would be a lot tougher. Obviously, you could set up things we're … to build a relationship prior to doing it, which would help massively but I think especially some people would struggle to have that ability to really trust and to be able to share… (Phil).

… Other than time there isn't really many disadvantages that really stick out to be fair. I agree with what Phil said, it would be more beneficial to have that relationship already there otherwise you're going to spend the first couple of weeks like building it… (Luther).

Within this context familiarity of experience plays a significant role in the facilitation of successful peer-mentoring relationships. This was an important factor, because the idea of trust and mutual collaboration underpinned the ideas that accompanied reflective dialogue.

Restricted interaction and the potential for misinterpretation of collated reflective information in the early phases of the peer-mentoring intervention are highlighted within this narrative:

… Yeah, the only possible other one as well is when we didn't see each other it was, from what I can read, from what Becks was saying, if I interpreted it wrong or incorrectly… then I could have potentially given her like the wrong or inaccurate information… (Leanna).

This finding reveals that collaborative mentoring relationships help towards enhancing the management and teaching skills of student teachers in attempting to effectively coordinate classroom and teaching activities. In general, this narrative data indicates that collaborative mentoring relationships are beneficial to supporter teachers, student teachers and pupils. Through the process of learning from each other, the narrative data indicates that student teachers can improve their understanding of the school environment and teaching practices that inform learning.

The narrative data presented indicates that there are potential factors that can hinder the enactments of collaborative mentoring relationships between student teachers. Some of these problems can be attributed to individuals while some can be linked to the school-university

relationships. For instance, some support tutors/ teachers find it difficult to adopt a peripheral viewpoint and allow student teachers to take leading roles within the classroom. Contrastingly, some student teachers find it difficult to utilise the advice given to them by their supporter teachers. In the case of the school-university relationships, the inability of the tutors and the supporter teachers to meet before the students' field experience and school leadership are good examples.

This view suggests that mutual collaboration by teachers and student teachers ahead of lessons can create opportunities for the enactment of collaborative mentoring. As revealed, co-planning provides opportunity for peer-mentees to clarify the aims of their intended actions. It also offers the opportunity for them to provide the roles expected of each other thereby fostering the effectiveness of collaborative mentoring.

A student teacher highlights that other than time there are no disadvantages that are particularly outstanding regarding peer-mentoring:

> … *Other than time there isn't really many disadvantages that really stick out to be fair. I agree with what Phil said, it would be more beneficial to have that relationship already there otherwise you're going to spend the first couple of weeks like building it… (Luther).*

Beyond measuring the enjoyment and effectiveness of the peer-mentoring initiative, other aspects explored whether the process had contributed significantly towards the professional development of the student teachers during their induction into the teaching profession:

> … *It helps you in relation to areas of improvement; especially, as we said at the start, we've got targets to set every week which is obviously to do with our professional development as well and the peer-mentor initiative, there is development, your peers giving you advice and how to overcome that… (Becks).*

Additionally, one of the student teacher considers some aspects of reflection, situated around participating in a collaborative learning community:

> … *For me, I like to think I'm reflective, I hope I am but sometimes reflective just in your head or just with yourself isn't enough… So by me having a conversation with Becca, if I'm struggling with something or if something's going well and actually that made it a bit more real and I could sort of see where I was going to go with it next… (Leanna).*

Another narrative highlights the importance of disseminating resources for teaching and learning:

> *… In terms of professional development, just sharing resources or sharing ideas has helped massively because I might have taught hockey in my first placement and Luther hasn't and when we swapped over, my school, I've been able to give him some resources, share my lesson plans or share actual ideas, that's helped massively in terms of resources and the same like with assignments… Luther's previously done this or he's helped me with that, which … that's been really good in terms of professional development, in terms of subject knowledge that's really helped. But I think as well, in terms of professional development, just having that confidence, speaking to somebody else who's going through the same thing as you because at times you do think that you might … you're not progressing as much as what you are... (Phil).*

Importantly, for this student teacher this resonates with reassurance and increased confidence:

> *… But then when you do speak to somebody else it does give you like that bit of reassurance that, you know, other people are sort of in the same boat so it does give you the confidence to go back to school the next day and go again and keep going, rather than just being stuck in a rut… (Phil).*

Luther supports this narrative highlighting that the rigours and demands of teaching make it difficult to sometimes produce original resources, and this is where the peer-mentor becomes useful, in being able to ask for resources:

> *… Basically you've got no time to do anything so if your peer-mentor can give you say some resources in hockey or some references for your essay it gives you maybe an hour or two hours that you can use on something else. So just bouncing ideas off, sharing resources it enables you to kind of focus on something else rather than spending two hours searching hockey drills or something like that… (Luther).*

Contrastingly, the narrative provided, again refers to the competitive element which makes student teachers' resistant to provide resources to fellow colleagues within the programme of study:

… I think this course with us being like sport people and competitive, there's a lot of competitiveness between everyone across the course, some people don't feel free to share resources when that is so beneficial to everyone… (Phil).

… It's a competition; they want to be the best. They want to be the one; they'd rather that other people don't get a grade one because it makes them look a little bit better or long term, in terms of a job. But in terms of progress, everyone progresses a lot faster and develops more, especially subject knowledge, if people pooled together resources and ideas… (Phil).

The next context for deliberation among the student teachers considered how the student teachers would maintain this phase of collaborative learning to inform mentoring and reflection. Specifically, answers were sought to understand in progressing forwards, how peer-mentoring could be implemented within a professional developmental context:

… So for me, I'm fortunate enough to have a job and so possibly I could pair up with someone that's also an NQT because I imagine there will be at least one or two. So they'd be a different subject area but I don't think that necessarily matters because at the end of the day the pedagogy and the teaching's the same, just different subject. So maybe I could team up with one of them when we have to do our like CPD within schools… (Leanna).

Contrasting, parallels suggest from one of the student teacher's that a more subject specific PE practitioner would be preferred:

… For me, I'd have to go with a, if I had options, I'd have to go with an NQT in PE if there was one. I could possibly go with another NQT from another subject but away from that it would have to be with another teacher who was quite reflective on their experience as an NQT rather than … because a lot of teachers forget about when they were training or when they were there, they forget, they think they just walked into the job with ten years' experience. So you'd have to find someone who's kind of very supportive… (Luther).

Luther specifically highlights the importance for the mentor to have the correct traits, in supporting practices involved within the mentoring process:

… So if there were no NQTs about with that type of personality, that's what would suit me, a teacher who's quite, you know, approachable, reflective on their past experience... (Luther).

… Yeah, exactly the same or if you're assigned to a mentor in the department, even better if it's someone who's newly into the job, maybe a couple of years, you know, maybe not an NQT but has only been there maybe two, three, four years. They can show you like, you know, especially for your first year, exactly what to do; they can share their experiences; areas of improvement and obviously they can help you from there… (Becks).

Some of the contexts illuminated within this section recognise the importance attributed to continuing professional development and how this facilitates a spiral of reflexivity, in attempting to develop teaching and learning practices and encouraging students to understand their teaching behaviours. From the reflection-on-action, there was some evidence to suggest practice was better informed, when encouraged within a community of learning, where ideas and practice were disseminated among other practitioners. This finding suggests that student teachers felt that recent familiar experiences were important towards the induction of trainees from student teacher to early-career teacher (NQT's). Importantly, this finding suggests the significance attached to recent experiences, which can relate to student teachers' current experiences in attaining professional benchmarks.

The capital attributed to such mentoring practices or constructs of mentoring was highly valued by the participants, with this particular narrative suggesting that time needs to be allocated for productive mentoring to occur:

… I just think it all sounds good but it's got to be allocated time. It's got to be recognised by the school that you're in that it is beneficial and is important and allocate that time specifically to do so. Because if you just leave it to be down to the individuals to do it, it doesn't happen because people are that busy that if it's left to do it after school or lunchtime it doesn't happen; well it might do but it's nowhere near as good enough if you've got a block of time and you know …I think that's the only way I'd do it, make sure that there's allocated time and people there and it is sort of is being done… (Phil).

Several improvements to personal practice are signalled in the above narratives, with the student teachers' experience of having engaged in the cyclical process of reflecting-on-practice through constructivist and collaborative processes evident. Collectively, the narratives illustrate the

student teachers' ability to systematically evaluate and search for reasons behind the outcomes of whether their teaching and reflective processes had improved, not only in relation to lessons, but specifically, in regards to being given the opportunity to engage in peer-mentoring each other through their induction into the teaching profession. As a consequence, areas of teaching in which they had previously encountered problems subsequently improved through their increased awareness of responsibility in trying to improve each other's teaching and learning practice and changing aspects of personal practice.

One key feature of peer-mentoring and reflective practice is the capacity and commitment to link theoretical principles underpinning aspects of pedagogy with one's own practice (Eraut, 1994; Stenhouse, 1975; 1983). Student teachers can draw on knowledge from a range of sources as they seek to improve their teaching. Aspects considering the impact of mentoring relationships and communication were reported to be pivotal components towards promoting reciprocity and eliminating power dynamics and hierarchy in peer-mentoring:

> *… So between ourselves, obviously we know each other and we're on the same level, very much a fair playing field about how we talk to each other and stuff. When we're in school it has been a hierarchy; you definitely can notice it and as much as like when we're in front of the kids, I'm kind of one of them… but when I've been in like meetings and that, it's very much, you know, I'm not the qualified one. And even … like I love feedback and I love their suggestions but obviously sometimes you feel like you do take a lot of feedback, sometimes a bit too much. But I've been very fortunate, my two schools have been great mentoring but there definitely is a clear hierarchy and sometimes I think that has a downside… (Leanna).*

Through descriptive and comparative reflective discourse the student teacher raises a number of issues from experiential experiences in attempting to summarise how some experiences endorsed hierarchy during their placement. Moreover, they demonstrate the impact of relationships where mutual learning and reciprocity are at the core of personal improvement.

For this particular student teacher, contrasting discourse highlights some more salient features of teaching and mentoring practice within a school context; which reflect some standardised mentorship in addition to some empathy shown by the school mentor having recently been in the position of a trainee:

… So to be fair, this mentoring experience it was a lot more, you know, I'm your mentor. I want you to do this and you know it wasn't really realistic and then when the paperwork came in it's like they couldn't back up what they wanted me to do… You know, when it was their turn to do something they couldn't do it but then my second experience was a lot better, a lot more laid back, a lot more individual to me so it kind of brought me on a lot but that's because the mentor was kind of still in touch with his experience of being an NQT and kind of being new in the department… (Luther.)

The catalyst for some of the narrative provided derives from the differences encountered on certain teaching experiences. This exemplifies how the student teacher approached the mentoring constructs provided, as they reflected on how particular styles of mentoring which were used to promote and develop teaching practice.

When student teachers' compare, contrast and evaluate aspects of peer-mentoring between each other, they considered some of the underpinning knowledge gained from teaching experiences, school experiences and endeavour to link that knowledge to a specific context. This particular narrative illustrates some formal and informal mentoring that transpired and how these complimented each other in developing teaching and knowledge construction:

… I think it's (peer-mentoring) worked well between the two of us, we've done alright. In relation to school, especially this time, I've had a very good mentor. However, my mentor's very busy – head of year seven so she's got a lot of responsibilities so it was good because we had a structure; we had one hour a week set aside to have a proper mentoring session. After each lesson she would have sat me down, went through, you know, 'you've done this well and you've done this well, however, you could do this, do this'… (Becks).

Similar contexts then considered the role of communication in facilitating productive mentoring within the formalised school environment:

… It seems like school mentor, I think at the beginning communication should be key and there should be an agreement between both of you on how it will be. Because I know that some people have been in school and they've said, 'I want all your lesson plans on a Sunday for the week'. And that is just, it's unrealistic, I understand from me what they want … all lesson plans done, emailed to them prior to teaching them. However, in some schools I didn't even have to produce a lesson plan if I didn't want to so, which is obviously, at the time you think 'great' but when you look back at the end of the year it's

not beneficial so I think at the beginning, if you communicate with your mentor and say right because he might have ideas how he wants to do it and you might have ideas and then you agree what's going to happen… So having that communication at the start could benefit the whole thing rather than you constantly chasing up what you want and then you might think up better ideas so I think communication at the beginning is really key… (Phil).

This exemplifies how the student teacher valued communication as an important attribute in facilitating effective mentoring dialogue. The narrative above suggests a commitment which considers the dissemination of ideas and practice as pivotal toward developing teaching artistry as a trainee. For this student teacher, communication provided an opportunity and a vehicle to challenge and query some of the assumptions posited within the practical teaching environment based on personal beliefs and values, which scrutinise why they think about aspects of teaching in a particular way.

The importance attributed to productive mentoring also permeated through to reflecting on classroom experiences, and how these experiences were able to encourage the student teachers to help each other with regards to sharing resources and providing advice on how to improve classroom practices:

… I think one of the most important things is, which has already kind of been said, is the sharing of resources or lesson plans, especially now that it's coming to the end of the year. People have taught a lot of lessons so it's now time whereas, 'oh have you got this lesson?' And they're like, 'yeah, I'll send it over to you'. Or, 'have you got resources?' 'Yeah, I'll send it over'. And I'm like, 'OK, I've got this, do you need it?' They're like 'yeah'. 'Right, I'll send you it'. So it's working together, I think that is the main thing, working together… (Becks).

Further narratives in the concluding phases consider some of the pressure released and the enjoyment gained from not having to be observed towards the end of the teaching placements as the academic year drew to a close:

… It's the freedom to do stuff and they're still there watching you so they're still sort of doing it (observing lessons); they're not giving you crit but the main thing is though you're not worrying about making time and to go to a computer and sit there and type up an evaluation and type up then your targets for next week, type up this, you've got more time then to … to sort of in your head plan stuff,

write stuff down, you know your own plan and then go and enjoy teaching. It's just a lot, lot easier when the pressure's off having to tick so many boxes, which obviously you've got to do… (Phil).

The freedom identified with not having observations was collectively identified as an important aspect in being able to display innovative practices that were not restricted by the confines of strict observational standards and benchmarks. Further, this demonstrated the overwhelming pressure encountered by student teachers in trying to satisfy teaching standards to successfully gain the necessary pre-requisites required to complete their teacher training.

Concluding thoughts consider how some of the peer-mentoring practice has contributed towards encouraging the student teachers to engage in more reflective practices which help to inform and develop aspects of teaching and learning:

… I think I've become a lot more reflective and reflecting on when things haven't worked, sort of sitting down and that but taking that, not just in terms of the professional side of it in school, but just in general things now in life; just a lot more reflective on like why things were good, why things were bad, why I was happy, why I've been sad and that type of thing. I've just got a lot more like philosophical and a lot more reflective on everything I do, which is hopefully … a massive thing… (Phil).

… Until more recently, until the last couple of months I'm quite critical of myself, I'll always bring up the negatives after teaching. Whereas now I'm like, 'OK well I've done this well, I've done this well'. Everyone's going to have their areas of improvements but I've definitely been able to reflect better and reflect all the time now. Maybe not a great reflector but I know I do it… (Becks).

What I think I've learnt is obviously you become more reflective, the PGCE forces you to do that but in terms of the peer-mentoring I've been through, I've probably learnt a little bit more how much you can learn from someone else's point of view; not someone who's above you and kind of … someone who's on a par with you and going through the same process. They can have a totally different angle or they can have a new idea but, you know, someone that's going to create like that light bulb moment for you. Sometimes you can be stuck in your little tunnel and you can't see … you just can't see it and then obviously you'll have a certain discussion with someone else, they can just put you on the right track straight away, create that light bulb moment… (Luther).

Importantly, the above narrative facilitates the on-going process of formative evaluation and reflection, which gives rise to modified practice through systematic, self-reflective enquiry, which develops when student teachers' scrutinise teaching approaches and strategies which worked effectively and discard or further refine those practices. In this way, student teachers ground theory in their own teaching and build a repertoire of exemplars, images and metaphors that they draw upon to frame each unique teaching situation (Schon 1983, 1987). The narrative above resonates with an essential characteristic of the student teacher's capacity and commitment to critically reflect on their own teaching and act upon insights gained to inform future planning, improvement and development.

Other contexts from the narratives perceived by student teachers to have been influential as they studied their own teaching was their capacity to enhance the quality of pupil learning and development in three main areas: pupil progress or achievement, pupil behaviour patterns and pupil effective states:

> *… It was hugely important for me that as my teaching developed… so did the learning and understanding of my pupils… Having this mentally… really impacted my personal improvement as a teacher and I became a lot more confident as a result… (Leanna).*

The student teachers' believed that pupil learning and development was attributable to their personal improvement in five main areas: greater understanding, insight and awareness about the principles and procedures of pedagogy; thinking more about aspects of teaching and their enhanced knowledge of pupil difference and diversity.

Another common area of interest perceived by student teachers to have been influenced as they studied their own teaching was their capacity and commitment to seek alternative perspectives and possibilities to inform their teaching:

> *… When I was not being observed anymore… I was able to consider other innovative methods that could improve my teaching and inform other areas... (Phil).*

With regards to gaining some concluding thoughts and opinions from the student teachers concerning the peer-mentoring intervention, the post-intervention questionnaires were particularly revealing. Some of the suggestions and ideas highlighted were used as another instrument to guide and navigate further considerations and future practices. In attempting to draw conclusions, the student teachers' were asked about what components they thought were

required for successful peer-mentoring. Additionally, the questionnaire also provided some extended narratives on recommendations for mentoring enactments within teacher education.

The student teachers summarised the following as imperative for successful peer-mentoring:

- Prior relationship
- Trust
- Firm understanding of each other's situation (including strengths, weaknesses and barriers)
- Reducing hierarchy between student teacher and experienced teachers
- Setting time aside to reflect and disseminate ideas regarding teaching and learning with your peer-mentee

5.10 Considering the advantages and areas for further consideration: Issues for Discussion

For the student teachers', within this study their peer-mentoring roles were carried out proficiently and effectively, however, in the initial phases some of the participants faced issues in gaining adequate and appropriate mentor guidance and advice. This was made explicit during the focus group discussions. An overarching theme and persistent challenge was time. This appears to have been a major factor in the fulfilment and enactment of peer-mentoring and in particular completing the required tasks to inform reflexive processes. The student teachers within the study already considered themselves as friends, with relationships generally established before their engagement in the mentoring intervention. This was a significant factor highlighted by the participants as contributing towards developing positive collaborations and facilitating positive qualities of mentoring such as reciprocity, communication and responsibility. The peer-mentoring relationships and friendships developed were considered to be important with regards to developing and informing teaching and learning, and pedagogical practices. However, the re-occurring challenge identified was time, and this was a particular constraint that sometimes proved problematic. Other mentoring roles such as the role model, partner, and professional other were also identified by the student teachers. Some of the trainees highlighted the importance of a successful role model, within the mentoring process to promote positive qualities and professional skills.

Collectively, the student teachers perceived that the peer-mentoring and workshop support was crucial in developing their teaching practices, and understanding of reflection and professional learning. They recognised aspects of mentoring support include all aspects of mentoring functions: classroom practice including teaching techniques, strategies, content, lesson planning and familiarity with school culture and policies; teacher resources; management skills; observing teaching; and engaging in collaborative team teaching. This support was viewed as particularly crucial for the student teachers as all of them were coming from the position of novice practitioners.

The student teachers claim to have gained significantly from this peer-mentoring intervention, both professionally and personally. Within the process of this development, the student teachers were able to utilise and disseminate knowledge situated around teaching and learning, in sharing pedagogical experiences, in learning to work collaboratively and collegiately within a community of practice, as demonstrated through the student-led themed workshops. As highlighted previously, it is pertinent to draw attention to this particular context. A challenge identified during implementation of the peer-mentoring initiative was limited time, and the subject mentor's involvement in school activities with regards to how their personal qualities and attitudes influenced the experiential experiences of the student teachers' during their teaching placements. However, this provided the rationale for engaging in productive peer-mentoring, as where the student teachers were not able to gain sufficient support from their subject mentors; they were able to gain adequate support and assistance through their peer-mentoring relationships and within the community of practice throughout the workshops. Importantly, this was facilitated by the student teachers being able to build effective communication structures during their peer-mentoring. They recognised the importance attributed to communicative interpersonal skills, and this was a crucial aspect towards maintaining an effective, professional relationship. In addition, to having skills such as a positive attitude, mutual respect and trust, and being able to acknowledge each other's contributions where appropriate.

The student teachers' generally preferred informal relationships and establishing communications as the intervention went on. Important for the facilitation of the study, the researcher dedicated considerable effort to encourage the student teachers to continuously work at building and sustaining their rapport and professional dialogue. For this to occur, a conducive environment was instrumental where trainees felt they were in a 'safe' environment to engage in collaborative dialogue, with regards to disseminating and reflecting upon ideas associated with teaching and learning. Imperatively, peer-support became an important and positive experience for the

student teachers. There was some acknowledgement that they found this particular process very effective in providing extra mentoring support, where they felt there was a lack of mentoring support. Significantly, they felt that peer-mentoring allowed them to express their feelings and disseminate opinions to one another within a community of practice.

In considering some of the mentoring that had taken place externally, from the peer-mentoring intervention, the student teachers mentioned sometimes a disengagement from subject mentors, with regards to being unavailable due to other commitments and other time constraints, they perceived that this affected the frequency and link of discussion regarding planning and reflection. Importantly, when such discussions did occur there was a specific emphasis on the less constructive aspects of feedback and practice generally.

In attempting to inform teaching through reflection-on-practice, the peer-mentoring intervention provided opportunities for student teachers to improve their overall teaching, particularly through the dissemination of ideas within the student-led workshops which facilitated the community of practice. This particular engagement encouraged student teachers to be proactive, and enabled them to maximise their strengths and consider within a collaborative environment areas for improvement. Encouragement was also placed towards navigating student teachers towards utilising their intuition, and utilising their analytical abilities to solve problems within their own teaching practice. The reflexive process encouraged both peer-mentees to collectively self-reflect, and where possible amend their pedagogical approaches. The student teachers on the whole, engaged with and implemented the reflective practices suggested, as part of the peer-mentoring intervention. Conversely, at times some of the student teachers were not able to implement the recommended reflective practices because time proved to be a constraint for them, and they were encouraged to prioritise and meet the required course deadlines. Additional reasons were situated around the demands of other school activities, and in some cases the negative attitudes of subject mentors towards engaging in such reflective dialogue.

Significantly, as the student teachers were able to engage in developing their definition of mentoring, and view mentoring from a more constructivist paradigm, rather than a traditionalist and apprenticeship model of mentoring, they began to identify significant mentor roles in alignment with engaging in a more reciprocal approach towards mentoring. The significant mentor roles identified were those of guide, advisor, critical friend, partner, role model, supervisor and knowledgeable other. Among the student teachers, they became comfortable in adopting these roles interchangeably and while some of these were only partially fulfilled by the trainees, efforts were made to try and engage in these various roles in trying to be an effective

partner in the process of peer-mentoring. Other emerging roles also identified by some of the student teachers recognised some attributes associated with management and leadership.

5.11 Measuring and assessing the impact of the peer-mentoring intervention: Post Intervention Follow up interviews, discussion and considerations

One of the most important features associated with the peer-mentoring intervention has been to assess the impact of the intervention, now that that the participants have transitioned from student teachers into early-career teachers. Monitoring impact post intervention has been important with regards to measuring the legitimacy of collaborative learning approaches. The participants note some important considerations for how post intervention some of reflective processes have influenced their professional learning and teaching:

> *The main impact would be when you first go into a school as an NQT… you have experienced teachers that will mentor you… through the peer-mentoring intervention I already had experience of mentoring… so I was able to hit the ground running in terms of boxing off ideas or speaking to my mentor in terms of picking up issues… (Luther).*

> *The peer-mentoring intervention definitely helped me to reflect. I used this experience to question and challenge things, so for example, we are doing assessments for skills tests, and I would say to other members of department what actual drill are you setting up to test?! So it is actually about getting their advice and their comments… and then be able to reflect on how it went afterwards so it has definitely helped me to be able to reflect and seeking advice for future lessons… (Beckz).*

> *The peer-mentoring intervention helped me to realise how important it was to reflect on my own practice and how sharing thoughts with people helped me and support me in what I was doing… so it was really good to learn from other people instead of just seeing things from my eyes… (Leanna).*

> *Having peer-mentoring allows you to have that structured or unstructured discussion… you just have an informal chat, just to bounce ideas of each other… erm… I found that… that experience (peer-mentoring) helped me learn a lot more than I might have done if I was on my own… (Phil).*

Some considerations then addressed aspects of reflection upon completing the initial teacher training year:

Just in terms of reflecting in terms of some of the good points and bad points of the training year… the opportunity to engage in peer-mentoring allowed me to replicate a lot of the processes in terms of working with new colleagues… this allowed me to progress a bit faster and improve aspects of my teaching… (Luther).

So… one of the main things we did in the peer-mentoring was meet up with our peer and I would give them feedback… and then we would spend a lot of time reflecting on this… I don't… now necessarily do it in terms of written feedback but I do… do this during my PPA time… and we kind of have a general informal chat… and say this is what I do, and how do you do it… is it the same?! So… we have a general informal chat… (Leanna).

During the intervention, many of the approaches used and developed by the participants have been considered to be a point of reference for navigating them through their NQT year and their transition into early-career teachers. The approaches developed were a catalyst for informing some of the current professional practices that the participants are now engaged within their respective schools:

Being engaged in the peer-mentoring helped me to reflect independently and with my peer, this helped me in terms of being able to do this school. Erm… I was able to use certain models that I picked up in my training year… I was able to go through it myself and introduce it to my department as well… (Luther).

I guess basically, just the same thing as before, it has been able to show me how to reflect and how important it is to measure and reflect on your success and teaching… the evaluation of how people learn and their different styles, because you spend a lot of time doing evaluations so it has allowed me to consider how I will be reflecting in the years to come, and by doing it more often the process will just become second nature to you, in terms of how I am going to do that and how could I do it better… (Beckz).

The approaches we used massively helped me to learn how to reflect and how to do it with someone else and help them improve as well as myself… One of the things that was big for me was when we met up and discussed issues about practice. I suppose all that stuff helped me get through my NQT and it helps to frame a lot of what I do now… As I can always use these approaches to guide what I do… (Leanna).

However, for Phil this context was slightly different, primarily because during his sabbatical he has undertaken a teaching assistant and coaching role within a school, which has meant that by his own admission he has been unable to utilise a lot of approaches implemented whilst part of the peer-mentoring intervention, however there was a desire in the future to engage in these approaches formally or informally:

> *Erm… at the moment since I have been out in America I have not really used any. I mean there are a couple of guys that I work with, in a soccer club… I mean it is still the same, I am delivering practical sessions and through that talking with the guys and thinking about what can be improved and what kind of activities were we doing? And what would the outcomes be? That kind of chat beforehand, even in an informal structure is helpful. However, I will be looking for opportunities to use these approaches in either formal or informal ways… (Phil).*

Post intervention an important consideration as been to assess the capital by which the participants attributed to action research and whether they would endorse practitioner research as a stimulus for encouraging teachers to examine their own teaching practice. At this particular point of the participants professional progression, it was important to assess their conceptualisations of action research and the potential for educationalists utilising and engaging in such reflexive processes and examinations of pedagogical practice:

> *Personally… I would use action research to improve practice… I would. I done my NQT year in a tough school and there was a lot of issues to fix, so it is worthwhile being in a department and trying something out with a class whether it be through behaviour or speeding up the changing room time… The same characteristics so to speak we used to try new things out, we would test it and see if it worked… Routines were massive because the behaviour was so poor, so we kinda figured out how can we get them in the changing room without them fighting or breaking anything… so yeah we had to work with a lot of the changes in the school, so it was kinda doing that action research allowed for an openness to challenge existing practices etc… So I would sell it to anyone as you can improve… (Luther).*

> *I would advocate this yeah. Because during your training you are trying to get as much knowledge as you can and obviously working with Leanna, allowed me to gain different types of knowledge through our peer-mentoring. So erm… any extra knowledge or advice is useful as it acts as a positive reinforcement during your PGCE and NQT year, so definitely this is a good thing to engage with… (Beckz).*

> *100%... I would advocate teachers to do this… Erm… you're not only developing yourself, but this then has an impact on the students that you are teaching. Improving your teaching helps extend their*

learning… so it's always good to do some sort of research that helps you to reflect because it sort of becomes part of the wider thing and helps with student's learning… (Leanna).

Most definitely… absolutely 100%... I think sometimes you can get blinded by your own opinion; you can get stuck in that tunnel vision. You might think something went well, you might think something did not go so well, but when you have that type of mentoring system where you're able to discuss things, I think you get a boarder understanding of the actions that transpired... whether it was bad and what can you take from it… examining your own practice through action research allows you to question these things in-depth… (Phil).

During the peer-mentoring intervention, reflective practice underpinned all of the collaborative processes that the student teachers were engaged in throughout the intervention. Post intervention it was imperative to access whether the participants continued to engage in reflective processes to develop aspects of their teaching. These considerations become pivotal in determining the impact of the intervention with regards reflecting upon the transition from student teacher to early-career teacher:

Basically… when I was doing the NQT year a lot of it was put out there for you… so when I was doing it… it was very intense so a lot of the reflective stuff ends up coming naturally. If you don't do it you feel like you won't survive otherwise. When you got the thought of OFSTED coming in and all the leadership team trying to get the departments and school 'OFSTED ready' so you kind of have to keep on reflecting and improving. Where I am now… I just want to continue improving and reflecting like I have been so I can figure the best way to teach an activity or lesson… but I want to do this in a reflective, realistic and practical way… (Luther).

Yeah… basically… now I think about things a lot and always write things down. So for our first few years in Northern Ireland, our NQT year, and professional development is spread over three years. So in our first year it is induction, in our second year it is early professional development one and early professional development two, so basically you produce evidence in your portfolio over the last three years which addresses areas of improvement, lesson evaluations and schemes of work. So there is a continuous engagement in reflection, and the processes we learned in our PGCE year very much facilitates that… (Beckz).

Yeah definitely… always, always, always now… I am communicating a lot through email and I just always, always read back over my emails with regards to how I come across professionally or what I have said… thinking now, how do I sound to those people, how I am coming off? So since engaging in

reflective practices, I have been able to improve, and this has positively affected other areas of my life, not just education and work, I suppose… (Phil).

At this point further probing was essential to determine how this has impacted Phil's school practices:

It's just important in relation to teaching to reflect and think… have I done the best job that I can possibly do?? How does this affect the people I am teaching… Can I make improvements etc… (Phil).

This narrative provides an honest contrast to both the narratives above, with some fairly pragmatic reasons as to why it is can be challenging in the work environment to engage in reflective processes:

No… not really and it's not because I don't agree with it… but because I was doing my NQT year last year which was quite full on and reduced PPA time, and more teaching hours… it's not something I really have time to sit down and do myself… however, I do it an informal way… with colleagues I suppose… (Leanna).

Further to these considerations, it was important to examine whether the participants engaged in reflective conversations with their colleagues in their respective professional environments. More importantly, this would provide an opportunity to understand how these reflective conversations transpire either formally or informally:

Yes… yes… I do engage in reflective conversations… like I said we had the imminent arrival of OFSTED and this was a hot topic to your constantly asking whether your 'OFSTED ready'… are we ready..?! How can we get the best out this activity, your *constantly figuring stuff out and reflecting on stuff… but I think I was quite good it anyway because I am quite quiet in nature and like to think and observe… so for me to engage to engage in those types of conversations it was beneficial that I had done this the year before because when we were doing peer-mentoring we would make that time together… sit down in the library and just kinda get through it… asking each other questions, and it is the same questions that I fire out at colleagues now! So it was that experience of doing it (peer-mentoring) in my training year that helped me to do it in my NQT year… it benefitted me a lot doing this previously… (Luther).*

Basically, it literally happens all the time because we share an office which allows reflective conversations to follow very easily between lessons or after lessons. So for example, this went well and this did not go so well, and the other members of department can provide you with insight on where you can improve, and

probably a lot of the time, there are occasions where you are reflecting without realising. Because you begin to reflect a lot more when you are always speaking about it… (Beckz).

Yes… I' am quite lucky that one or two of colleagues I share an office with… and I also actually… share a car journey and get to chat with my colleague and we talk about things and ask what do you suggest…?! Errm… and I also… where we have large lesson do some team teaching and that has been a good way of me learning from them and vica versa… (Leanna).

I do engage in reflective conversations… but it is selective… this doesn't happen with every colleague because it depends on whether I have a relationship with the colleagues and whether I trust them… I think it's important to get good value, I mean it does take time to get that bond with the people that you know, in terms of when you have these reflective conversations and knowing that you are going to get some quality insights out of it… (Phil).

Through their participation on a peer-mentoring intervention, it was important to determine whether having engaged in a formalised collaborative learning environment if the participants had been presented with the opportunity to be acculturated into formal forms of peer-mentoring post initial teacher training within their current places of work:

Ermm… yes they do have some mentoring stuff. Erm… their not as intense or as formal as they could be… but yeah they are… so basically you have teachers that will observe you and you have student teachers in there, teach first in their so it's kinda a natural thing to happen… (Luther).

Erm.. no not really. They have always suggested to go and informally observe other members of staff within your department and in the school in different subject, but you know just finding the time is difficult, but it is definitely something that we are trying to implement within the school with regards to professional development. It is something the school have suggested but it is just finding the time to carry it out…(Beckz).

Obviously… last year I was assigned to a mentor… but it was someone much more senior to me, and so obviously I had their feedback… and this year my head of department has done a lot of the appraisal stuff… but in terms of having a formalised mentoring construct, I have not really had anything in place… (Leanna).

Erm no… I haven't been part of any formalised peer-mentoring programmes… no. (Phil).

These narratives illustrate a reoccurring theme, associated with reduced forms of innovative mentoring provision, which resonates with the some of the dialogue already presented in this

study which recognises that professional development for teachers is highly dependent on the existing ethos and culture of the school with regards to developing teachers pedagogically.

When queried personally about any personal forms of mentoring that had been encountered, the narrative provided by Luther highlights a few examples of the mentoring constructs he had been acculturated into upon transitioning from an NQT to an early-career teacher:

> *Well… I had my NQT mentor and then I had my professional mentor on the NQT programme to fall back on… a lot of this happened with the senior teachers who were leaders. Experienced teachers would put on coaching sessions to help support beginning teachers and there were like CPD programmes where we were put in little groups and spread out into different departments. So it was actually quite similar to peer-mentoring and we would be assigned a task and then just bounce ideas of each other and helping each other… so I was doing PE and come up with ideas that maybe an English teacher wouldn't and vica-versa… (Luther).*

Conceptually, throughout the study reflective practice was defined as a course of action designed at developing pedagogical features. An important consideration for measuring and determining impact of the peer-mentoring was evaluating the influence of peer-mentoring with regards to informing the development of reflective practices:

> *Erm…to be honest I think it helps… because my NQT mentor was kinda on my level, so even though he was a very very experienced teacher… he was on my level so was like a peer. Whereas I know other people and their mentor's were part of (Senior Leadership Team) SLT or middle leaders so it's a different dynamic, so they probably could not share ideas in the same way as it would be a different dynamic as it would probably be them telling you what to do… or leading you… so I found this type of mentoring was a lot better for me, as you are not under the pressure of having to be right all of the time…and it's good because with your peer-mentor you kinda of get an idea that these are thinking the same I am thinking, so having a peer on par with yourself is massively beneficial as you can relate to and reflect with them, the peer-mentor can get you back on track a lot quicker having conversations with someone who is the same position as yourself… (Luther).*

> *Yeah… I do think mentoring influences reflective practice, one of the hardest things though is making the time… it's just having the timeframe, but overall it does make a positive contribution. I think mentoring provides a good basis for considering reflective ideas and this works well when you have a peer to do this with… (Beckz).*

Oh yeah… 100%... I think it is not until you reflect with someone that you begin to look at your own practices and what you do… sometimes it takes that conversation starter to get things going, when you do not have that conversation starter, you can sometimes get stuck in a rut and think how can I improve this or get support from others… (Leanna).

… What we did in the peer-mentoring massively influenced me because I was teamed up with Beckz, and I was kinda thinking about the best way to support her, and I always tried to focus on the things she was good at and help her with that… and I preferred going down that route instead of highlighting what she wasn't so good at… (Leanna).

… It just… (reflective practice) gives you a structure that you know you can go down… in terms of having conversations about what has happened… it makes you think a lot more about stuff, it provides you with that bit of confidence, just having someone there that you can talk too… in terms of reflecting on what you have done. I think peer-mentoring really does influence reflective practice… (Phil).

Further to these considerations and insights for reflective dialogue amongst colleagues, there was also a need to examine post intervention whether the student teachers were still engaged in either formal or informal peer-mentoring, externally or internally within their current places of work:

Erm… no… no. Well obviously because I have passed my NQT year, that kind of mentor that I had has gone now. So I would be in that little programme of experienced teachers coaching myself… but that personal one on one kind of mentoring I am not engaged with anymore. I guess the dynamics have changed a little bit… cause obviously now my role involves helping NQT's and teach first's. So in that sense that context has changed in bit… (Luther).

To be honest, they have been talked about but nothing has formally been put in place. And again I think the main issue come back to time and this always gets in the way of professional development ideas, so it's a shame as all the staff would really benefit from this… (Beckz).

Erm… No as I mentioned earlier it is quite hard to engage in peer-mentoring because there is nothing formally that exists where I work, I mean we probably do it informally and unconsciously, but to be honest it is quite hard because we don't have anything like that where we work and also I suppose we don't really have enough time either… So no we don't really have anything, however my school has introduced this thing where you video your lesson and send it to a colleague to encourage reflection… (Leanna).

No… I am not involved in any forms of formal peer-mentoring (as previously mentioned… (Phil).

In attempting to probe about whether the participants engaged in any forms of peer-mentoring with their colleagues, it was useful to understand how this may informally transpire:

> *To be honest… I think you have too… to survive. So yeah… something will always happen where you need to go to someone for advice. But it mainly within your department and the head of department kind of encourages this so when we have staff meetings we are kind of sharing our practice, so everyone knows what going on so that we are all on the same page. So it is just a natural thing to happen. So obviously when I was engaged in the peer-mentoring throughout my PGCE year, you get used to asking certain types of questions… and it kinda just sticks with you. So you become very reflective and stables you from having that previous experience. (Luther).*

> *I have engaged in an informal context but not in a formal context… however I do get opportunities to reflect with teachers and think about lessons with other staff, so in an informal context I suppose yes… this does take place… (Beckz).*

> *Yeah… to be honest there just is not the time for it (peer-mentoring)… there's just not enough time for it… (Leanna).*

Considering some of these components then provided some scope to consider the effectiveness of communities of practice within the school environment among teachers, and the capacity for potentially encouraging or engaging early-career teachers in such collaborative and reflective approaches aligned to developing pedagogical practices within a collegial environment:

> *I would definitely encourage trainees to develop some kind of communication with their peers… Because I think a problem shared is a problem halved… I think there are a lot of things that can go wrong but if you speak to people I think you can figure them out quite easily. So yeah it could be down to anything… you teach the same class as them are you having the same problems we are having, so okay how can we fix it?! If there can be some kind of peer-mentoring in there and they can make it worth their while then they will be the ones that get the benefits from it. I would definitely encourage people in their training or NQT year to build some type of group, where you can exchange ideas and problems, whether it's assessment or folders… it's kind of impossible to do it on your own, the professional mentors are very busy and do not always have the time to spend to go through things with you… (Luther).*

> *Yes, I would… maybe not on such a frequent basis like we did every other week but on a termly basis… I think that senior leadership could implement this well, if you had the time to provide all teaching staff with an opportunity to reflect… because the more experienced teachers don't reflect as much as newly qualified teachers; I think that everyone could always develop at something… (Beckz).*

Oh yeah… 100%. I think if you introduce it early then it will just become a way of your teaching, but if you introduce a lot later on in your career it becomes hard to learn those skills, because it is not as simple as just looking over something and saying it was good or not so good… if you don't do it at the early stages, then one you are not going to improve when you are at your most rawest, and two… as you know as you get older it gets harder to learn new skills… (Leanna).

Yeah… I would definitely encourage student teacher to engage in a community of practice. I think it is so important, and especially in terms of the people that you are working with because the relationships that you have with those people that are reflecting has so much influence on your practice. During the peer-mentoring process I was paired with Luther, who I had known for a few years, and on my course I did not really feel comfortable talking to them about this stuff, so the relationship underpins everything that happens in peer-mentoring… I think having this within the community does improve the quality of the mentoring… (Phil).

These insights were quite useful for rationalising why formalised peer-mentoring programmes are useful for engaging student teachers in supportive, collegial communities of practice where their remit is concerned with supporting one another through their induction into professional teaching, in addition to providing pastoral and informal types of support, and a dissemination of ideas and resources.

In determining the impact of the peer-mentoring initiative, post intervention it was pertinent to consider some of the challenges that the participants may now encounter now they are not part of a formalised peer-mentoring programme. Primarily, this was an important barometer for evaluating post intervention how the participants felt with regards to not having a peer of similar experience to express concerns too regarding teaching and other pastoral aspects which were formed as a result of engaging in reciprocal endeavour:

When you get into the school everyone knows you are an NQT… so they expect certain things from you. Your accountable… you might have a form group… sometimes people expect you to have the answer… but obviously there are a lot of things you do not know, such as where are the classrooms… so you have to kind of get over the expectation level which was not there before, and this is even more so because you have no peer to formally to talk to or share these expectations with in terms of someone at a similar stage… (Luther).

… Coming in new (to a school) you have a lot of things to get used to and having no peer-mentor to lean on can be quite difficult in trying to adjust to work, because your kind of on your own so you have to try and create a peer-mentoring system yourself. So you kinda have to set up informal peer-mentoring

because I used to get in early similar to a colleague and we would reflect on things… so you have to kind of create those circles, and that was the toughest thing at the start having none to rely on, so you have to kind of create those relationships to try and mirror the peer-mentoring system that we were a part of… (Luther).

I guess you're kind of always on your own now… you don't necessarily have that back-up as a group. So again, it's about finding your own feet and finding your own research. So even… during PGCE year I had Leanna, and it was like what did you do, and what can I do to help and while you have your department there, it is not like when I was involved in the peer-mentoring during my teacher training. I suppose it's also the support structure and sharing of tasks which massively helps as well under a lot of pressure as a trainee, which sometimes would be useful now I am a qualified teacher… (Beckz).

I suppose… you kinda just get stuck in your ways now you are just constantly teaching, and you have a thing of people watching you and your not constantly reflecting… you kind of just start getting in to some bad habits… erm… not thoroughly planning your lessons and on a negative side, it can impact on what the students get from you… so sometimes you feel like you're just plodding along… (Leanna).

Well… I think that there are some stressful times where you just feel a little bit overwhelmed like if you have an idea or if you need help, knowing there is a structure where you can just send a text or drop an email… what do you think of this… have you got that?! I think it just takes a lot of weight of your mind, even if you do not use it (peer-mentoring) just knowing that there is someone there who will help… who is willing to help… So for me he communication aspect is so important, knowing someone you trust, as you may not get on with people in school or on your PGCE… (Phil).

Furthermore, the narratives expressed then addressed what the student teachers felt was the most important component of the peer-mentoring intervention, and perhaps more pertinently how had this impacted them pedagogically post intervention now they are early-career teachers:

I think… to be honest I did not really enjoy my training year, so it was more having to comes to terms with the fact that within our community of practice, everyone had the same problems and everyone had something that they were going through. Based on some of the conversations I had with Phil, I was looking out for other people and looking for some of the signs of isolation so I knew when to help them based on what I had experienced good… and bad. Doing the peer-mentoring during my PGCE year gave me the confidence in my NQT year to get on with it and just work through the tough classes and long days, knowing everyone was going through the same thing… that's kinda what I took from it knowing that other people were going through the same thing, the reassurance that came from working

with Phil was comforting as we were able to share problems, and know that this was the nature of the beast… (Luther).

I have probably said it before but the most important thing was seeing how other teachers do stuff… that you maybe would not have done before. For example teaching one sport and seeing how someone did something and how you might do it differently… and working out whether that overall would be a better way, so it's just finding out how people do stuff and discussing this in a supportive group, I think that was the best thing about the peer-mentoring… (Beckz).

For me… it was just having someone that was at the same level as me… in terms of pedagogically, so just talking about how improvements were made, and being able to reflect as that was the ultimate goal… how I am going to achieve what I am trying to do…?! But by having someone at the same level to start with it was really good and also to be with other trainees going through something similar… (Leanna).

I think, the community was so important and like I said me, Luther, Beckz and Leanna had known each other for a number of years throughout our degree, and like in those focus groups that massively helped, so having that community aspect where everyone does trust each other is so important. I think it really does help, I think we were very lucky for to have each other and bounce ideas and improve our teaching collectively… Teaching wise this gave me a lot of motivation because my peer-mentor was ambitious and this pushed me to improve, I really wanted to emulate what Beckz, Luther and Leanna were doing as they were outstanding teachers… (Phil).

Further insights acknowledged the importance that the participants attributed to working with a peer in a reciprocal and supportive capacity:

The comfort of knowing that someone is going through the same thing as you has a knock on effect and then after you can just get on with the teaching knowing that this is normal… it's fine and you can relax a little more… (Luther).

Working with someone through peer-mentoring provides you with support mainly because you share similar problems and view things in a similar way having gone through the same experience, it just helps you to make sense of everything that is happening… (Beckz).

It was just great to have that crutch of someone to lean on… that you could share problems with and talk to without feeling under pressure… (Leanna).

The aspects considered provided a catalyst for considering the participants views post intervention, regarding their recommendations for engaging student teachers in peer-mentoring as a means to develop pedagogical understanding and inform reflective practice. The insights provided highlight the capital attributed to such collaborative learning processes. As posited in these narratives, the participants highly commended peer-mentoring as a developmental tool, however, they were also cognisant of the need for personal investment for such endeavour to work, and highlight time as an important factor for consideration amongst trainees wishing to engage in similar collegial processes:

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Student teachers need to be aware of time… and treat that aspect with respect due to the sheer volume of work, so respecting the process of peer-mentoring actually helps you to manage all of these challenges a bit better. When you get to the business end of placements that's when you will really need the support, so you have to give it time to flourish and grow as it is a great source of support (peer-mentoring) that you would not otherwise get. To be honest I would try and replicate this again, and I think that having a previous relationship helps a lot so you can feel comfortable with them… I mean, I think the less formal it is, I think the more that you will get out of it, because if you do not know them you might hold back or be a bit cagey… (Luther).

So… basically it would be to encourage them (student teachers) to find time to do it… I personally always had this at the back of my mind and really had to remember this… it was easier for me to do this on a Friday, then through the week, or every other Friday after school… you know, just set aside a ten minute slot to get it done straight away, whereas sometimes I would leave it and leave it, and it made it hard… that's why you have to schedule yourself and timetable yourself, so be strict with yourself… (Beckz).

I would recommend that they go with someone that they are comfortable with, because if you don't you may hide stuff that you need to discuss, one… towards them because you do not know how they are going to take feedback… and the other side… is that you are then not actually able to reflect on what has happened. Me and Beckz actually did our degree together and had some sort of relationship beforehand, so I am saying you have to do your degree together, but I think having a previous relationship does help… because it meant that we could have open discussions and that was probably the biggest thing for me, to feel safe… (Leanna).

I think time… having that time and place where you can really get into and having that structure which you need to have time to do. During the PGCE process there were times when you had to group up but there was no peer-mentoring, I think to be fair having a less formal environment helps a lot, because

being able to have a moan and talk through these things and build each other up is important… we were helping each other through it… (Phil).

Additionally, the participants also recognise the challenges associated with attempting to possibly implement a formalised peer-mentoring structure, they highlight issues and factors such a time for teachers to be able to engage in such activities due to their workload and administrative demands. Having now been acculturated into professional teaching, the participants are now fully aware of the demands which accompany being a class teacher. They are aware of some of the insurmountable challenges that teachers face, and recognise that some of these problems make it difficult to implement a formalised peer-mentoring structure:

I think the challenges for student teachers to be honest would be the workload… the workload matters, and then getting them together to find a time for them to collectively meet. I mean in the place I worked the behaviour was really bad so this had a knock-on-effect on everything which would make it hard to engage in stuff like this because all the time is spent finding ways to manage behaviour. I think it would be something people need to do, but they may struggle to do. Once they would be engaged in it, I think they would see the benefits, but the bad behaviour just wears people down so the time becomes a problem. Workload… just shouts out to me and as you know the teacher's workload has a massive impact on people's attitudes towards professional development… in terms of time and motivation to do it… (Luther).

I think probably time would be the biggest challenge with your staff members, I cannot really think of any other challenges but time… especially as I think staff are willing and are motivated to participate, so apart from that I could not really see any other challenges as long as your members of staff within your department were willing to participate to do it… Time is such a big issues because in my school we have so many professional qualifications to do, and we provide a lot of teaching provision across Key Stage 3, A-Level and BTEC and Sports Leadership, 1, 2 and 3… so especially this year it time would be a massive issue… (Beckz).

Erm… I think three things, I would say… one the time, finding a time when everyone is available and not got other bits and bobs to do… secondly, actually getting people on board, people who are on the same page as you… and thirdly, money and resources wise, do the school have the provision? So a lot is dependent on the schools approach towards mentoring, so I would say; time, money and people… (Leanna).

Erm… I think time again, I think everyone tries to get as much done as possible in such a rushed time because everyone has so much stuff to do… I think it's about finding someone to have that peer-mentoring experience with… Just so you can have that support system… (Phil).

Post intervention it was pivotal to measure the effectiveness of peer-mentoring as a construct to inform reflective practice. Determining the effectiveness of this intervention has been measured by how their mentoring and reflective engagement has helped to support their transition from student teachers to early-career teachers. A significant aspect which has facilitated this transition has been the process of peer-engagement and reflecting as part of a collective, through a formalised community of practice where the trainees were able to disseminate ideas and discuss pedagogical dilemmas associated with classroom practice. The narratives provided deliver an opportunity post intervention to assess the lasting impact and benefits that engaging in peer-mentoring and a community of practice had on the participants professional ideals and practice:

I found that the just knowing that there was a group of people sharing the same problems I was sharing was important, so it's not just my teaching these are general problems and this was reassuring, that people were experiencing what I was experiencing. For me teaching is all about confidence in terms of putting things together and the motivation to do it. Within our group, knowing that we were all having the same problems kind of helped me to kick on and improve… (Luther).

I think it worked really well because we already knew each other… I mean with Leanna we already had that friendship and even with Luther and Phil, we knew them so it was a lot easier to talk to them about it, rather than some stranger it would be a lot harder to get things across and communicate and that was a massive strength, and also seeing how they improved their lessons helped me with my own reflection and how I viewed my own teaching and learning… (Beckz).

Erm… I felt it was a source of support… the PGCE for me was one of the hardest educational years I had, so having someone go through the same thing was important, having someone to share with… and having someone on the same level. Because we all had different expertise, so it was knowing that I was struggling with this… and you have experience in this… how can you help me, so those were the main things I found benefical… (Leanna).

Knowing everyone else was having the same struggles that you were having… so it's nice to know that through the PGCE year everyone has those struggles, I mean you might be struggling but then through the mentoring you realise it is not that bad… Because there were times when you were struggling and think does that mean I am a bad teacher, knowing that everyone is struggling too just helps you to understand it's not just me… (Phil).

The final consideration, for measuring the impact of peer-mentoring post intervention was to gain the views of the now early-career teachers with regards to their conceptualisations of teachers being researchers of their own practice through action research. Importantly, it was pertinent to decipher if the participants felt that examining pedagogical practices was a worthwhile activity, and should teachers' actively engage in such scrutiny of practice more often. Their conceptualisations and views of action research were therefore significant, in determining their views and understanding of this discourse and the effectiveness of this research paradigm:

> *I am all for teacher's researching their own practice, for me it's all about teacher's improving and reflecting on their own practices. To be honest, I enjoyed university so I always liked the idea of research and like the idea of applying this to my teaching, because it allows you to improve results and routines. The only thing that stops all of this is time and teacher's workload. For me I am all for it… in terms of teacher's doing research to improve their own practice but it is all about time and workload. I think that it would be good for leadership teams to set up opportunities for teacher's to research their own practice, I mean I am that way inclined so I am all for it. It's just the workload and time, just kind of over powers everything… (Luther).*

> *I definitely think that it (action research) would be a positive as people research and reflect in different ways… I think doing this is quite important for your own development and will help you in the long run… this has really allowed me to develop especially in terms of reflective teaching and what strategy I use in terms of how I go about doing it… so you know mainly refining myself as a teacher… you know what I am good at and what do I need to make improvement? In relation to action research and peer-mentoring it did benefit me in a lot of areas… (Beckz).*

> *Ermm… I think it is absolutely a great way of improving your practice… by reflecting on what you do. I think the key word is 'action research' so they actually put into action, the only reservation that I would have is that I would not want the research aspect to impact their day to day teaching… but I think through researching their practice, they will be able to help others as well… through being able to completely reflect… (Leanna).*

> *Well… I think from what I saw, and I mean I did numerous placements at about ten schools… a lot of the teachers who have worked for ten years plus… they do lose that spark that they had… and I mean that is not everyone, because I did come across some really ambitious teachers who still have that… I mean it wasn't that some of them did not care, I just think they were happy to plod through rather then maybe reflect on what they were doing and whether they could do a better job… If they did have that peer-mentoring, action research system in place, they could still be pushing each other, you motivating*

each other to keep improving… with regards to what they are doing from a teaching perspective… (Phil).

The narratives expressed provide a useful point of departure, with regards to the lasting impact that action research has on the participants. Their perspectives endorse action research as a useful pedagogical tool for examining practice, and pertinently, the capital they attribute to such reflective endeavour is best emphasised by their resounding endorsement of this particular practice for all educators.

These considerations posited acknowledge the capital that the participants resonated with the concept of teachers being researchers into their own practice. This construct is useful for further considerations and implications for adopting action research. Importantly, insights provided also acknowledged some of the permutations to engaging in such endeavour, specifically the reoccurring theme throughout the study of time and workload pressures, as a reason for why teacher's may struggle to engage in such reflexive activity.

The considerations and narratives presented are representative of the participants' thoughts and perspectives post intervention. These narratives have provided a useful point of reference for the now early-career teachers, and similarly a useful point of departure for this particular study. The narratives presented represent the transition from being a trainee to an early-career educationalist, and a development of reflective practices which underpin every facet of the participants' pedagogical approaches. The premise for action research is that it endorses a spiral of reflexivity where practices can be evaluated, amended and critiqued to measure impact. Post intervention the participants have acknowledged the impact that the peer-mentoring intervention had on their professional learning as many of those constructs presently underpin what they do professionally. While the participants' strongly endorse the effectiveness of collegial learning, and determine this as an impactful practice, they also acknowledge that due to time and workload permutations, challenges may arise when attempting to engage other members of staff into formalised peer-mentoring cultures. The point of departure arises from the participants' recognising the significant impact that this particular mentoring intervention had on them throughout their induction into teaching and moving forward they hope to engage new entrants into teaching into collegial and reflective teaching communities as a means to developing teaching practice and challenging existing beliefs and values situated around this discourse.

5.12 Summary

This chapter has investigated the development of student teachers' reflective practice through utilising peer-mentoring within the context of action research. The perceptions of student teachers, gathered from focus group interview transcripts, formative workshop feedback and open-ended questionnaires, were analysed qualitatively to identify patterns, trends and themes inductively. Specifically, the aims were to identify qualitative distinctions among the student teachers, regarding their interpretation of peer-mentoring, in attempting to provide rich, in-depth explanations and narratives of experiences for consideration purposes. The findings were situated within categories and dimensions of mentoring and reflective practice, which helped to navigate and facilitate the purpose of the study. Ideas for this were generated from the work of Pollard (2011) and Zwozdiak-Myers (2012), with regards to their conceptions of reflective practice. Importantly, this categorisation of reflective practices was used as a vehicle for student teachers' to demonstrate a commitment towards improving their teaching and learning. Interview transcripts were also analysed to identify qualitative distinctions in the types of reflective conversations used by student teachers, to reveal the characterisations of mentoring and reflective practice. This section attempted to provide some comparative, contrasting and critical reflective conversations among the student teachers' during their engagement within the peer-mentoring intervention. The range between the number of descriptive, comparative and critical reflective conversations used varied, with regards to exploring peer-mentoring among the student teachers' and this informed reflexive processes.

The data indicated that peer-mentoring was variously described by the participants and this varied from collaborative, partially collaborative to non-collaborative relationships. While the collaborative mentoring can be of benefit to supporter teachers and student teachers, the findings also indicate that the collaborative mentoring can be confronted with varying problematic challenges. Some of these challenges are time, differences in teachers' and tutors' values, inadequate skills regarding practical experiences, lack of empathy, and age and experience of teachers. These challenges are not insurmountable as the collaborative mentoring can be enacted and enhanced when the expectations of supporter teachers and student teachers within a peer-mentoring construct are complementary and agreed from the outset. In this study, there were variations in the expectations of supporter teachers and student teachers. Nevertheless, the findings also reveal some conditions for the collaborative mentoring to be enacted during school placements and within the classroom. These include co-planning ahead of lessons, active learning processes and better communication and reciprocal arrangements between schools and

university, among others. Communication, interpersonal and teaching skills are also viewed as vitally important for the enactment of the collaborative mentoring, in particular this provides the basis for peer-mentoring among student teachers along with trust. Involvement of supporter teachers in student teachers' assessment seem to be appreciated but could also be challenging, particularly when considering observations of teaching practice. As revealed, some student teachers' felt a sense of confinement and professional restriction when being observed and scrutinised. Others also indicated that such arrangement could have a negative impact on mentoring relationships between supporter teachers and student teachers.

These research findings and their implications are discussed in the next chapter.

Chapter 6: Discussion

6.1 Introduction

This chapter discusses the main findings of this study and considers how this relates to some of the theoretical literature and perspectives, with regards to previous conceptions of mentoring and reflective practice within initial teacher education. Implications behind the research findings are explored and examined, with some suggestions proposed for the development of peer-mentoring to inform reflective practices within student teachers.

The purpose of this study was to explore the concept of peer-mentoring among student teachers to inform reflective practice within the context of action research. Importantly, research situated around reflexive processes to inform professional development among student teachers within initial teacher education suggests a number of distinctions which can be linked towards developing a series of values, beliefs and specific types of knowledge concerning teaching and learning pedagogy, all of which help to inform professional artistry within teaching (Bradbury et al., 2010; Ghaye, 2011; Liston and Zeichner, 1991; Zeichner and Liston, 1996).

Research studies (Gardiner, 2010; Kensington-Miller, 2011) undertaken to explore and examine aspects of peer-mentoring practice have focused specifically on expert-novice relationships with regards to mentoring, and while there is a body of research and literature which encompasses peer-mentoring as a vehicle for collegial and collegiate learning, very few commentaries discuss the impact of peer-mentoring in attempting to inform reflective practices among student teachers. Within this study, peer-mentoring has been defined as an intervention which can be used to facilitate student teachers acting as mentors for one another (Le Cornu, 2005). Reflective practice, within the confines of this study, has been defined as a disposition to enquiry incorporating the process through which student teachers' structure, or restructure actions informed by their experiences within teaching (Zwozdiak-Myers, 2009). Two research questions guided the study: How can peer-mentoring and reflective practice contribute towards developing more collaborative learning with regards to student teachers' supporting one another through their teacher training? What are some of the challenges of peer-mentoring within a practical context during teacher training?

Significantly, these questions were informed by a conceptual framework and dimensions of mentoring (intervention), which was designed to explore aspects of peer-mentoring, and how they informed reflexive processes among student teachers. Similarly, the intervention was utilised to observe and explore how student teachers could demonstrate their capacity and commitment

to developing their own teaching practices through reciprocal and collaborative reflective conversations and dialogues within a qualitative methodological framework. In framing the direction for the study, narratives and perspectives were also gained from in-service teacher trainers. Qualitative narrative data was gathered and explored in relation to the themes which underpinned the research study, specifically reflective practice, collaborative learning and peer-mentoring.

The main focus of the next sub-section within this chapter is to discuss the main research findings pertinent to both research questions within the context of six specific themes/ dimensions which underpinned the peer-mentoring practice which occurred within this study. Links between reflective practice and peer-mentoring are drawn interchangeably within this section where appropriate.

6.2 Student teachers conceptualisation of mentoring

In this study, although student teachers highlighted a number of reasons that guided their decision to participate within this particular research study, there were two specific reasons, which personally resonated significantly with the participants, and were perceived as highly important. These reasons were central to the development of this study; specifically the reasons highlighted were associated with a concern to improve the quality of their teaching and to work within a reciprocal paradigm where student teachers were able to express concerns about practice to one another within a 'safe' environment (Kensington-Miller, 2011).

Within this study mentoring seem to be viewed from two main perspectives by the participants, firstly, the traditional/apprenticeship model and secondly, the more recent shift towards more constructivist learning practices concerning mentoring (Le Cornu, 2005), which they had all engaged with during their time as undergraduate students on a physical education programme of study. From the traditional/apprenticeship perspectives, some of the participants indicated that mentoring tends to be viewed from a hierarchical, novice-expert disposition; this was particularly evident during some of the experiential school placements which were undertaken where some of the student teachers' felt that their prior experiences were ignored, in attempting to use these prior experiences to influence teaching practice. This conception also resonates with the assumption that the mentor is synonymous with a guardian (Megginson and Clutterbuck, 2010; Clutterbuck, 2001). Evidence from this particular case study of trainees' revealed that guidance to student teachers is imperative for the development of teaching and learning to become effective.

For the group of student teachers, mentoring was viewed as a process by which good practice is modelled by supporter teachers, as highlighted by Gardiner (2010) who suggests that the practice and mentorship of in-service or existing teachers significantly influences the values, positions and belief of student teachers with regards to teaching and learning. Thus, having a supporter teacher with an adaptable skill set seems necessary for student teachers' to professionally develop. The conceptualisations considered by the student teachers' encapsulated some of the more traditional constructs associated with mentoring in attempting to define this particular discourse. In many ways, students regarded traditional mentoring models as inconsistent and conflicting with the requirements for independence and knowledge creation that are at the heart of most teaching jobs (Bottoms et al., 2013).

In recent years, a variety of alternative mentoring models and definitions of those models has been proposed which provide more collaborative and less hierarchical forms of mentoring than traditional models (Kram and Isabella, 1985; Mullen, 2005). In making this distinction, throughout the course of the peer-mentoring intervention, the student teachers' were able to consider different forms of mentoring within the practical school landscape, as their variance of experiences exposed them to different types of mentoring practice, some of which reflected typical hierarchical structures and some which reflected more reciprocal and collaborative structures. Importantly, Zellers et al., (2008) argued that single hierarchical mentoring relationships are no longer the norm and that multiple mentoring relationships allow individuals to draw support from a variety of sources. The concept of multiple mentoring relationships has been described as group mentoring (Boice, 1992), collective mentoring (Chesler and Chesler, 2002), mentoring circles (Darwin and Palmer, 2009), strategic collaborations (Wasburn, 2007), relationship constellations (Kram, 1985), peer-mentoring (Le Cornu, 2005) and mentoring mosaics (Head et al., 1992). Pertinent to the study, the student teachers' recognised that multiple mentoring relationships may allow for them to draw support from peers, administrators, graduate school advisors, and colleagues. All of these forms have in common the formation of a network of mentors that includes more than two participants, whether this maybe in peer-mentoring pairings and support structures, the teacher training cohort or the mentoring focus group. The work of Mitchell (1999) highlights that group mentoring provides a range of advice, perspectives, and opinion from others with varying expertise, experiences and skills.

In attempting to define mentoring within this study, participants' were encouraged to make attempts at conceptualising, and making this phenomenon pertinent towards their own professional development. Bottoms et al., (2011) support attempts by student teachers to

conceptualise and socially construct their understanding of collaborative learning by suggesting that peer-mentoring models are composed of faculties of equal stature, where participants share similar interests or are in similar positions with regards to career development and progression. Importantly, the student teachers' recognised that the relative equality between peers meant that they were more likely to engage in information sharing and providing psychosocial support (Angelique et al., 2002). In most cases, Bottom et al., (2011) suggest that peer-mentoring groups often form in response to limitations that student teachers perceive in the existing mentoring structures and provision available at their universities or within their initial teacher training programmes of study (Angelique et al., 2002; Driscoll et al., 2009). Furthermore, Anderson and Swazey (1998) and Hudson (2013) found that student teachers were more likely to draw on their peers for socialization rather than from their teacher trainers or support teachers. Thus, the conceptions of peer-mentoring deciphered between the student teachers' may seem natural in the transition from trainee to professional.

The narrative data also reflected conceptions of modelling good practice from the apprenticeship theory with aspects of constructivist theory; this also formed some of the basis for defining mentoring. It became apparent that the narratives indicated that while modelling of good practice by supporter teachers, and practitioners of mentoring is highly valued, being allowed to be active agents within the mentoring process is also of equal importance. Some of the student teacher's considered mentoring as a means by which student teachers are given orientation about the school environments they will be immersed within (Cunningham, 2012; Kaasila and Lauriala, 2010; Le Cornu, 2009). The teacher trainers' that participated within the study indicated the need for student teachers to understand school cultures and norms in order to be integrated within the school environment/community. Some of the ideas hypothesised highlighted the need for aspects of orientation and navigation to be provided for student teachers at the beginning of their school placements. Bradbury (2010) explains that mentoring as a socialisation process provides opportunities for supporter teachers and student teachers to engage in reciprocal and collaborative learning to develop professional knowledge and skills.

Other definitions posited by the student teachers', also indicated mentoring as a form of constructivist activity in which the process advocates joint decision-making and shared responsibility for what occurs within the classroom and externally within the initial teacher training programme of study. Primarily, this suggests that from this conception, mentoring is not restricted to the apprenticeship model, whereby mentees solely rely on mentors, knowledge and guidance as a means to signposting their professional practice. Conversely, it aligns with the

perspective that mentoring is a multi-faceted activity which is not restricted to hierarchical, novice-expert instructions dictated from the mentor down towards the mentee but a collaborative process which embodies cohesive dialogue and reciprocal learning (Shank, 2005). A feature which became quite pertinent for the student teachers', which they identified in attempting to define mentoring as a practice or a construct, was the concept which encapsulated professional development. The trainees' recognised the need for schools to understand the importance attributed to developing a teacher's professional practices, and were aware about how varying definitions of mentoring dependent on the practitioner within the school can facilitate this particular commitment to improvement. Kensington-Miller (2011) acknowledges that professional development is a necessary prerequisite for all teachers, but within schools the presentation and commitment to delivering these opportunities has become more difficult due to restricted funding. In conceptualising how professional development for teachers can be underpinned by a good mentoring culture, the student teachers also recognised the opportunities located around developing communities of practice, in recognising the capital for teachers to develop another's practice. Similarly, Jones et al., (2009) and Webb et al., (2009) posit that with teaching becoming increasingly cosmopolitan, peer-mentoring is an opportunity to provide fresh development in situ to develop teachers' practice as well as providing professional support and friendship. This very much facilitates some of the discourse that the student teachers' utilised in attempting to define aspects of mentoring and more importantly, the context that navigates this particular purpose. Further, peer-mentoring through this particular lens is linked to practice, it is school-based, on-going and teacher driven, which are imperative features of successful professional development (Hiebert et al., 2002; Kedzior and Fifield 2004; Kensington-Miller 2007; Lee, 2001).

The theme for mentoring among the student teachers' became intrinsically linked with teacher professional development, in which they viewed mentoring as a process of guiding; supporting and enabling others, in this particular instance themselves into the teaching profession (Cunningham, 2012; Jones and Straker, 2006; Watson, 1994). As the understanding of the student teachers' began to develop with regards to how mentoring is situated within initial teacher training, definitions began to acknowledge the wider context and varying dialogues that mentoring encompasses particularly in trying to define its purpose. Interestingly, as the professional proficiency and competence developed among the student teachers', they were able to view and define mentoring through varying practitioner lenses.

Collectively, the student teachers' disseminated and defined the mentors role through their school experiences as someone that can adopt the mantra of a consultant, assisting other, and the individual that helps to explore planned goals by guiding, supporting, and enabling the mentee to move towards making autonomous professional decisions. Within this context, emphasis is placed on inducting trainees into the teaching profession (Henrich and Attenbury, 2010). This conception of mentoring, very much aligns with the discourse posited within the mentoring vernacular. Vonk (1993) advances that mentoring has also been defined as a 'dynamic reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a beginner (protégé) aimed at promoting the career development of both participants' (1993: 8). In this definition, reciprocity of the relationship, the environment for the activity, characteristics of the participants, and the objectives of the activity are important elements of mentoring. The student teachers' recognised that to establish a relationship the mentor and the mentee need to know each other well and share expectations. Bottoms et al., (2013) supports this recognition, by highlighting the importance of familiarity in creating peer-mentoring relationships which are reciprocal and accommodate the mutual needs of both mentees. Many aspects of the student teachers' definition and characterisation of mentoring facilitated some of the key functions required of mentoring relationships, with regards to career-related assistance. According to Kram (1988), there are five sub-functions of career-related assistance, including sponsorship, exposure and visibility, coaching, protection, and challenging assignments. Sponsorship is achieved when a mentor empowers a protégé to advance within an institution. Similarly, when a mentor encourages a protégé to attend events held by the institution, he/she is providing exposure and visibility (Kram, 1988). Coaching is another sub-function of career-related assistance described as teaching a protégé decision-making skills and/or interpersonal management (Ensher and Murphy, 2011).

The valuable outcomes attributed to mentoring by the student teachers, also resonates with the work of Eby et al., (2008) who found mentoring to be correlated with valuable outcomes applicable in multiple settings and across various types of mentoring. These include relational, career, motivational, attitudinal, behavioural, and health-related outcomes. Again, as the trainees' framing of practice became more concrete, so did working definitions of mentoring that were shared among the student teachers within their peer-mentoring pairings and the community of practice when experience of peer-mentoring were disseminated for critique and evaluation. Consequently, the summative context for defining mentoring throughout the peer-mentoring intervention among the student teachers' concluded that the mentoring relationship can lead to

different outcomes pertinent and particular to the individual, or in this case the trainee teacher because of its multifaceted nature (Fleck and Mullins, 2012).

In analysing the narrative data presented, it seems apparent that mentoring as a concept is observed through differing lenses at varying stages of the student teachers' development from within this study. The variation and development of views regarding mentoring as practice begins to become more competent and embedded this is not surprising as mentoring is considered to be a voluminous concept with the potential for a variety of implementations (Cove et al., 2007; Kram, 1995). A significant contributing factor to this, becomes the student teacher's background and institutional school cultures that they have observed or been immersed within, this can also directly influence a trainee's understanding in conceptualising mentoring within a practical context (Harrison and Pell, 2006). Thus, conceptualisation of mentoring by the participant situated within this study will be directly influenced by their understanding and knowledge, based on their on-going professional experiences as a student teacher. The integrated nature of mentoring, facilitates the idea that this particular process can be adapted and modelled to suit the context or situation in which mentoring is used to facilitate, underpin and support experiential learning (Fleck and Mullins, 2012; Martin, 1996). Seemingly, mentoring can also be based on mutual agreements between supporter teachers and student teachers. Among the student teachers' they highlighted that in such contexts mentoring can be categorised by equitable relationships where student teachers view themselves as recipients and practitioners of learning within the teaching landscape (Kafai et al., 2008). Essentially, the narrative data presented embraced the need for mentoring to be seen as an activity that takes place within a constructivist framework, supported by communities of practice (Edwards and Collison, 1996; Lave and Wenger, 1991).

Thus, the narrative data provided highlights the need for student teachers, particularly within the contextualisation of peer-mentoring, to embrace collaborative learning as a construct where reciprocal and mutual learning can occur (Le Cornu, 2005). However, the narrative data also illuminates that definitions characterising mentoring in a collaborative context may occasionally feature situations where supporter teachers may have to engage in hierarchical practices which may resemble individualistic or autocratic practice where experience is regarded as pertinent to the progression of teaching development for the student teacher. This characteristic suggests that it becomes more necessary then, for supporter teachers to be mindful of this particular conflict, and apply cautionary procedures when attempting to guide student teachers towards achieving mentoring goals.

6.3 Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention

Within this study, the experiences of the student teachers' engaged within an initial teacher training programme of study, became instrumental in facilitating some of the peer-mentoring dialogue that would go on to characterise collaborative endeavour and reciprocal learning. During this period, where student teachers were in the infancy of their teacher training, importance very much became attributed to the significance of peer-support for student teachers to navigate their way through their initial teacher training. This resonates with Heirdsfield et al., (2008) who recommend that peer-support and mentoring programmes where student teachers adopt the role of peer-mentors are preferable because they provide more effective and reciprocal support during the teacher training transition, with capital being attributed to two individuals sharing a similar experience.

Narrative results from this study showed that the majority of student teachers reported difficulties in managing course and time expectations, with particular regard to maintaining a spiral of reflectivity which aimed to inform their own teaching. The participants became aware that the most significant component of their professional development with regards to developing competency stimulated from their commitment towards reflective practice. This commitment is endorsed by Collin et al., (2013) who suggest that beyond its enshrinement as a professional competency (or competency component), reflective practice has become an increasingly dominant paradigm in education. Sources of evidence commonly drawn upon to conceptualise the commitment to this process were reflective conversations, reflective diaries, field notes, formative workshop feedback, focus group interviews and personal journals. This finding indicates not only that a range of research instruments were utilised, but essentially this was gathered from a range of perspectives which supports the argument for the need to gather evidence from multiple perspectives or lenses for triangulation purposes, in relation to documenting the early experiences of the student teachers' within their ITT programme of study and, more specifically, how peer-mentoring was able to help them navigate their way through some of the challenges they faced during their induction into teaching (Bell, 2010; Cohen et al., 2011). Importantly, this was in line with the approach adopted in other research studies for developing reflective practice in student teachers (Gore and Zeichner, 1991; Gubacs-Collins, 2007; MacDonald and Brokker, 1999; Le Cornu, 2005).

Within this study, it is noteworthy that the student teachers' reported that they sought advice and course information directly from their peer-mentoring pairings and the mentoring workshops. This particularly became a source of support and opportunity for advice to be professionally disseminated. Within this context opportunities were also used for developing reflective processes, discussing areas of strength or areas for improvement, in endeavouring to improve and develop teaching. Many of the early experiences, also illuminated some key findings with regards to the student teachers' being able to learn more within collaborative pairings, as the specific focus was signposted towards pedagogical matters, which were situated around what constitutes good teaching practice and how teaching can potentially be improved. This very much facilitates the work of Baker and Milner (2006) who suggest that peer-mentors are pushed towards greater degrees of articulation about pedagogy and practice, whereas traditionally, mentors respond more to individualistic traits and personality characteristics associated with good or bad practice of teaching. Similar to Bullough et al.'s (2002, 2003) findings on elementary schools regarding student teacher peer-support, Baker and Milner noted that by co-planning, team teaching, and observing one another teach, peers support each other's development. Importantly, the discourse presented was represented among the student teachers who reflected upon their classroom procedures through reflecting upon many different aspects such as behaviour management and pupil behaviour. This was perceived as the most influential determinant of effective and successful teaching, in addition to challenges concerning the utilisation of time in preparing substantive amounts of paperwork to satisfy the teacher training standards and benchmarks required by the programme of study and the school placement.

This finding suggested that monitoring changes in pupil behaviour and developing subject knowledge became the yardstick by which the student teachers judged the effectiveness of their teaching, in addition to how they were able to manage the challenge of the perceived lack of time that they thought they had, with regards to completing administrative tasks associated with their teacher training. In reflecting upon these experiences, the implementation of peer-mentoring in the initial stages during the early experiences on the initial teacher training programme of study, indicated complex, multi-dimensional aspects, which place emphasis on the student teachers developing within their peer-mentoring constructs, an appropriate practitioner instrument for specific purposes, which allowed them to reflect on feedback given to by one another and interpret possible meanings for developing teaching practice (Hagger and McIntyre, 1993; Hattie and Timperley, 2007). These findings would suggest that the student teachers' utilised listed

(documented) feedback derived from multiple sources and multiple perspectives effectively to gauge their own practice during their progressive development (Hattie and Timperley, 2007).

Some findings however, which emerged from the student teachers' perceptions raise several anomalies. For example, the student teachers' indicated that the development and facilitation of their teaching practice was not always prioritised by the teacher trainers, in their opinion they felt that many of the structured processes were specifically designated to ensure paperwork and administration was completed, rather than specifically encourage and develop teaching practice. Another issue for consideration, also indicated that student teachers felt that their professional artistry was somewhat suppressed and compromised, and that at times they felt innovation was not encouraged, particularly when going into a departmental setting. This very much contradicted and conflicted with some of the practice that the student teachers had engaged in which were specifically designed to embrace innovative processes, reflection and the dissemination of knowledge within a community of practice (Edwards and Collison, 1996; Lave and Wenger, 1991). Gardiner and Robinson (2009) indicate that peer-collaboration during planning and instruction help student teachers take innovative risks. The early experiences, which would go on to inform the lived experiences throughout the initial teacher training and peer-mentoring intervention indicate that by brainstorming, co-planning, and assisting during lesson implementation, the student teachers' helped each other bridge the gap between theory and practice (praxis), in addition to implementing student-centred pedagogies that they had not previously observed during teacher-centred field/ school placements. The student teachers' also felt that they also found peer-dialogue was more rich and open-ended than dialogue with mentors and supporter teachers, particularly during the workshop related activities. Initially, the participants highlighted mentor instruction and dialogue to be directive and focused on issues such as which lesson to teach and what to do differently next time, whereas peer-dialogue involved more brainstorming and problem solving related perspectives. The trainees' also indicated that peer-feedback was also more frequent and more specific towards developing as practitioners, in comparison to the feedback that they had received from their subject mentor.

The capacity and commitment for student teachers to systematically evaluate their own teaching through collaborative and peer-mentoring procedures is recognised as an integral component of professional development (Gardiner, 2010; Le Cornu, 2005) and a key attribute of extended professionals (Stenhouse, 1975). Within this context, the overall narratives present that the early experiences amassed within the initial teacher training programme, were important for framing

the training ahead. Specifically, there were some important contexts for peer-mentoring, which were explored in the early stages of the student teachers' induction into teaching. With the nature of the peer-mentoring intervention, being fluid there were anomalies which made it hard to measure the effectiveness of this particular intervention in the initial stages as this proved to be the most challenging period for the student teachers. Consequently, this stage provided clear advantages and disadvantages, with the fluidity, and potential lack of structure proving to be a challenge for the student teachers. Arguably, as they became more settled and embedded within their teaching practices the fluidity of the peer-mentoring intervention became an advantage, particularly through the student teacher-led themed workshop content. However, further considerations may need to explore the need for developing the skills, practically from the point of developing professional autonomy among student teachers before they are engaged or immersed in specific professional development interventions, aimed at researching teaching and learning. Associated with this was the regular and systematic evaluation of the peer-mentoring intervention, which according to the trainees' could have been more researcher-led in the early phases of the intervention, as the student teachers' may not have been aware of the particular needs that facilitate successful collaborative relationships with regards to professional development in education. Consequently, the emphasis on student autonomy, which the student teachers' indicated was a challenge at the beginning of the intervention, was found to be indicative of the approach undertaken by student teachers generally, in the need to be navigated through the teacher training process rather than solely rely on their peer-mentoring pairings (Bottoms et al., 2013). This needs to be investigated further, particularly as these processes to a huge extent when considering student teachers are at the heart of constructivist learning and action research, with regards to providing trainees with a platform or stimulus to draw parallels between prior learning and the experiential learning to be undertaken for professional development (Carr and Kemmis, 1986).

The types of interpretation located to the early experiences of the student teachers, regarding utilising peer-mentoring to inform reflective practices highlight areas of difference and variance between linking such practice in a practical context. These areas need to be investigated further, particularly in relation to exploring strategies that might support the more descriptive and prescriptive student teacher's that require structure and systematic support, with regards to early engagement within an initial teacher training programme of study.

6.4 Studying teaching for personal improvement through reflection

In this study, student teachers' reported several aspects with regards to developing teaching to facilitate personal improvement through utilising reflexive processes. The group of student teachers' highlighted how personal experiences and prior experiences underpin many of the values and beliefs within the classroom setting. This resonates with Collin et al., (2013) who suggest that the grounded property of reflective practice means that reflection, whether abstract or concrete, can never be disconnected from prior experiences, as this facilitates existing or present experiences. The properties attributed to reflective practice, with regards to developing professional learning within teaching became a key feature for the student teachers' immersed within this study. The characteristics attributed to reflection by the student teachers' indicated that reflective practice is conceived as a process that takes place in the social individual, not just a professional individual (Beattie, 2000; Colin et al., 2013). An important observation made by the student teachers, centred on utilising reflection to develop teaching competence and confidence. This particular acknowledgement was an important distinction to be made by the student teachers, because they began to realise the synergy between reflection-in-action and reflection-on-action, and its impact on pedagogical practices (Schon, 1983, 1987; Pollard, 2011).

During the study, reflection became the stimulus through which the student teachers' were able to measure personal improvement, this also became the catalyst for really engaging in collaborative, reflective dialogue which aimed to facilitate the dissemination of good practice and dilemmas that may be inherent in teaching practice (Galea, 2012; Bradbury, 2010). This observation suggests that the exploration into peer-mentoring to inform reflective practice provided the catalyst for the student teachers' to undertake an in-depth look into particular aspects of their own teaching, in a collaborative forum. An important distinction to discern was that this was slightly uncharacteristic with regards to their usual exposure concerning ways of learning about teaching or how to teach, with regards to what they had been exposed to at that particular stage of their initiation into the teaching profession.

There was also an indication that some of the student teacher's perceived some of the practice within the initial teacher training to be highly individualistic, and this was considered to be an aspect which could reduce confidence with regards to developing subject knowledge and teaching expertise. The utilisation of reflection however was considered through various lenses; one significant context in particular, was the potential overuse of utilising reflective processes.

Importantly, during the intervention it was important to recognise that while the necessity of developing reflective practices of student teachers is well documented (Hayden and Chiu, 2012; Bransford et al., 2005; Darling-Hammond, 2006; Hammerness et al., 2005; Porter et al., 2001) reflection as a part of practice once a teaching career evolves and develops is more complex (Loughran, 2010; Nilsson, 2009; Ostorga, 2006). Hence, the importance attributed to utilising peer-mentoring to inform productive reflection within this study that did not appear monotonous to the student teachers.

Within this context, the student teachers' immersed within the initial teacher training received guidance in utilising reflection as an analytical tool, (Korthagen et al., 2001; Korthagen and Vasalos, 2005; Loughran, 2010) however, there was some acknowledgement that this guidance alone is not sufficient for transfer to practice. Therefore, an observation made among the student teachers' and the researcher which became apparent was that teacher education and professional development must prepare teachers to reflect on their own, once they are in practice, where communities or cultures of practice are non-existent within a professional setting. The number of critical reflective conversations encouraged and utilised by the student teachers' within the study, revealed that the characteristic of disseminating practice became more prevalent as the student teachers became more knowledgeable, particularly with regards to utilising peer-mentoring and collaborative dialogues as a means to demonstrate this newly acquired knowledge which informed their teaching practice. There were some variances found between the reflective conversations had within their peer-mentoring pairings and workshops, and the reflective opportunities that the student teachers' were exposed to during their teaching placements. In some cases, practice was discussed, with a significant proportion of the feedback not facilitating reflection, but, contrastingly, being revealed to be deconstructive in developing teaching artistry and competence. The comparative of such conversations used within the context of utilising personal teaching experiences to facilitate reflection, requires further investigation particularly in relation to how student teachers' engage with in-school colleagues and construct knowledge and use that knowledge to link theory with their own practice (Hayden et al., 2013).

Throughout the study, it became apparent that there were similarities posited by the teacher educators in the initial stages of the research study. The student teachers' were faced with the complexity of knowing the essential characteristics of a reflective practitioner, and essentially, were collectively responsible for implementing effective methods for promoting reflection and stimulating meaningful analysis of outcomes that result from reflection on and for action

(Dewey, 1933; LaBoskey, 1994). The consensus, among the student teachers' was that there could have been more time attributed to developing strategies for teaching and analysing the reflection that was engaged in within their initial teacher training programme of study. A re-occurring a theme which proved to be challenging for the student teachers', related to the lack of time to evaluate personal growth through reflection, specifically because of the illustrative paper trail required in satisfying the standards and competencies for initial teacher training. Contrastingly, these contexts were considered in greater depth during the student teacher-led themed workshops.

The schema for developing a conceptualisation of reflective practice among the student teachers', became evident during focus group discussions where the trainees were able to define reflection in relation to how they have developed and how their teaching had developed in association with such practice (Bolton, 2010; Ghaye, 2011). Importantly, this was a pivotal aspect for the study, as such conceptualisations situated around reflection, began to stimulate different types of reflective thinking. This also supported the belief concerning the recurring notion that reflection is an intentional cognitive process that requires critical skills beyond basic knowledge and understanding of an event or experience is embedded in various continuums of reflective thinking, and more specifically, LaBoskey's continuum. The development of reflective thinking resonated with LaBoskey's (1994) three types of reflective thinkers: (1) Common Sense Thinkers, (2) Alert Novices, and (3) the Pedagogical Thinker (LaBoskey, 1994). The narratives collated presented and resonated with the three types of reflective thinkers as they continue in complexity from simple to most complex and mature. A critical component, which was important in revealing such engagement was the intellectual responsibility undertaken by the student teachers' in attempting to develop their professional practice as teachers, and utilising their personal development and experiences to facilitate this progress, strongly echoing Dewey's notion of whole-heartedness (Dewey, 1933; LaBoskey, 1994). The proficiency of the student teachers, also allowed them to engage in descriptive, dialogic and critical types of reflection (Hatton and Smith, 1995). The student teachers' regularly, engaged in such dialogue, by removing themselves from the events or actions leading to a distancing from practice, exploring discourse within themselves and exploring the experience, events and actions, utilising qualities of judgement. All of which influenced possible alternatives for explaining and hypothesising their teaching practice (Thorsen and DeVore, 2013). Further, as a consequence of this particular type of engagement with reflective practice, it became evident that the student teachers' developed an awareness that their actions and events are not only located in and exportable by reference to multiple perspectives

but are located in and influenced by multiple historical, social and political contexts, which influence their teaching and pedagogical practices (Ghaye, 2011; Thorsen and DeVore, 2013).

Research has indicated that all teachers utilise personal theories and beliefs to reflect upon themselves as teachers, their teaching, subject matter, pupils, and their roles and responsibilities within the classroom landscape (Clark, 1988; Clarke and Peterson, 1986; Ennis, 1994; Feiman-Nemser, 1990; Pollard, 2011). In facilitating some of these indications, Clark (1988) suggests that teachers utilise their reflective and personal experiences to develop and hold implicit theories, which tend to underpin their pedagogical discourse. Importantly, the considerations for observing personal development became a pertinent stimulus for the student teachers, as they were able to begin to conceptualise how their personal theories and beliefs integrated with some of the theories that they had adopted with regards to teaching and learning, more specifically around pedagogies and how this practice is implemented.

In this study, the narrative findings suggest that the student teachers' might have allowed their preconceived values and experiences to influence the way they have taught or approach particular situations. Within the study, it became apparent that the student teachers' considered personal beliefs to directly influence the on-going development of their peer-mentoring, teaching practice and collaborative learning within the community of practice. While it could be argued that this may have been an implicit or tacit personally driven goal for the student teachers', this finding requires further investigation, to clarify in terms of raising awareness about the implicit personal theories and beliefs that the trainees may hold, and the possible influence and consequences of such beliefs on their own teaching should personal theories and beliefs remain unchallenged, in relation to developing reflective practice. Further explorations could systematically analyse the impact of reflective conversations and how they facilitate personal improvement. Within this study, reasons to explain this particular difference or dissonance were not readily apparent, thus, the need for further exploration in this particular area.

6.5 Establishing a Community of Practice

In this study, the student teachers' identified a number of ways through which they considered alternative prospective possibilities to inform their own teaching. The re-occurring theme which underpinned much of this particular peer-mentoring intervention was the benefit of engaging in a community of practice where student teachers felt 'safe' to disseminate concerns and ideas

related to pedagogical practices in teaching primarily through the workshop activities. The conceptualisation of a community of practice held by the student teachers' resonates with Mortier et al., (2010: 345) definition of like-minded practitioners who share a concern, set of problems, and passion about a topic, knowledge or expertise within an area by interacting with other practitioners on a continual basis. The central conception which underpins communities of practice is the concept that learning is based on the premise that learning is a process of social participation underpinned by constructivist principles (Edwards and Collision, 1996; Lave and Wenger, 1991; Wenger, 1998). The constructs which categorise a community of practice were very much embodied by the student teachers, with combinations of collaborative learning varying from learning within a community (learning as belonging), identity (learning is becoming); and discovering meaning (learning as experience) and conceptualising how this influences practice (learning as doing) (Denscombe, 2008; Wenger, 1998).

The narratives presented indicated that the student teachers' identified with their community of practice in helping to facilitate their teaching and learning reflexive processes, which enabled them to understand and recognise the impact of social learning processes in specific situations (Mortier et al., 2010). The benefit of such communal dialogue promoted a 'safe' environment for trainees to express their thoughts and consider positive and negative aspects in relation to their experience on their initial teacher training programme of study. This particular finding indicates that such communities based on socialist and constructivist paradigms are a key feature for student teachers to learn effectively and strengthen their professional development in a community of practitioners engaging in similar experiences. Hence, supporter teachers and teacher trainers need to recognise the capacity for such endeavour, and engage with student teachers in order to help them facilitate collaborative dialogue with other trainees immersed within the same experiences. The need for developing collaborative endeavour, in the form of a community of practice has been commentated widely upon within the literature (Lave and Wenger, 1991; LaBoskey and Richert, 2002; Wenger, 1998; Pollard, 2011). LaBoskey and Richert (2002) contend that such collaborative and communal platforms provide a stimulus for cohesive dialogue which offers student teachers the chance to share and learn about ideas concerning improving their professional knowledge, from a variety of colleagues and practitioners within a similar context to themselves. In this study, the student teachers' strongly advocated collaborative conversations, which seem to contribute to effective teaching and learning between the trainees. The contribution for peer-mentoring therefore, within this context facilitates some of the thinking persisted by Souto-Manning and Dice (2007) who explain that the nature of

mentoring, strongly advocates communities of practice, in disseminating experiences. Further, they suggest that through practitioner lenses of collaborative dialogue, mentoring is capable of assisting teachers to understand learning environments with a view to improving teaching and learning in a variation of educational constructs.

Consistent with the constructivist approach, the student teachers' indicated that the productivity and effectiveness attributed to the concept of communities of practice, derives from being able to utilise real-life experiences, and its ability to capture the depth and complexity of human interaction and learning (Mortier et al., 2010). Importantly, the participants recognised the importance attributed to developing collaboration, they recognised that this particular phenomena is based on partnerships being established to create new structures to support shared work and endeavour (Darling-Hammond and Bransford, 2005). The engagement within a community of practice, also encouraged facets attributed with the concept of *domain*, when considering community of practice discourse. Wenger et al., (2002) and others describe the concept of *domain* as the following: 'the domain creates common ground and a sense of common identity. The domain inspires members to contribute and participate, guiding their learning, and providing meaning to their actions' (2002: 28). In utilising this particular concept, the student teachers' were able to create a *domain* for their own learning which incorporated reflecting upon their own actions in relation to framing and measuring their pedagogical practices. Additionally, this also provided the trainees' with the opportunity to develop their own professional understanding and knowledge (Furlong and Maynard, 1995). Furthermore, the domain, in the capacity presented inspires members (practitioners), in this case through the mentoring workshops and focus group discussions.

Thus, the provision of enabling environments which allow student teachers to engage in communities of practice cannot be devalued or underestimated, with regards to student teacher's personal and professional development as part of a collective. Such processes also facilitated a useful means for analysing feedback, with the peer-mentees (student teachers) providing constructive recommendations regarding the improvement of one another's professional practice and the peer-mentoring intervention. This finding resonates with Wang et al., (2008) who suggest that the feedback process is considered as an important feature of effective mentoring, particularly within a collaborative framework. In this context, the implication for communicating effectively is considered as a substantial determinant for the effective establishment of a community of practice. Essentially, this is because effective communication can contribute to

student teachers, colleagues, and practitioners making sense of their experience through communities of practice which embody mentoring at their core (Edwards and Collison, 1996; Orland-Barak, 2005; Koballa and Bradbury, 2012). This aspect of communication was facilitated by focus group discussion meetings which provided the opportunity for the student teachers' to evaluate and disseminate ideas relating to experiences in teaching, how this informed reflective practice, and how peer-mentoring was able to underpin both these particular areas. Additionally, the focus group was also used as a means of monitoring progress, building enthusiasm and taking progressive steps in measuring the effectiveness of peer-mentoring to inform reflective practice. In the first instance, the community of practice was designed to develop collegiate support in any given context and reduce an over-reliance on teacher trainers and subject mentors for help and support, in trying to promote professional autonomy and collaborative endeavour among the student teachers (Mortier et al., 2010).

Within the study, the central premise and the ethos resonated around developing a 'community' (Lave and Wenger, 1991; Wenger, 1998). The narrative data highlighted the importance of this particular context in alignment with collaboration. Differences in expectations of supporter teachers, outside of the peer-mentoring intervention from the student teachers became an aspect of challenge, in attempting to enact communal cultures of learning. It became apparent to the student teachers' that not all of them had been exposed to practitioners in their school placements who embraced the potential for collaboration as a highly essential factor for effective mentoring. In acknowledging the importance of community, in constructing a community of practice, some the student teachers eluded to the lack of a professional culture which encouraged teachers to collaboratively engage in and disseminate ideas about teaching practice. The conceptualisation of the community and how this particular term is defined in relation to collaborative professional dialogue is theorised by Wenger et al., (2002) who suggest that 'the community creates the social fabric for learning'. Further, they mention that it fosters interactions based on mutual respect and trust, with participants encouraged towards demonstrating a willingness to share ideas, expose one's ignorance, ask difficult questions, and listen carefully (2002: 28).

The qualitative narratives presented indicated that the student teachers' were able to contribute their stories (narratives) and perspectives about how their experiential learning was progressing, in addition, to sharing their current needs or worries. The purposefulness of the community of practice, within a focus group setting aligned with the peer-mentoring intervention, allowed the

student teachers' to utilise this particular forum as a vehicle to improve their pedagogical practices as part of a collective. Consequently, this meant that the student teachers' were able to build upon each other's information, insight, advice and suggestions to generate new ideas for support. When the student teachers' agreed on the potential effectiveness and feasibility of an idea for educational or social support, it was added to the support plan. The fluidity between developing creative processes and common-sense approaches was an important component of developing reflective practice. Boud (1999: 125) recognised that the emphasis placed on the need for personal disclosure in discussion forums was often found to be beyond the capacity of some student teachers. Contrastingly, among this group of student teachers this particular disposition was not particularly evident, as the student teachers felt comfortable disclosing and discussing aspects of practice among their peers. Similarly, MacDonald and Brooker (1999: 59) perceived potential barriers in student teachers' uneasiness in working with the personal. However, again this was not a problem experienced by the student teachers used within this study, because there was an aspect of purposeful selection to ensure that the peer-mentees were familiar with one another through either similar personality traits or similar previous experiences. Importantly, this study does not pertain that these particular types of challenges do not exist. Rather, on the contrary, thus, there may be a need for this to be investigated further, in contexts where this does often occur, particularly in relation to creating an environment of trust so that suggestions made by informed others can be perceived as constructive and non-threatening within a community of practice.

Importantly, a barometer for measuring and analysing the effectiveness of a community of practice within the study besides the formative feedback provided, was assessing the fluidity of connection and synergy between the ideas generated by the student teachers' during the workshops, focus group discussions and the practice they adopted in implementing those contextual ideas within classroom and peer-mentoring settings. The student teachers' documentation of their reflective experiences facilitated accessible and readily available resources for teaching practice. This idea situated around practice, when attempting to conceptualise the effectiveness of a community of practice are best described as a set of frameworks, ideas, tools, information, styles, languages, stories and documents that community members share (Wenger et al., 2002: 29). Significantly, this practice established specific types of knowledge which were disseminated within the community of practice among the student teachers' throughout the peer-mentoring intervention, in attempting to inform reflective practice (Lave and Wenger, 1991; Wenger, 1998; Wenger et al., 2002).

The capacity and commitment to consider alternative perspectives and possibilities have been recognised through the implementation of communities of professional practice (Lave and Wenger, 1991; Lieberman, 2000). Such endeavour is considered as an important element of student teacher professional development (Brookfield, 1987, 1995; Dewey, 1910, 1933; Lave and Wenger, 1991; DfS, 2012; TDA, 2009) and, as an attribute of developing cultures of pedagogical practice (Bradbury, 2010; Stenhouse, 1975). Research indicates that (Bottoms et al., 2011; Gardiner, 2010; Mortier et al., 2010) there are a number of strategies, such as discussion (focus group) forums, negotiations, peer and collaborative teaching and learning, through which student teachers can develop multiple ways of thinking about teaching (Gore, 1993), particularly when considering adopting more collaborative processes, in attempting to consider other means of understanding and interpreting pedagogical practices which embrace the need to consider aspects of teaching from alternative perspectives (Dewey, 1910, 1933). Results in this study showed the perspectives and lenses (Brookfield, 1995) most commonly identified by student teachers engaged within a community of practice, which included collaborative learning, cultures of practice, peer-learning and reciprocal dialogue. These aspects were accentuated, by consistent dissemination and dialogue within the peer-mentoring pairings and the reflective focus group discussions, which helped to inform aspects associated with developing a successful community of practice (Wenger, 1998).

While the overall narratives within this context of communities of practice suggest that the student teachers' considered alternative perspectives and possibilities to inform their own teaching, a number of qualitative distinctions, identify that this particularly type of professional inquiry is built entirely on reciprocal trust and practitioners that share a similar commitment towards developing practice as part of a collective. This particular commitment involves student teachers engaging with specific terms which utilise descriptive, comparative and critical reflective conversations and dialogue. While these findings could be considered to be exclusive to this particular study, other future studies could perhaps locate reasons for variance found in implementing communities of practice, in addition to examining some of challenges that such communities present within an educational context, as this was not considered, explored or investigated in depth, within this study.

Within this dimension a number of findings raise the question as to whether some student teachers might have experienced barriers in attempting to gain perspectives and engage experienced teachers' within a community of practice, or even whether such cultures were

existent in the first instance during the trainees' school placement experiences. The lack of support and disinterest that some of the student teachers' perceived from school staff towards engaging in collaborative processes to inform teaching raises concern, as does the problem reported by some of the trainees' of feeling like their input regarding teaching was not valued.

This raises both ethical and professional issues. These concerns could be linked and, in part, might explain why some of the student teachers' did not perceive discussions with informed others during school placements as having influenced the on-going development of their teaching practices and experiences. These areas need further investigation, particularly in relation to finding out what causes might underpin these perceived challenges concerning productive dialogue with informed others and discovering ways to overcome them, so that student teachers and experienced teachers can engage in dialogue to explore alternative perspectives and possibilities, in all matters concerning teaching and learning.

6.6 Developing Trust within Peer-Mentoring

Teacher induction programs are designed to ease the transition of new teachers from being students of teaching to teachers of students. Although programmes differ in duration, components, target populations, intensity, and sponsorship, nearly all include a mentoring component (Ingersoll, 2007). Within this study, for this component to be developed, a central factor was the trust elicited between the student teachers' involved within peer mentoring intervention. The trust aspect heavily underpinned the notion of peer-mentoring enacted within this study. Primarily, because aspects of this study advocated that during the induction phases of learning in teacher training, peer-mentees can serve as coaches, guides, and supporters to colleagues that are sharing similar experiences in adjusting to the rigours of teaching, with the explicit mission of helping to retain, socialise, and develop quality teaching and learning practice within a communal learning space (Carver and Katz, 2004; Lave and Wenger, 1991; Smith and Ingersoll, 2004; Wang, 2010).

The student teachers' identified the component of trust to be a significant factor in engaging in reciprocal and collaborative mentoring where openness and honestly are embraced as facets to improve teaching and learning. Similarly, Lin (2011) and Kinsella (2007) highlight the need for trust to inform mentoring performance. Further, they emphasise the need to measure trust, by assessing how this influences peer-mentoring dynamics, and where this is not evident in such

constructs, analysing what effect this may have in terms of peer-mentoring effectiveness. The narratives from the student teachers' indicated that the development of trust and appropriateness of the mentoring arrangements based on that demographic of trust, may impact on the success or outcomes of such professional collaborative relationships. Equally, this research serves as a caution against what might be perceived as a complacent and misguided view, that in the developing of trust alone and sharing of pedagogy and reflection, this will specifically create 'perfect' and 'harmonious' enactments of peer-mentoring (Lin, 2011).

Significantly, within this particular dimension of exploring peer-mentoring, it was notable to observe how the student teachers conceptualised the idea of trust particularly within the context of using their own experiences to improve and navigate one another's practice. The element of trust became a feature which heavily resonated with the participants, essentially, because they became very aware that for their peer-mentoring relationships to be productive, transparency was required. This particular component meant that the student teachers had to engage in reflective and discursive dialogue which facilitated a 'safe' environment for student teachers to pursue ideas about their experiences of engaging in teaching and learning environments and the pedagogy that surrounds those particular environments. One important aspect was the perceived barriers that accompany a lack of trust within peer-mentoring relationships. The student teachers' were able to acknowledge this as a particular challenge, and a potential barrier towards embracing open forums where reflections and ideas concerning teaching and learning can be posited. This particular thinking resonates with Le Cornu (2005) who identifies that the lack of trust between peer-mentees restricts the boundary and circumference for trust in deliberating and disseminating ideas concerning teaching practice.

The approach towards developing trust within this particular context is indicative of some of the ideas associated with building theories-in-use (Schon, 1983, 1987), in utilising personal practices to inform aspects of trust in developing student teachers practice, exploring with variation, and consideration towards how this stimulates the teaching and learning dialogue. A key indicator for how trust became the catalyst for engaging in critical reflection was the means for such processes to provide additional support (Bradbury, 2010). This resonates with previous research based on constructs of mentoring where; peer-mentoring programmes are widely accepted as a means of providing additional instructional support for students (Fox and Stevenson, 2006; Jacobi, 1991; Smith, 2008; Raider-Roth et al., 2012). In addition to the academic benefits, the student teachers' elicited several other advantages of developing strong professional relationships which were

underpinned by trust. The trainees' acknowledged that aspects of the peer-mentoring intervention were able to offer the focus group an additional instructional outlet, thereby relieving some of the pressures from, the teacher trainers, whilst still providing adequate support for one another in a collegial environment (Fox and Stevenson, 2006; Heirdsfield et al., 2008; Mazur, 1997; Smith, 2008). Moreover, a re-occurring theme which underpinned the process for effective-mentoring was the notion, that trust provides an opportunity for peer-mentees to reflect deeper on the learning process. They highlighted, that in developing professional trust, subject mentors in particular, must be able to think about how student teachers' may learn and develop, and apply this to their interactions with mentees. In this regard, Heirdsfield et al., (2008) highlight that peer-mentoring can be especially useful in teacher education programmes where students are preparing for a career in educational service. Further, they contend that the developing of professional trust among teacher trainees' aligns heavily with how the subject teacher interprets and implements this dialogue when working alongside trainee teachers.

The narrative data provided also demonstrates that within collaborative mentoring relationships, personalities are a significant indicator for the production of trust. The trainees' explained that the basis for developing trust can sometimes be affected by the lack of bond and professional cohesiveness between educators. The narratives presented build on the concepts discussed at length, with regards to the facilitation of mutually beneficial mentoring relationships (Gardiner, 2010). Thus, it is important to acknowledge that the narrative data presented indicates that where practitioners involved in mentoring are not of a similar mindset with shared orientations and aspirations, development of trust is unlikely to occur. Spezzini et al., (2009) suggest that successful mentoring relationships have been linked with not only the matching of mentors and mentees, but a professional dialogue underpinned by trust. Throughout the study, it also became apparent that the trust aspect of mentoring also facilitated some of the pastoral elements of collaborative learning, with some resonance between peer-mentoring providing emotional support, which in turn contributed to enhancing the student teachers' learning and success (Fox and Stevenson, 2006; Rice and Brown, 1990). The element of trust which permeated the peer-mentoring relationships among the student teachers' indicated that trainee teachers feel less intimidated by peer-mentors and the trust which accompanies this professional relationship. This resonates with results from several studies of effective mentoring programs which indicate that student teachers feel less intimidated by peer-mentors and more likely to ask questions they may not be willing to ask course instructors or teacher trainers (Heirdsfield et al., 2008; Page and Hanna, 2008). Thus, the spiral of trust developed among the student teachers' that participated

in this study, suggests that if students feel more secure in asking course-related questions, they will become more comfortable with the material and more likely to succeed in all aspects of their induction into the teaching profession. Within this study, this has been identified as an important element in any initial teacher training programme, and more importantly, should currently be of particular interest to researchers and teacher education programme developers.

Importantly, for the student teachers' an aspect of the course which required them to engage in academic writing was the framing of reflective pieces and more academically focused assignments. The trust developed within the peer-mentoring community of practice allowed for the dissemination of ideas and sharing of good practice with regards to completing the required coursework, particularly within the workshops. Early within the study, a major concern for the student teachers centred on academic writing particularly within the initial teacher training as there were modules that required Masters level writing, which the student teachers' had not been exposed to as they had just completed their undergraduate degree. The ability to demonstrate knowledge through writing is a basic requirement for student teachers' on an initial teacher training programme of study, and in recent years, many universities have established writing-intensive courses into curriculum design across a broad spectrum of disciplines within teaching and learning. These courses integrate frequent writing assignments, in ways that assist and support student teachers to learn both the subject matter and discipline-specific ways of thinking and writing (Douglass et al., 2013).

Although, there is much research (Gardiner, 2010; Kensington-Miller, 2011; Le Cornu, 2005) to support peer-mentoring programmes as a way to improve academic performance, there is limited information linking the effects of peer-mentoring on student teacher's perceptions of mentors' contributions and effectiveness, and how 'trust' plays a pivotal role in underpinning this and improving students' writing skills among one another. Based on some of the findings within this research study, and the already existing well-established theoretical frameworks of learning and cognition (Dewey, 1933; Edwards and Collison, 1996; Kolb, 1984; Lave and Wenger, 1991; Schon, 1987; Pollard, 2011; Vygotsky, 1978), it could be assumed that student success, and developing 'trust' and communities of practice among peers in the area of writing may be enhanced through the academic and social interaction provided by a peer-mentoring programme. Vygotsky's (1978) social learning theory attributes cognitive development to social interaction between a learner and a more knowledgeable other (MKO). According to Vygotsky, the MKO is anyone with a higher understanding of a particular concept than the learner including peers and

other students. The features of trust very much facilitate social interaction. The student teachers' recognised the impact of this and were aware, that social interaction plays a significant role in the peer-mentoring process by creating an atmosphere in which student teachers are comfortable seeking assistance from a more knowledgeable peer. Some of the ideas in this study, concerning trust, and its implications for the peer-mentoring relationship, also identify with Relational-Cultural Theory (RCT). Importantly, this concept resonates with the idea that human development and change is fostered in mutually trusting, empathic and growth-developing relationships (Comstock et al., 2008; Miller and Stiver, 1997, Rhodes et al., 2004). The thinking which pervades RCT contends that to achieve positive change, both the mentor and protégé(s) need to establish high-quality relational skills that include and embody trust as a key principle, authenticity and being emotionally competent (Comstock et al., 2008). In discussing, this context, several aspects of this theory were evident among the student teachers', particularly in relation to their engagement and practice within their peer-mentoring pairings.

Additionally, the concept of complementarity and trust has been explored in the context of peer-mentoring relationships (McManus and Russell, 2007). The concept of complementarity indicates that while the mentor may be more knowledgeable in a particular area of need than the mentee, the benefits of participating in a peer-mentor relationship are beneficial to both parties. Within this study, the stimulus for collaborative dialogue was reciprocity and trust, with both parties being open to receiving and disseminating new knowledge. For example, within this study the student teachers' provided each other with new knowledge on particular topics; firstly, within their peer-mentoring pairings, and then collectively within the student-led workshops. This provided an opportunity for the trainees' to further develop their skills whilst also practicing other useful competencies (e.g. communication, assessment, and modelling) (Douglass et al., 2013). Godshalk and Sosik (2007) investigated the learning goal disposition and found that student teachers' may have more beneficial relationships with their mentor when both parties are focused on learning. Thus, the potential for mutual gains and developing professional trust further increases the appeal of peer-mentoring interventions designed to help student teachers' in navigating their way through their teaching induction.

The capacity and commitment of student teachers to implement new strategies and ideas in their own teaching to facilitate peer-mentoring has been recognised as an integral component of effective collaborative learning (Lave and Wenger, 1991; Le Cornu, 2005, Wenger, 1998). In analysing a number of the reflective discussions that concerned aspects of trust and how

important this contexts becomes in underpinning the mentoring relationship, student teachers were able to analyse how this influenced the capacity for student teachers to build and rationalise their peer-mentoring practices, in evaluating what made them effective and measurable. In considering the impact of trust, upon peer-mentoring, aspects of this capacity and commitment have also been identified through epistemological cognition, in moving towards the relativist position of contextual knowing (Moon, 1999). In considering some of the narratives posited within the study with regards to trust, this also highlights that student teachers construct knowledge which is situationally framed and guided by contexts, in the attempt for trainees to make sense of their teaching practice and reflexive processes (Schon, 1987). In this study, while the perceptions of the student teachers' regarding aspects of trust and how this facilitates the peer-mentoring paradigms would suggest that they exhibited the capacity and commitment to engage in reciprocity, mutual dialogue, and engaging in ideas about their own teaching, this finding was specific to this particular study. Although other studies (Bottom et al., 2011; Gardiner, 2010, Douglass et al., 2013) have also highlighted the need for trust as a significant factor in facilitating effective mentoring. This study, however, does not posit that this particular presentation of narratives regarding trust is a reflective for how trust must be implemented or enacted within mentoring relationships; rather these are summaries exclusive to the findings which emerged in this study. Further explorative pieces may wish to consider the possible variances of trust and how this is implemented within varying constructs of mentoring.

6.7 Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study

Upon critically and collaboratively reflecting on teaching and peer-mentoring at the end of the initial teacher training programme of study, the student teachers' indicated feelings of positivity and engagement in attempting to develop reflective practices to inform teaching and learning. The student teachers' feelings towards their participation in peer-mentoring were very positive and serve to support some of the basic tenets of the reflective model concerning peer-collaboration. As others have reported (Le Cornu, 2005; Manouchehri, 2002; Pollard, 2011), a commitment to professional growth and a belief on the part of the student teacher that interaction with peers is essential to learning is vital in effective peer-collaboration. Importantly, an important acknowledgement elicited by the student teachers also indicated some the challenges for collaborative learning, which seem to be inherent in mentoring relationships between the student teachers who participated within this study. The most significant aspect in

relation to reflecting on such experiences which directly informed teaching was the issue of time to engage in such aspects. Barrera et al., (2010) highlight that student teachers require, designated and specific time allocations during initial teacher training programmes of study to develop relevant professional knowledge and skills. This aspect was particularly challenging and did present challenges in relation to attempting to encourage the student teachers to develop their reflective processes. Another challenge, proved to be the transition and development through phases of mentoring which aimed to target specific areas for teaching improvement through using ideas and conceptions associated with reflection. The maintaining of such phases became conducive to utilising the time of the student teachers' effectively with regards to the time they had specifically to allocate towards engaging in a peer-mentoring intervention. Accordingly, aspects of this particular concept had to be streamlined and made significantly more linear in accordance with the time that the student teachers had available to engage in this particular study, due to the extensive requirements of engaging in an initial teacher training programme of study.

Reflection upon the peer-mentoring experience among the student teachers' demonstrated that in the initial stages collaborative mentoring was collectively considered to be quite difficult to engage with specifically due to the workload and demanding course requirements. Importantly, suggestions were also posited concerning identified differences in interests and expectations. Additionally, the student teachers' voiced unrealistic expectations in relation to engaging and facilitating some of the components of peer-mentoring. The student teachers' generally agreed that towards the end of the peer-mentoring intervention, as teaching practice became more embedded, and the requirements of the course became less demanding, peer-mentees' became less dependent on the more professional aspects of mentoring in relation to course knowledge and subject knowledge, and became more dependent on pastoral and supportive aspects. Colvin and Ashman (2010) suggest that the flexibility of peer-mentoring relationships indicate that almost every component of peer-approaches facilitate some sort of benefit in relation to how such relationships can be utilised for personal productivity. The student teachers' claimed that they were able to establish mentoring relationships immediately, attributing this to the deliberate, purposeful selection of peer-mentees who had shared similar experiences and already had existing friendships, which proved to be the catalyst for strengthening and maintaining trust, and developing critical reflective professional relationships (Johns, 2009; Shaw, 2013). Thus, the data presented points towards the notion that collaborative mentoring may not thrive and prosper in situations where people involved are not like-minded with similar orientations and aspirations

towards professional development. Spezzini et al., (2009) reported that successful collaborative peer-mentoring relationships have been heavily associated with the successful matching of student teachers. This was reported to have been a major influence on the positive outcomes associated with engaging in their peer-mentoring intervention. This also resonates with attempting to minimise challenges in promoting effective mentoring and reduce inadequate teaching practices among trainee teachers (Bell and Mladenovic, 2013; Terrion et al., 2007; Krull, 2005).

In attempting to facilitate critical reflection skills, to inform teaching and learning, it became imperative to develop the skills set required to enable student teachers to engage in a level of professional dialogue that is necessary for active participation within learning communities (Le Corun, 2005). This engagement within a learning community formed by the group of student teachers within this study illuminated varying emotional experiences within phases of the peer-mentoring intervention with positive and negative emotions being displaced in equal measure during the earlier and middle phases of the mentoring intervention. To this effect, personal support by peer-mentees was important in all phases, but successful relationships seem to have developed more strongly in the middle, and towards the end phases of the peer-mentoring intervention where the student teachers' began to form a collegial and personal professional bond within their community of practice, in relation to the development of teaching competence, teaching confidence, subject knowledge, dissemination of ideas concerning teaching practice and the ability to reflect upon teaching and professional learning. Apparent changes concerning the implementation of peer-mentoring may have resonated with some of the recommendations provided by the student teachers to provide more structure to the peer-mentoring intervention and increase sources of personal support to facilitate professional learning. This resonates with Le Cornu (2005) who suggests that critical reflection skills need to be seen as an important component of mentoring, so that mentoring is conceptualised as it is not only about providing personal support for one another, but also providing professional support by challenging ideas and beliefs. Similarly, Rodriguez (1995) concept of multicultural mentoring, supports the idea of student teachers' engaging in dialogue which encourages them to examine their values and assumptions, so that multiple perspectives are promoted, rather than engaging in mentoring which aims for homogenisation or conformity to one prospective or set of practices.

Upon reflecting, the student teachers' were able to track their personal and professional development from their initiation onto the initial teacher training programme study until the end

of this particular programme. Much of the ideas presented indicated towards being able to engage with another student teacher and share concerns and triumphs regarding teaching practice to someone going through a similar experience. This level of reciprocal support, very much underlined the objective of peer-mentoring, particularly within this study, where participants were encouraged to engage in helping one another through their induction into the teaching profession, in favour of the more hierarchical, expert-novice traditional mentoring dialogue. This commitment towards reciprocity became a central feature for this study. Le Cornu (2005) suggests that the notion of reciprocity needs to be made explicit in critical friendships. That is, the purpose of working with a critical friend is twofold: to develop one's own reflection skills and to facilitate the development of one partner's reflection skills. Traditionally, other constructs of mentoring and engaging in reflection have often been focused on the individual as a learner, rather than recognising the mentor role as well. This is a subtle but important shift of focus. Through this particular lens, this highlights the importance of peer-mentoring as a process in which student teachers become directly involved in each other's learning by being mentors for each other (Le Cornu, 2005). Importantly, this is not to imply that peer-mentoring can only occur within a pair. Hargreaves and Fullan (2000) claim that new approaches towards mentoring should encourage a shift from mentoring in pairs to becoming an integral part of professional cultures within initial teacher training and schools generally. Significantly, this study utilised peer-mentoring in pairs as a starting point to encourage learning about how to participate successfully within a learning community. Such an approach has the advantage of providing a collaborative relationship based on a partnership where neither of the participants within the peer-mentoring construct holds a position of power over the other (Le Cornu, 2005).

The structure of the peer-mentoring intervention, facilitated and encouraged student teachers having regular contact with one another to engage in collaborative learning, in some cases this was fortnightly in relation to the workshops, particularly in the initial stages but during the middle to end phases of the intervention collaborative meetings occurred with more frequency. Academic commentaries highlight that the rigours of being a student teacher, has its own dynamic; with its own set of relationships, rules, intellectual and emotional responses, judgements, and unpredictable factors (Britzman, 1991; Groundwater-Smith et al., 2001; Tang, 2003). Increasingly, as the intervention continued, the benefits of engaging in dialogue with peers and supporting one another through a practicum of experiences became more apparent, as this coincided with student teachers being able to competently and critically engage in reflexive processes (Bottoms et al., 2011; Featherstone et al., 1997; Le Cornu et al., 2001). Importantly, for

the student teachers', opportunities were presented for them to engage with the process of mentoring, and their capacities for mentoring were developed through the ability to reflect upon their experiences and challenge these experiences to further improve teaching and learning practice. The student teachers' commitment to developing a mentoring attitude, interpersonal skills and critical reflection skills was apparent upon completion of their teacher training and engagement within this peer-mentoring intervention (Gardiner, 2010). Le Cornu (2005) posits that the mentoring attitude is developed in a number of ways. Specifically, she states that this includes being explicit about particular attitudes; such as open-mindedness, responsibility and wholeheartedness and being congruent with these in the messages that are presented to student teachers, in face-to-face interactions, email communications, online and written programme materials (Le Cornu, 2005). The role of the researcher within this particular study was to work with the student teachers in focus groups which facilitated a community of practice, which encouraged being explicit about how trainees wanted to work with one another. Within this context the notion of reciprocity was explained in such a way that the participants were made aware of the expectation to care about other trainees' learning as well as their own. Importantly, the environment created was one which stimulated a democratic, respectful culture of discussion and professional dialogue where student teachers' attempt to make sense of their learning (Smyth, 1993) rather than dictating what this should look like. The mentoring practice engaged in throughout this particular study resonates with Awaya et al., (2003) conception of creating a culture of mentoring, stimulated by constructivist learning and reflexive dialogue and practice. A significant aspect, in relation to measuring the success or effectiveness of the peer-mentoring intervention was gauging if this particular process encouraged student teachers to appreciate the role they play in assisting their peers to be able to become effective pedagogical practitioners. Essentially, this is the mentoring aspect. Thus, the goal is for student teachers to develop an appreciation of the skills that are needed for engaging in professional dialogue that is enabling, both for themselves and for others situated within the process of trying to become a professional teacher (Dobbins, 1996; Gardiner, 2010; Kensington-Miller, 2011; Le Cornu, 2005).

The overall impact of the intervention was varied in the initial stages, but as the intervention became more developed and student teachers felt more comfortable, the quality and commitment towards peer-mentoring and professional collaborative dialogue began to increase. Importantly, for the student teachers immersed within this study they generally found this process to be positive and productive, with a particular emphasis placed on utilising reflective practice to inform teaching and learning through collaborative dialogue (Shaw, 2013). The

student teachers' all identified that, their range of teaching skills was extended through their engagement in peer-mentoring, with the improvement of skills, lesson planning and classroom management all attributed to engaging in this particular intervention. The student teachers' collectively agreed that their positive development in these professional areas was, in part, due to the support and advice provided by their peer-mentoring constructs, in the various roles that were undertaken to facilitate reflective practice and development of teaching, subject knowledge and pedagogical practices. The student teachers' also profited from a dissemination and redistribution of resources amongst one another within their community of practice, where they were able to share knowledge and understanding of school cultures and policies, and generally became more reflective, self-critical, and self-reliant. Importantly, this promoted professional autonomy, where the student teachers became proficient and knowledgeable in areas associated with pedagogy through the dissemination of similar experiences, values and opinions situated around teaching and learning.

There were, however, some challenging experiences, which posited varying degrees of frustration and anxiety, particularly in the initial phase, from the perceived lack of mentor support from the teacher trainers; regarding a lack of resources; unsatisfactory relationships and communication with subject mentors and teacher trainers, with some of these continuing to varying degrees throughout the mentoring intervention and initial teacher training programme of study. Professionally, the trainees also gained from the intervention, in relation to the development of their insights into their own teaching through reflecting-on-action (Dewey, 1933; Galea, 2012; Schon, 1987, Pollard, 2011). Through this reflection, the trainees' were able to gain an insight into their own teaching practice and course management; their ability to plan; their ability to engage in reflective processes; and their ability to implement and transfer all of their learning from their collaborative conversations into contextual pedagogical practices. Furthermore, the trainees' also gained in self-awareness; communication skills, use of positive reinforcement, relationship building communication skills, interpersonal skills; reflective abilities and specific skills and techniques to inform their pedagogical practices, and understanding of engaging in a community of practice (Lave and Wenger, 1991; Wenger 1998).

Significantly, issues of power within this study potentially could have been identified as a challenge. However, this was not evidently blatant among the researcher and the student teachers but rather couched in terms of peer-mentees feeling powerful because they were helping one another to succeed, rather than because they felt the situation itself was imbued with inherent

power (Colvin and Ashman, 2010). The student teachers' voiced the concern that peer-mentors in some cases could abuse the relationship or not fulfil their role. Again, this was a more subtle form of issuing power: recognition that the student teachers' in their role as peer-mentors have the ability to do either of these things rather than an outright statement of the mentor having power (Christie, 2014; Colvin and Ashman, 2010). The student teachers' also had professional 'power': power to accept or reject one another's help. These findings extend to Colvin's (2007) study in suggesting that in more established programmes, such as an initial teacher training programme of study, peer-mentoring relationships still encounter power and resistance issues to a smaller degree, but they are recognised more as risks and benefits. Successful peer-mentoring, just like, and perhaps even more so than peer-tutoring, is the result of cohesiveness and trustworthy relationships among student teachers, and other stakeholders immersed with this process such as mentors, researchers and teacher trainers. This context accentuates, that mentoring practice does not occur within a restricted vacuum (Colvin, 2007; Hickson, 2013; Burley and Pomphery, 2011).

In this study, the student teachers' perceived that they showed both the capacity and commitment to enhance the quality of their teaching and learning practice, and whilst they encountered challenges in doing this, ultimately, this informed a lot of the experiences that they brought to the classroom environment. With regard to some of the challenges presented concerning reasons behind some of the variances and challenges encountered, this may need to be investigated further, particularly in relation to possible barriers which might influence student teachers' capacity to maximise learning opportunities for developing teaching practice.

Initially, the student teachers' were apprehensive of some the factors associated with initiating and examining their own learning, primarily; this was due to inexperience in teaching and mentoring. Through engaging in a peer-mentoring intervention to inform reflective practice, student teachers were aware that emphasis was placed on matching participants in relation to personal qualities, teaching experience, personal communication skills and other specific criteria's for the process to be regarded as beneficial and effective towards informing teaching and learning and reflective practice. Other components perceived as influential, in facilitating the implementation of peer-mentoring were the prior meetings with the student teachers' before commencing the intervention to indicate and express what was expected of them and the level of commitment required for this process to be effective. This consensus highlighted that the productivity of such an intervention would be purely dependent on the professional capabilities

of the student teachers. This aspect and informal meetings with participants before the intervention proved to be the catalyst for informing the community of practice and mentoring relationships between the student teachers. This resonates with Le Cornu (2005) who emphasises that the establishment of good relationships before engagement in mentoring constructs is pivotal for the learning process to be effective. This particular finding is also consistent with the views of other researchers (Morton-Cooper, 2001; Rawlings, 2002; Barrera et al., 2010) who have presented academic commentaries in the area of mentoring relating to previous mentoring interventions, with regards to developing the appropriate skills and qualities expected for successful mentoring to occur.

6.8 Post peer-mentoring intervention considerations: Measuring impact

In determining the impact of the peer-mentoring intervention some important considerations illuminated by the participants resonate with the discourse which surrounds measuring mentoring currency and impact within the professional workplace upon completing teacher training. Burley and Pomphery (2011) indicate that many of the challenges associated with measuring impact upon completing any form of formalised mentoring is highlighted when trainees are inculcated into their respective school cultures. Specifically, they suggest that maintaining formalised mentoring relationships becomes increasingly harder upon adopting the status of 'early-career teacher', where it is likely that previous mentoring relationships become harder to maintain, in addition to considering the existing school cultures and attitudes towards mentoring and collaborative dialogue.

The participants' highlighted significant gains during and after the peer-mentoring intervention in relation to developing their pedagogical and reflective practices. Importantly, for assessing the impact of the student teachers studying aspects of their own teaching through action research, one of the more imperative features of this particular study aligns with considering how peer-mentoring has impacted their inductions into the teaching profession during their NQT year and presently as early-career teachers. The participants expressed that presently, while they have been assigned to more experienced members of staff as a point of reference with regards to any concerns over teaching, besides their engagement in a formalised NQT mentoring programme for early teaching entrants which resonates more with traditional types of mentoring; they have not formally engaged in any type of collegial mentoring, which places emphasis on peer-related constructs. Significantly, this indicates that the participants have been acculturated into more

traditional forms of mentoring, which reflects a hierarchical expert-novice construct. Bottoms et al., (2013) highlight this as a challenge for monitoring the impact of peer-mentoring interventions, primarily because many of the good practices learned during these formalised periods cannot be maintained as dependence for such mentoring cultures is solely reliant on the importance that the school attributes on such developmental constructs. Pertinently, Bottoms et al., (2013) recognise that traditional forms of mentoring within education remain the accepted norm, and without continuing professional development designated from senior leaders within schools; challenging this norm and instilling newer forms of collaborative and reciprocal mentoring become problematic. The impact of the intervention created lasting benefits in relation to improving teaching practice, this has been maintained informally by the participants utilising conversations situated around practice, and disseminating resources and experiences of classroom practice. The process of action research has instilled within the participants a desire to continue to improve their practices and challenge themselves from a reflexive position to continue to make further gains and improve as teachers. Pollard (2011) states that action research provides a practical catalyst for examining practice and more importantly, in the wake of such examination continuing to further improve areas of development from a reflexive position.

An important part of this research has also been to explore whether upon entering the teaching profession whether the participants have been able to develop or initiate their own communities of practice within their current professional work settings, with a view to encouraging colleagues to engage in examining their own practice through a less formal action research construct. The participants expressed that this had been difficult to initiate, primarily because there were already existing forms of mentoring present and embedded within their school environments and perhaps more importantly, there main focus was concerned with integrating themselves within the school community and in attempting to do so, it became challenging to attempt to engage existing members of staff, already indoctrinated within an existing culture to engage in formalised peer-mentoring and reflective conversations. Gardiner (2010) indicates that the transference of formalised peer-mentoring into professional education structures once peer-mentees or communities of practice has been disbanded can present a plethora of challenges in attempting to either maintain or transfer such mentoring constructs into different or in some cases new school cultures. This context resonates with the participants' experiences post intervention in relation to maintaining and transferring some of their learned experiences accrued from the intervention. The experiences gained from the intervention continue to serve as a reference point for the participants, specifically the importance aligned to continually developing

their reflective practices and engaging in collegial endeavour to improve pedagogical understandings aligned to components of teaching and learning.

The impact of the intervention was considered to play a valuable role in helping to construct a professional identity for the aspiring teachers, as they felt that challenging their existing values and beliefs was pivotal towards developing and examining facets of their own teaching practice. A measure of the intervention recognised as having significant impact on the participants now they are in full time teaching employment was the importance that they attribute to helping incoming student teachers that will going through the initial teacher training process. The participants' recognise the potency and capital attributed to encouraging potential student teachers to engage in peer-mentoring to develop reflective processes which allow them to examine their teaching. The participants collectively indicated that in their roles as early-career teachers they would feel competent enough to support potential student teachers through a formalised peer-mentoring programme and help them to navigate their way through their introductory period into the teaching profession, having recently been inducted themselves. The participants felt that the intervention also has helped to define their own construct of mentoring, and perhaps quite significantly attribute characteristics which define the role of effective mentoring among trainee teachers. Cunningham (2012) highlights that formalised mentoring experiences often help towards developing educationalists understanding and defining of the mentoring role; and the characteristics that are associated with productive and purposeful mentoring. Specific characteristics highlighted in attempting to measure the impact of peer-mentoring experience post intervention were aligned to understanding the concerns of the mentee and considering pastoral needs. The participants recognised that peer-mentoring can be used as a vehicle for engaging in collaborative conversations about teaching and learning. Significantly, they acknowledged that this can also be used as a forum for staff to disseminate ideas and engage in reflection through collegial and supportive environments. With regards to initiating this with experienced staff, the participants expressed feelings of apprehension, particularly as they highlighted that many of the staff that work within their present institutions are non-reflective practitioners who often do not personally challenge aspects of their own practice, favouring their 'vast' experience as teachers over deliberate reflective engagement and action.

The reflective processes which emerged from the peer-mentoring intervention were also a barometer for measuring impact among the student teachers as many of these practices have

provided a good foundation for self-evaluation and assessing how improvements can be made and maintained within a teaching environment. Upon reflecting on their peer-mentoring experience, an aspect of self-improvement that was considered crucial by the student teachers was ensuring that reflective engagement was meaningful and purposeful. Such dialogue resonates with the thoughts of Loughran (2010) who states that the value of the reflective process should be underpinned by purposefulness, specifically ensuring that all attempts to become reflective derive from a position of honestly and a willingness to systematically examine one's own practice. The richness associated with developing reflective capabilities is something that the participants heavily align to effective impact as a consequence of their participation in the peer-mentoring intervention. The participants highlighted the development of these capabilities as a significant reason for being able to transition in their professional journey from student teachers to early-career teachers. In attempting to conceptualise and measure the impact of some of the participants' thoughts concerning reflection, their viewing of this concept has been contextualised within places of work, with one exception to this being a research participant who has undertaken a sabbatical period upon completing their PGCE. The participants upon becoming teaching professionals have become more aware of the salient complexities of reflection, developed through their involvement in the peer-mentoring intervention. Their understanding of this discourse, provides further impactful evidence of how they now conceptualise reflection. Collectively, the participants identify with the notion that reflective practices cannot be isolated from the contexts and organisational purposes for which they are used. Primarily, because reflective cultures are dependent upon a school's existing ethos towards staff and professional development, particularly when related to the developing pedagogically (Bradbury et al., 2010).

The participants acknowledged that reflective contexts will differ from one situation to another and this is perhaps most evident in the attitudes towards reflection undertaken in their respective institutions. There is an acceptance that with regards to wanting to initiate similar collegial programmes, the work environment drives the reflection and frames the legitimacy of how such collaborative endeavours transpire. The impact of reflective engagement on the student teachers practice, has allowed them to draw correlations and connectives between work and continuous learning. Bradbury et al., (2010) explain that this process provides the link between knowing and producing pedagogically and represents part of the change process which accompanies practitioners examining their own practices. Post intervention how the participants interpret reflection now resonates more specifically with some of the ideas associated with pedagogical

praxis. The participants now align productive and purposeful reflection with interventions into work activity that allow change to be the vehicle for improvement based on the insights of what has previously transpired or occurred (Cunningham, 2012; Kensington-Miller, 2011). However, there is an acknowledgement that while there is a motivation to examine and improve practice, this may often be at the behest of organisational cultures or actions which may or may not endorse productive reflection as an important component of developing professionally.

6.8.1 Post intervention and impact: Summary

The developmental aspects of the peer-mentoring process seem to have created a lasting commitment to continuously reflecting on teaching practice. The reflective capabilities of the participants have navigated them through their induction into teaching from student teachers to early-career teachers. The dialogue examined among the participants suggests that the peer-mentoring intervention contributed towards making a considerable, lasting impact on the participants' professional learning, through the endorsement of collegial activity and action research. While the initiation of similar mentoring constructs seems to have not been possible due to various circumstances situated around having to be acculturated into school cultures and more traditional forms of mentoring, there is scope for the participants hopefully initiating similar types of interventions which engender communities of practice and reflective dialogue in a collegial capacity. The considerations associated with the possible implementations of mentoring initiatives in the future however, are dependent on external variables that the participants have posited are beyond their control. More specifically, variables such as personal and organisational attitudes towards reflection which may endorse or discourage practitioners from examining their own practice. Furthermore, other variables include time, workload and administrative pressures and perhaps most significantly, the pressures associated with student attainment grades and league tables. These are all determining factors which may affect the possible implementation of peer-mentoring or communities of practice initiatives centred on engaging in reflexive dialogue.

Overall, there are some pertinent areas for consideration and the barometer for measuring impact could be considered to be purely subjective, although significant attempts have been made to ensure that an objective approach has been adopted throughout the study. The impact on the participants post intervention has been a lasting one, with some clear narrative evidence to suggest that the participants have utilised their experiences of peer-mentoring engagement to

inform reflective practice as a reference point for further developing their pedagogical practices, either by developing personally or challenging their existing beliefs and values about teaching. Additionally, and perhaps most notably, the impact of this experience has been used by the participants to navigate their way through their NQT year's and transition into early-career teachers. Although the participants have been acculturated into more traditional forms of mentoring, there is a desire amongst the participants to potentially mentor other trainees through a similar process of reflective collegial activity. However, the participants recognise that existing and embedded cultures, mainly related to time constraints may prove to be a barrier towards implementing such mentoring constructs. Through the participants continuous engagement in reflective practice, their understandings and defining of this concept has evolved, particularly through contextualisation, transdisciplinarity, embodiment and co-production, in considering how reflection can be reconceptualised as they continue to make substantial improvements in practice. Their commitment to this process ensures that the lasting impact of the peer-mentoring intervention which had the remit to inform reflective practices will be enduring, and provide the student teachers with stimulus for continuous examination of their teaching practice, in addition to a constant challenging of their values and beliefs aligned to teaching and learning.

6.9 Summary

Within this chapter, key findings have been discussed by drawing on the qualitative narrative data collated, in alignment with academic literature around mentoring and reflective discourse. From the narratives presented, it became clear that the views of the student teachers' became more developed over a period of time as they became more knowledgeable, proficient and confident within their pedagogical practices. In utilising, peer-mentoring and reflection to inform this process, the student teachers' initial definitions of mentoring, which did not resonate with more social learning constructivist approaches began to evolve and change as they observed the effectiveness of engaging in reciprocal dialogue about professional learning, particularly within a student-led workshop environment. This greatly influenced the trainees understanding towards mentoring approaches and relationships, and how this discourse could be reconsidered through a different practitioner lens, which embodies collaboration as a form of developing pedagogical practices. The narratives did reveal some variances and particular challenges with engaging in peer-mentoring, and recommendations have been made towards other researchers perhaps engaging in further research to unpick the more salient areas of peer-mentoring.

From the initial, conversations in the infancy of the peer-mentoring intervention, the conceptualisations of mentoring by the student teachers' were situated around the more traditional/apprenticeship and constructivist philosophies, in alignment with their understanding of mentoring at that particular point in time. However, as the process continued, the student teachers' conceptualisation of mentoring evolved and with this, new conceptions and definitions of this phenomenon were embraced. The challenges to the enactment of collaborative mentoring relationships, was a pertinent issue particularly when discussing the impact of subject mentors during school placements within the community of practice and the focus group discussions. Contexts explored also elicited some of the student teachers' citing differences in approach, opinion and inflexibility in acknowledging prior experiences which could be used to inform the classroom environment. However, recommendations were made towards student teachers potentially collaborating before school placement experiences regarding subject mentors. Primarily, this suggestion was provided to facilitate collaborative dialogue and engage in co-planning ahead of lessons, and develop an awareness and understanding of the school culture. This was considered as potentially beneficial in that better communications could be developed by engaging in reciprocal arrangements, which could be arranged by the University provider and the placement facilitator. Aspects of these findings are summarised further in the table below (see Table 6.1).

Thus, this chapter provides a platform for final considerations and recommendations regarding the utilisation and implementation of peer-mentoring to inform reflective practice among student teachers. These recommendations and conclusions will be provided in the next and final chapter of this thesis.

Table 6.1: Summary of Peer-mentoring, dimensions and themes which underpinned the study in relation to the research questions

Mentoring Dimensions	Indications of Impact	
	Student Teachers	**Peer-Mentoring Benefits and Challenges**
Student teachers conceptualisations of mentoring	Supporting trainees through their induction into the teaching profession. A process by which experienced teachers help trainee teachers to develop teaching knowledge and	Student teachers were able to attempt and define mentoring, and make this applicable toward their learning situation. Student teachers began to think of reciprocal mentoring

	practice. Viewed through traditional/ apprenticeship model, with some acknowledgement that mentoring is moving towards constructivist learning.	as the framework for productive mentoring. The fluidity of the conc 137 meant that sometimes the student teachers felt there was a lack of structure at times.
Evaluating early experiences of teacher training and peer-mentoring	Rationalising of early experiences to inform future teaching practices. Consideration given towards how collaborative learning could inform reflective practice. Peer-mentoring facilitated the acquiring of subject and course information.	Time was a significant barrier to meeting up and completing reflective conversations and written documentations. Student teachers enjoyed the process of learning collaboratively. Opportunities provided for student teachers to discuss concerns of ITT, additionally, reflexive processes developed increased self-awareness in student teachers.
Personal improvement through reflection	Reflecting on all components of teaching and pedagogical practices. Developing the capacity to self-evaluate and challenge pre-existing beliefs and values about teaching. Developing professionally and increasing teaching competency and subject knowledge. Considering how to facilitate this improvement through peer-mentoring and reflection.	Increased self-awareness. Student teachers improved and gained knowledge through reflective practices. Course attempts to engage in reflection were not highly regarded, as student teachers felt the process was rushed. Student teachers were able to use their peer-mentoring experiences and dialogue to inform reflective practices.
Establishing a community of practice	Working as a collective within peer-mentoring pairings and workshop activities. Focusing on how individual experiences could be	Learning collectively and disseminating ideas concerning teaching and learning was considered as a key component towards improved teaching during the

	collectively collated to consider dilemmas in practice. Improving understanding of working reciprocally to collectively achieve desired outcomes. Engaging in reflective dialogue within a collective and 'safe' environment, particularly in the student teacher-led workshops.	course of the mentoring intervention. The dissemination of reflective conversations among student teachers in their peer-mentoring pairings informed a lot of the community of practice dialogue within the focus group and workshop activities. Positive communicative interpersonal skills were developed in building peer-mentoring relationships and communities of practice. Approaches between the peer-mentoring pairings were varied in sustaining mentoring relationships.
Developing Trust	Developing confidence and trust in peer-mentee. Engaging in an environment which allows student teachers to confide about issues concerning practice with each other. Trusting the judgement and opinions of fellow student teachers.	Student teachers found the mentoring environment to purposefully facilitate trust. Students found that developing trust with subject mentors 4 proved to be difficult in some cases during placements. Student teachers were able to develop and strengthen mentoring relationships over a period of time.
Measuring the effectiveness of peer-mentoring	Student teachers attributed improved practice towards peer-mentoring and engaging in a community of practice. 18 The process of engaging in action research allowed them to observe changes in teaching through peer-mentoring and reflective dialogue. Student teachers engaged in	The improvement initiated through peer-66ntoring was considered a significant factor in the development of teaching and learning practices. The most significant and reoccurring challenge was allocating time to engage in continuous mentoring and reflective dialogue.

	reciprocal learning, which improved and developed their understanding of working collaboratively to inform teaching and learning.	There were significant gains from engaging in peer-mentoring which helped student teachers to challenge values and beliefs and become reflective practitioners.
Professional learning support	Positive personal qualities and attitudes towards teaching. Lesson planning skills through dissemination, discussions and demonstration. Level of collaboration encouraged creativity. Student teachers become autonomous teachers. Peer-mentoring provided professional and personal support.	Levels of support varied among the student teachers dependent on their ability to manage their time. Peer-mentoring and reflective practice facilitated improved teaching and encouraged creativity among student teachers. Support was underpinned within the peer-mentoring pairings and then further, within the community of practice.
Mentoring relationships and communication	Professional relationships built among student teachers. Student teachers more receptive to informal mentoring (peer-mentoring) rather than structured and prescribed mentoring. Personal attitudes and qualities were imperative in building mentoring relationships.	Positive interpersonal skills were recognised by student teachers as the catalyst for productive and effective mentoring. Student teachers were able to engage in reciprocal dialogue, which allowed them to consider and collectively improve aspects of teaching and learning practice. Communication was strained when student teachers were heavily immersed within their teaching placements, where substantial paperwork was required to satisfy varying standards in recognition of gaining Qualified Teacher Status (QTS).
Teaching observations and	Teaching observations overall	Student teachers improved

assessments	reflected good teaching practice with areas for improvement to be considered Student teachers utilised peer-mentoring as a forum for disseminating ideas and dilemmas concerning practice.	and gained knowledge from observing the teaching of experienced and trainee teachers. Focus group interviews proved to be a useful way to evaluate and dissect teaching and learning practice.
Mentoring roles and responsibilities	Varied roles were undertaken to accommodate peer-mentoring relationships at different phases of the mentoring intervention. Mutual learner, guide and advisor were the preferred and adopted roles by student teachers. Teacher trainers recognise that the mentor's roles are varied dependant on varying contexts.	Student teachers recognised that positive and negative personal qualities contributed significantly towards mentoring roles. Such mentoring and holistic practices additionally, allow for the emergence and discovery of other capabilities such as leadership and personal management etc.

Chapter 7: Conclusions and Recommendations

7.1 Introduction

This study explored the peer-mentoring relationships between student teachers within an initial teacher training (PE PGCE) programme of study. The aim of the study was to better understand collaborative learning and peer-mentoring between student teachers, as a means to facilitating reflective practices. Importantly, this was also used as a stimulus to explore the means by which active collaboration can facilitate improved professional practices. Thus, constructivist theory with its origins in social learning was adopted as a framework for exploring mentoring relationships in this study. This study attempted to highlight the need for developing a shared understanding of mentoring within teacher education and professional teaching generally, amongst policy makers, teacher educators and schools regarding the multiplicity and complexity of factors that influence the transition and development of student teachers. Within the literature, it is well documented that constructivism seeks transformation in professional practice through social, equal and reciprocal participation of teachers and student teachers (Lofstrom and Eisenschmidt, 2009; Kincheloe, 2005; Wang and Odell, 2002). In this study, constructivism was considered as an integrated theory with apprenticeship, socio-cultural, reflective and equal participation as its components. The constructivist paradigm provided a social framework to explore the peer-mentoring relationships between student teachers to inform reflective practice in this study, through utilising and adopting a themed, qualitative narrative method of analysis which was concurrent (Teddlie and Tashakkori, 2009).

Importantly, the following conclusions were drawn from the findings of this study and relate to the research questions, themes and dimensions presented. Caution should be exercised concerning the generalisability of these conclusions beyond the student teachers and teacher trainers who were participants in this study.

Research Questions

1.) How can peer-mentoring and reflective practice contribute towards developing more collaborative learning with regards to student teachers' supporting one another through their teacher training?

2.) What are some of the challenges of peer-mentoring within a practical context during teacher training?

Research Themes and Dimensions

- Defining mentoring
- Evaluating early experiences of the initial teacher training programme of study and peer-mentoring intervention
- Studying teaching for personal improvement through reflection
- Establishing a Community of Practice
- Developing Trust within Peer-Mentoring
- Critically and collaboratively reflecting on teaching and peer-mentoring at the end of the ITT programme of study

7.1.2 Answering the research questions

Statement in relation to Question One: Peer-mentoring and reflective practices encourage collaborative learning by:

- Helping student teachers to understand the concepts which underpin reciprocal learning;

- Encouraging students to be autonomous learners in collectively developing peer-practices and ideas situated around teaching and learning;

- Encouraging students to engage in learning communities and reflexive processes whereby student teachers provide professional and pastoral support for one another in developing pedagogical practices associated with teaching and learning.

Statement in relation to Question Two: Considering the challenges of peer mentoring within a practical context among student teachers:

- Time significantly dictates how successful and productive the peer-mentoring process will be. This is due to the onus being on student teachers to place time aside to accommodate peer-mentoring alongside their initial teacher training commitments in satisfying the benchmarks for the award of QTS;

- Trust between student teachers, is perhaps the single most important component in peer-mentoring. Significantly, because the professional relationship takes many differing

interpretations in accommodating the needs of peer-mentoring pairings, so trust becomes an essential component. Developing trust in this capacity is made easier when participants share similar interests; have a previous friendship; have similar backgrounds or share similar values and beliefs about teaching and learning;

- Managing competition and power dynamics are essential in minimising the challenges associated with peer-mentoring. Competition within a learning community or peer-mentoring pairing can arise when applying for respective teaching vacancies, and this needs to be acknowledged and professionally managed between peer-mentees and communities of practice;

- Additionally, power dynamics whether referent or inherent also need to be managed between the researcher and student teachers to avoid unnecessary professional differences or dominant behaviour, particularly within a group context where all opinions are valued and required. All parties within the peer-mentoring and community of practice construct should be acknowledged as even distributors and receivers of knowledge and power.

From the findings throughout, the conceptualisations and definitions of mentoring by the participants were initially not mainly based on constructivist perspectives. Rather, some participants' definitions of mentoring were based on the traditional/apprenticeship model. Perhaps, this explains why the participants' expectations in mentoring were also informed by the traditional novice-expert and hierarchical constructs. It also became clear from the findings that the mentoring relationships enacted in this study were not entirely collaborative within the group of student teachers, as participants engaged in more formal constructs of mentoring rendered compulsory for participation on the ITT programme of study. In some cases the student teachers highlighted that this was of some benefit towards their professional development. In this research context, student teachers were expected to conduct a professional inquiry into their own teaching practice, however, in some cases this was not facilitated during school placement where the student teachers' posited a range of varying experiences nor encouraged. Further, a reflective approach to teaching and learning was not consistently permeated throughout the programme of study, with excessive administrative requirements stifling productive reflection for student teachers. Therefore, it may be concluded that all the elements of the constructivist theory

were not felt in the mentoring experiences of the student teachers in this study, with particular reference to being immersed within the school environment. The study would now like to draw on the findings to reiterate the possible implications and ways to improve mentoring practice and collaboration to stimulate or inform reflective practice for supporter teachers, school leaders, teacher trainers and student teachers.

7.2 Implications of the study

This study has generated a wide array of issues for consideration, with regards to implications for collaborative mentoring practice among student teachers within an initial teacher education context. These are explained as follows:

7.2.1 Implications for supporter teachers and teacher trainers

Student teachers need to be guided, given orientations and emotionally supported by supporter teachers, school leaders, and teacher trainers; particularly when actually undertaking school placements. However, in facilitating such mentoring practices guidance needs to be provided consistently with the needs of student teachers prioritised as most aspects of their teacher training are assessed against criteria. For this purpose, supporter teachers would need to observe student teachers in the classroom, on the periphery, as student teachers coordinate classroom activities. Further, supporter teachers and teacher trainers would need to become more conscious of how they support and guide student teachers to achieve their professional and mentoring goals. Within a school context, supporter teachers need to observe mentoring as a process through which mutual and reciprocal learning can take place between them and student teachers for improvement in professional practice. Essentially, in practice, it is imperative for experienced practitioners to demonstrate a willingness to learn from others, with some leverage provided to encourage co-habitation with others in the learning space. Importantly, learning environments must be enabling in attempting to accommodate student teachers contributions, with regards to the teaching and learning which underpins classroom practice. Perhaps, this can be promoted by school leadership teams and universities engaged in providing teacher training as a vital component of continuing professional development (CPD) events. Supporter teachers and teacher trainers need to engage student teachers in activities focused on the development of pedagogical skills. More importantly, supporter teachers should encourage active learning activities with student teachers and feedback should be timely, constructive and carefully provided. Essentially, for this to transpire, supporter teachers have to take the development of different pedagogical skills and approaches to teaching seriously, with the development of

student teachers at the centre of their mentoring practice. The dialogue used by supporter teachers needs to provide some professional respect, particularly when presenting outwardly to pupils. In this premise, perhaps supporter teachers should introduce student teachers to pupils perhaps as aspiring teachers instead of students or assistants. Pertinently, this would minimise the concern that pupils may not respect them when introduced as students or assistants. Additionally, supporter teachers and teacher trainers must be professionally vigilant, in accommodating the needs of student teachers' expectations. The understanding attributed to their experience and clarifications of expectations are significantly necessary for mentoring goals to be achieved between supporter teachers, teacher trainers and student teachers.

Supporter teachers need to constantly reflect on the approach utilised to assess whether the desired objectives are being completed. The narrative data provided highlighted the importance attributed to time. Sufficient time should be allocated to student teachers to understand the rigours and demands of school terrain, with opportunities also provided for developing the necessary professional knowledge and practical skills, required for the successful implementation of mentoring with supporter teachers. Rather than student teacher's being involved in exercising control over the group of pupils under the tutelage of an experienced teacher, supporter teachers can pass or convey information through student teachers in order not to reduce their morale and undermine their professional judgement and competency. Pupils should be informed of the approach in use especially when teaching is characterised by collaboration between experienced teachers and student teachers. Essentially, pupils should be aware of who are co-ordinating classroom activities, between their class teachers and student teachers. Such distinctions are pivotal for productive collaboration within the classroom environment.

7.2.2 Implications for student teachers

Student teachers need to be well-disposed to learning and internalising ideas from others either through feedback, co-planning or collaborative teaching with supporter teachers and other student teachers within the classroom, and outside of this particular context. Importantly, they need to be positive about collaborative endeavours such as peer-mentoring with supporter teachers and other student teachers in attempting to develop collegiate ideas concerning teaching and learning. Essentially, student teachers should avoid restricting their learning and understanding of schools to solely the classroom paradigm, but should demonstrate an interest in knowing about the children they teach, the teaching staff, the non-teaching staff and various other communities within the school vehicular. More importantly, interactions and establishment of good relationships with other members and stakeholders of school community need to be

taken seriously to enhance learning. Furthermore, considerations must also be given towards the constructs that permeate social, referent and inherent power, particularly with regards to managing dominant behaviour by either the researcher or participants. Focus should be directed towards facilitating even distribution of power and verbal dialogue within a learning community. Outside of a peer-mentoring construct among student teachers, trainees need to engage actively with supporter teachers in co-planning ahead of lessons for collaboration to develop in their mentoring relationships, particularly in a professional context within the school environment. Student teachers need to be aware of their supporter teachers' expectations, perhaps through constant communication and learning conversations. Importantly, student teachers need to act on advice given to them by supporter teachers. However, they also need to critique ideas passed to them and query practice and clarify issues where appropriate and necessary. This would, however, require openness and reciprocity on the part of the supporter teachers. Finally, within the peer-mentoring constructs; aspects of competition, individualistic traits which resemble selfish endeavour and competitiveness among trainee teachers also need to be managed to ensure that internal conflicts within a pairing or community of practice do not occur. Essentially, the premise for such collaborative endeavour is based on aspects of professional selflessness, trust and having the ability to work competently as part of a collective.

7.2.3 Implications for university/tutors

There is the need for effort to be intensified in facilitating professional dialogue among tutors, supporter teachers and student teachers for goals of the collaborative mentoring to be achieved. Effort needs to be navigated and steered by Universities to strengthen the connection between university courses and school curriculum. Constant and continuous evaluation of courses must occur in alignment with an ever-changing school curriculum, which is an essential implication to consider for purposeful mentoring. Importantly, this would keep student teachers abreast of school curricula, dialogue and discourse. Further information may also be given to student teachers whilst already on field experience if required. Pre-emptive measures must consider the need for potential informal meetings between supporter teachers and university tutors, in attempting to acclimatise student teachers to the rigours of field experience. Engaging in meetings prior to students' field experience offers opportunities and terrain for both parties to familiarise themselves with each other and clarify any concerns or assumptions directly related with their induction into the teaching profession. Teachers' Continuing Professional Development (CPD) events need to be tailored towards the attainment of shared aspirations between government, universities and schools. More specifically, teachers should be encouraged

to engage in collaborative investigations and communities of practice which endorse reflecting upon their own teaching, to better facilitate the improved pedagogical practice of student teachers.

Additionally, emphasis needs to be placed on the effective use of communication, interpersonal and teaching skills by supporter teachers and university tutors (teacher trainers) in order to foster collaboration with student teachers. Other skills such as management, organisation, assessment and report writing, planning and understanding when to promote autonomy for the development of student teachers should be emphasised and endorsed at CPD events. Apart from a field experience reflective log, on-line materials should be made accessible to student teachers and simple in their implementation to maximise time efficiency. Prompt responses to queries by supporter teachers and university tutors also contribute significantly towards supporting trainees. Reciprocal arrangements where university tutors and supporter teachers undertake experiential visits and school placement observations, whereby collaborative dialogue is promoted rather than directive dialogue, requires further development in attempting to improve dialogue between student teachers and supporter teachers.

Professional courses on mentoring covering various models and their advantages need to be incorporated in students' and supporter teachers' orientation/training programmes. This would help in strengthening their understanding of mentoring and the need to embrace a more collaborative mentoring relationship, particularly with regard to student teachers' peer-mentoring one another. Refresher courses concerning reflective practices and mentoring constructs may also be beneficial in attempting to improve supporter teachers mentoring and research capabilities regarding contemporary support for trainees within teacher education. For example, experiential learning and training on the use of action research and participatory research methodologies can strengthen collaborative research and dialogue between supporter teachers and student teachers (Ghaye, 2011). Within this context student teachers are expected to carry out research with the support of their supporter teachers whilst on field experience, to compile and document their lived experiences. The benefit of having several student teachers within an institution on school placements, can also contribute to feelings of stability and comfort. Administrative processes within ITE programmes could focus more specifically towards having more than one student teacher in a school or region for field experience. The deliberate placement of more than one student teacher in a school or area offers the opportunity for students to disseminate ideas concerning teaching and learning practice, in addition to, learning from each other informally (peer-mentoring).

The importance of this study also resonates with the emphasis now placed on Higher Education Teacher Training providers to produce NQT's and early-career teachers that go on to become outstanding teachers consistently once they have gained employment into the profession. A benchmark to satisfy 'outstanding' status as a teacher education provider from the Office for Standards in Education, Children's Services and Skills (Ofsted) now includes this specific criterion. Within this context, peer-mentoring and reflection have become even more pertinent, and the need for universities involved with teacher education and schools to facilitate such collegial and collaborative endeavour and create cultures for learning has become paramount in ensuring that higher education teacher education providers maintain their status' as 'outstanding' ITT providers or attain to such benchmarks (Universities Council for the Education of Teachers, UCET, 2014). Importantly, this study emphasises that the integration of such practices and cultures within teacher training programmes among student teachers and within schools help to guide NQT's and early-career teachers' pedagogical practices, in attempting to become 'outstanding' teachers and practitioners of teaching and learning.

7.2.4 Implications for Schools/School leaderships

School leadership teams need to promote a culture of dialogue and collaborative learning. School leadership teams need to be able to plan and coordinate school programmes, which facilitate collaborative mentoring, in addition to providing opportunities for teaching staff to engage in communities of practice (Lave and Wenger, 1991). For instance, school leadership teams needs to provide opportunity for pupils to be exposed to having two teachers in the classroom. They can also encourage and promote the involvement of pupils in planning classroom activities. Importantly, school leadership teams need to be meticulous and methodical in their selection of supporter teachers, in addition to providing enabling environments for teachers and student teachers to bond and work cohesively. In selecting supporter teachers to support student teachers, it is imperative that experienced teachers placed in this role are passionate about teaching and developing student teachers' professional practices.

7.2.5 Implications for Government

The progression of mentoring also requires amendments to Government policy, within initial teacher training dialogue between teachers, practitioners and policy-makers. Historically, government have always navigated policy and reforms concerning education. This resonates with Bernstein's notion of pedagogic discourse, which recognises the particular social relations between government agencies and those active in the field of education, including educational

researchers and teacher trainers as well as teachers and regional administrators. Essentially, this notion acknowledges that the varying stakeholders involved in this process are offered more or less status, and more or less agency in utilising different forms of pedagogic discourse, knowledge and practice (Bernstein, 1990). Importantly, there is the need for a specific government policy and intervention with relevant stakeholders, practitioners and teachers concerning pedagogic discourse with regards to mentoring practice in general within the ITE context. How mentors are selected, trained and rewarded with certification, workload and wages seem to be essential criteria for collaborative mentoring to be achieved. There is a need for government support and allocated funding in providing adequate cover for teachers, so that they are released from teaching duties to attend CPD activities, workshop or events targeted at mentoring development or training.

7.2.6 A framework for collaborative mentoring

As discussed within chapter three, some models of mentoring are consistent with the constructivist paradigm. However, these models can be developed and improved for collaborative mentoring to be effectively practiced between supporter teachers, teacher trainers and student teachers. Importantly, the context considered acknowledges the combinations and interconnections of efforts from important stakeholders to facilitate effective collaborative mentoring, particularly when encouraging this among student teachers. Essentially, this study posits that collaborative mentoring can be better facilitated with a combination of resources from teachers, student teachers, school leadership teams, university tutors and amendments to government policy regarding mentoring in teacher education.

7.2.7 Collaborative mentoring: How was a community of practice established based on the findings and how did this relate to good practice in mentoring?

Within this study, a community of practice was established based on the findings and reflective conversations which transpired among the student teachers in their peer-mentoring pairings. From the findings generated from this research study a community of practice was established through a collectively agreed set of criteria by the inhabitants based within the community, which identified with supportive and socialised learning. Importantly, how this criterion is maintained and professionally agreed determines the effectiveness to which the community of practice supports and contributes to reflection and developing pedagogically in a collegiate environment. This resonates and relates to good practice in mentoring because the central premise is focused around working in a collaborative capacity to gain an understanding of the factors which

underpin developing aspects of teaching and learning. In addition to utilising such practice as a platform to share experiences, in relation to best practice and informing reflexive processes.

7.2.8 Explaining and defining the model of mentoring which underpinned this study

The model of mentoring is embedded in socialised and collaborative learning. Importantly, the ideas which underpin mentoring dialogue resonate with a supportive practitioner helping to understand or guide the practice of another practitioner in a supportive and sometimes pastoral capacity. The model of mentoring is viewed in this way because historically, mentoring has been viewed as the transmission of knowledge from an expert towards a novice. Mentoring has been viewed like this because the novice has always been considered to be the recipient of knowledge from a more experience and knowledgeable other. The model of mentoring adopted in this study recognised all individuals in a mentoring capacity to be the reciprocal distributors and receivers of knowledge within a community of practice, where hierarchical expert-novice approaches towards mentoring driven by unequal power dynamics were eliminated in favour of collaboration and equality.

7.2.9 Considerations for peer-mentoring

Within this study, aspects concerning the effectiveness of peer-mentoring to inform reflective practice indicated peer-mentoring to be an effective way of enhancing reflective processes and enhancing professional teaching development of student teachers (Smith, 2008). Peer-mentoring, proved to be an assistive tool in encouraging individuals in this case, student teachers encountering similar experiences to work together, formally and informally. Within the peer-mentoring intervention, students repeatedly mentioned feeling more comfortable going to their peer for help and feeling less intimidated, with feelings also situated around reciprocity and mutual learning. Importantly, and inevitably the student teachers did highlight that the most challenging aspect of effective and purposeful peer-mentoring to inform reflective practice was actually having the time to engage in such collaborative endeavour. Essentially, for productive mentoring to occur, time and provision must be provided for student teachers to formally and informally engage in peer-mentoring, this study very much promotes the integration of such practice within initial teacher training programmes of study. Similarly, peer-mentoring programs offer considerable potential in achieving positive professional teaching experiences for student teachers learning how to frame and conceptualise their professional identity with regards to teaching (Douglass et al., 2013). The benefits of peer-mentoring appear to be enhanced when

students are strategically linked or paired with student teachers that share similar personality characteristics and traits, in addition to having previously undertaken similar courses or been involved in similar career fields. This study supports and confirms the nurturing of interpersonal relationships as an important characteristic in fostering productive peer-mentoring which aims to inform reflective practice. However, while cultural similarities, prior experience, relational aspects and social background were viewed as important in previous research concerning peer-learning and collaboration (Miller and Stiver, 1997; Ragins and Verbos, 2007), these were not viewed as highly necessary characteristics within this particular study. Participants within this study benefited significantly from the opportunity to collaboratively work in pairings and then collectively disseminate contrasting peer-mentoring and reflective practice experiences within a focus group collective. Importantly, this particular practice allowed student teachers to recognise and understand how mentor characteristics can contribute and benefit relationships, whilst also providing mutual benefits to the peer-mentee pairings. With regards to informing institutions, in particular schools and universities, this is an important consideration for institutions interested in creating effective peer-mentoring programs which embody collaborative dialogue and reflective practice at the centre of their teacher development provision. Based on the student teachers narratives and reactions, schools and universities need to consider how they may embark on developing and creating professional cultures which embody mentoring as a pivotal aspect of developing in-service teachers and student teachers.

Significantly, this research study highlights the role for initial teacher education in preparing teachers to participate effectively in learning communities. Specifically, teacher educators need to have an explicit commitment to developing mentoring skills and understandings to provide opportunities for prospective teachers to engage and become benefactors of productive mentoring (Le Cornu, 2005). This study proposes that peer-mentoring should be utilised as a strategy for student teachers to become directly involved in each other's learning by being mentors for each other. The narratives provided within this study illustrate how necessary mentoring attitude, interpersonal skills and critical reflection skills were in facilitating the aims and potential recommendations for peer-mentoring during a practicum of experiences, where professional support was provided for one another between the student teachers. The ultimate aim of peer-mentoring is that student teachers will have the confidence and willingness to participate actively in professional learning communities, with the catalyst for this aim being situated around conceptions of reciprocity and collaborative dialogue.

7.3 Suggestions for further research

Several considerations were deliberated upon when evaluating some of the limitations to this study. The following limitations illustrated that, firstly, the peer-mentoring case study involved a group of student teachers, and this was based on a deliberately small number for administration and control of research purposes. In attempting to minimise the chance of reporting based on inadequate data, interviews and field notes were used to complement/triangulate observations with regards to the casestudy, in attempting to explore peer-mentoring among student teachers to inform reflective practice. Secondly, the casestudy conducted was through a singular ITT programme of study, and some stakeholders such as university partnerships office administrators, local council officials and school administrators were not involved within the study. The sample size was consistent with the interpretivist paradigm as my intention was to explore and better understand collaborative mentoring and peer-mentoring practice within this context. Additionally, the sample size for this study consisted of four student teachers, with their experiences of peer-mentoring underpinning the findings and recommendations for this research study.

Future contexts regarding this type of research may need to consider, a larger scale study focused on mentoring between supporter teachers, university tutors and student teachers, with particular reference to providing appropriate professional provision for substantive and purposeful mentoring to occur. A comparative study of the ITT provision regarding mentoring practice with student teachers within other countries and nationally may also need to be considered when conducting such types of mentoring research in the future. Some of the questions or explorations posited in this study could also be adopted or adapted for further and perhaps more extensive research. For example, questions related to how mentoring is conceptualised, challenges to mentoring and factors required for collaboration to develop in mentoring between important stakeholders and student teachers may require further exploration. Additionally, future considerations may consider regular meetings and reciprocal arrangements, which engage in question(s) related to the most effective ways of disseminating mentoring discourse among stakeholders. This may also help to strengthen effective communication among the stakeholders involved within the mentoring process and development of professional teaching such as teachers, schools, universities and student teachers. The impact of teachers' years of experience on student teachers' learning and the impact that this may have on various constructs of mentoring practice could also be explored as part of a large research study in the future. This particular direction for future research may highlight the importance of experience in teachers' in

helping to facilitate student teachers' learning and mentoring relationships, as the findings from this study provide contrasting narratives with regards to working with more or less experienced teachers.

Furthermore, the implementation of a longitudinal study could be conducted to explore the features of mentoring experiences among student teachers from their inception onto an ITT programme of study, more specifically from the beginning to the end of this experience through to trainees Newly Qualified Teacher (NQT) year. This may help to clarify some of the contexts regarding student teachers' development, an issue raised among the student teachers' used within this study. There is also some scope for considering the use of instrumental case studies, with more time specifically dedicated to the exploration of mentoring relationships in the classroom, between student teacher and subject teachers as part of a more in-depth longitudinal casestudy.

Further contexts may also consider the conducting of a comprehensive study on the roles of school leadership teams, in facilitating mentoring practice, and professional development centred on creating more reflexive teachers within a mainstream school and the ITE context. Such explored contexts could reveal and present some understanding towards the capital that school leaders attribute towards mentoring as a professional construct for developing teaching practice, in addition to gaining some considerations as to how they think mentoring should be practised and conducted. The involvement of universities and school partnerships office staff, local council education officials, and school administrators may also be required to reinforce further studies on mentoring. As the narrative data revealed within the study, communication was considered an important aspect for effective collaboration between schools and universities as well as student teachers, particularly when undertaking school placements. Importantly, the involvement of school administrators and university partnership staff would help to identify causes of delay in the delivery of necessary documentation from university to schools or from schools to university, particularly when considering the progress of student teachers for assessment. The challenges encountered by school leadership teams with regards to providing and maintaining professional development opportunities to facilitate teaching and learning constructs could also be explored, as this also directly impacts the mentoring experiences of student teachers, particularly when they are based within that particular institution for school placement. The strength of such further explorations and studies will provide some wider contexts and discourse for consideration regarding mentoring in education generally.

7.4 Limitations of the study

Importantly, while some brief limitations have been considered, this sub-section explores some of these insights in slightly more depth. While indications have been posited towards the perceived development that student teachers' have gained through engaging in peer-mentoring to inform reflective practice within the context of action research from this study, the results should be considered prudently due to a number of limitations. These are based on elements of the research methodology and design of this study, as well as the realisation that it is not feasible to conclude with certainty whether the development of reflective practice would have occurred as a natural consequence of a peer-mentoring initiative among student teachers. However, the narrative data collated, aimed to support the gathering of perceptions from the research participants in relation to their views and opinions regarding teaching and learning, peer-mentoring, reflective practice and initial teacher training. The nature of using narrative analysis presents some obvious limitations with regards to misinterpretation and researcher subjectivity and bias. Bruner (1986) remarks that that the nature of this approach can contribute significantly towards compromising research findings, with regards to measuring the legitimacy of claims made. Gibbs (2007) highlights that, this becomes an obvious limitation, when utilising narrative analyses. There was some awareness of this, with regards to this potentially being a significant limitation, that could effectively undermine the study, and this was acknowledged throughout the research. Importantly, there was some understanding that natural and personal biases were inevitably going to emerge throughout the study, and when this occurred, particularly when relating to the student teachers' experiences as trainees, this was acknowledged and kept to a minimum to avoid jeopardising the reliability and validity of the methods or approaches used (Cohen et al., 2011; Packer, 2010; Punch, 2009).

The paucity of substantive research studies in initial teacher education and the diverse nature of those studies that have been undertaken to examine the development of student teachers' reflective practice, particularly within physical education initial teacher education, make specific comparisons and contrasting to previous research studies difficult. As previously mentioned, the sample size in this study was relatively small as participants were all selected/ recruited from a physical education initial teacher training programme of study course within one Higher Education institution in the North-West of England. Although, results of this study might be relatable to student teachers following similar courses in initial teacher education, they may be difficult to generalise for a wider specific demographic or context and this must be acknowledged. A significant challenge associated with qualitative research studies is that of

interpretation. It was realised that there are several ways in which interpretation has potential to influence the results of this research, including the bias that unavoidably derives from the researcher immersed within the study. Although, this study is informed by the theoretical underpinnings, which have been advanced in the vehicular of mentoring and reflective practice by eminent scholars; teacher educators and practitioners over past decades, in addition to discussions with professional colleagues, the framework and dimensions for mentoring and reflective practice utilised in this study were shaped by reflective commentators who have progressed and developed the conceptualisation of this phenomenon. Similarly, the evidence drawn upon to inform reflective practice came through utilising peer-mentoring within a conceptual framework related directly to the student teachers' engagement within action research to help improve their own teaching practices.

Evidence gathered to inform this study relied upon the research participants' understanding of what information was being asked of them. Although research instruments designed for use in this study were assessed for fitness for purpose prior to use, potential limitations and disadvantages associated with interpreting the questions in open-ended questionnaires and semi-structured focus group interviews, as discussed in chapter 4, may have occurred, although all conscious attempts were made to minimise such limitations. Similarly, although a number of measures were implemented to reduce risk of bias, the potential that organic bias has to influence student teachers' responses should be noted. Evidence gathered to inform this study also relied upon the research participants' judgements and perspectives to further improve constructs of peer-mentoring and collaborative learning, and this may reflect subjective dispositions, which may not have been rationalised against an objective disposition.

7.5 What particular ethical issues arose from the study and how were issues of researcher positionality dealt with, regarding gender, ethnicity, class, and power and were there any aspects of subjectivity or bias in the sample frame?

During the research study, while there were no particularly significant ethical issues which arose, however, one pertinent consideration was situated around the recruitment of participants. The researcher was aware and did acknowledge that there was an initial prior relationship with all the participants from the recruitment stage to the final selection stage of student teachers for the study. Admittedly, while a criterion for selection was provided for participation in the peer-mentoring intervention, the researcher accessed the purposive sample through convenience as

the participants' were located at the university where the researcher held a lectureship during the time of participant recruitment. From an ethical viewpoint it was considered by the researcher that this could be viewed as a biased sample due to the prior relationship that may have existed in varying dialogues as a lecturer to the students. However, subjectivity was removed, as the researcher had provided a set criterion for participation which was robust and could be replicated with a similar cohort of unfamiliar participants.

The researcher therefore had to ensure their positionality was transparent and continuously reflected upon throughout the study. This was to ensure that the researcher did not influence or inflict their views on the participants in anyway. Issues such as gender, ethnicity and class were not considered as specific criteria and therefore, were not acknowledged as potential barriers towards the positionality of the researcher, due to these factors not being set as restrictive or declared criteria for participation. However, not by deliberate action or design, the final four participants for the study did represent these demographics, with two females and two males making up the final participant sample with one of the student teacher's coming from the Black and Minority Ethnic (BME) demographic. This was quite pertinent with regards to equal representation as the views presented encompassed some of the challenges associated with teaching groups from these demographics and recognising their bespoke learning and pastoral needs. The status of the researcher was not affected as much as the participants due to the researcher removing themselves from the context to avoid inflicting subjective bias onto the student teachers. However, the researcher did acknowledge that their own status in the research may have placed them in a position of power above the participants. This had to be acknowledged, discussed with the participants, and collectively agreed to endeavour to avoid such power related constructs. Managing this was pertinent to ensure that inherent or referent power was not inflicted or transmitted on to the student teachers. Collectively, it was also agreed that no participants including the researcher should be the dominant voice over other participants with a collective remit focused on everyone becoming even distributors and receivers of knowledge.

7.6 What are the strengths and weaknesses of your study?

The strengths of the study resonate with factors that are focused on constructivist ideals associated with learning. Other strengths identify with an intervention entirely driven by student teacher concerns in attempting to endorse the narrative that they are better positioned to support

one another because they are encountering a particular experience at the same time in similar circumstances. The most important strength aligned with the research was the ability to support student teachers in becoming more reflective through peer-mentoring. As a result of this the trainees were able to measure where they had collectively made significant pedagogical improvements. This was considered as a significant strength as ultimately they were able to associate their teaching improvement with participation in the peer-mentoring intervention.

The weaknesses of the study resonated with perhaps not utilising a bigger sample or recruiting more participants so that the findings and results could be more generalisable. A bigger sample may have provided wider and varying dialogues which potentially might have differed to the ones that the participants presented in this study, therefore providing an opportunity to engage in comparative analysis, which may have led to some more pragmatic conclusions. Another weakness of the study resonated with having such as inflexible criteria for participation as this alienated a lot of potential participants that had a general interest in action research, reflection and mentoring. Their insights from a different perspective not necessarily that of someone being involved in initial teacher training, may have proved beneficial in considering other contextual situations aligned with education or pedagogical contexts which have the potential to embody collaborative learning and reflective practice.

7.7 If the study were to be conducted the study again, what would be done differently?

If the researcher were to conduct the study again, there would be a specific focus on the recruitment of a lot more participants purely from a range of perspectives point of view. Additionally, a potential comparative study would be completed to observe the peer-mentoring and reflexive processes of another group of student teachers in a different institution and correlate and draw thematic patterns regarding how such endeavour transpires in varying settings. Finally, the student teachers would be potentially followed over a two year period to observe whether they were able to maintain their peer-mentoring relationships and ability to continue reflect through such processes throughout their Newly Qualified Teacher (NQT) year after the completion of their initial teacher training.

7.8 Considerations towards reflective practice

The findings presented suggest these student teachers' recognise the interdependent nature of reflecting on practice and peer-mentoring, with each participant planning to embed this within

their professional practice. Such endeavour illustrates a commitment to engage in on-going professional development in order to improve throughout their careers, in addition, to improving teaching effectiveness in the interests of their pupils and personal professional practices. This commitment resonates with the research of Zeichner and Liston (1996: 6) who encourage the commitment by teachers to 'verbalise the disposition and skills required to study their teaching and become better at teaching over time'. It could be argued that the action research experience that the student teachers' engaged in provided these participant's with an invaluable point of departure and means through which this intention might be realised in future teaching experiences.

This particular study advocates that contemporary educators should be charged with engaging in reflective practices for several distinct purposes: (1) to adjust their teaching methods, line of questioning, and the sophistication of the content they are teaching to meet the learning needs of their students; (2) to improve their effectiveness and to affect student learning outcomes following instruction; and (3) to reflect on the politics and systems within their sphere of influence to affect change and promote social justice, educational opportunity, and equity (Gore and Zeichner, 1991, LaBoskey, 1994; Van Manen, 1977).

The development and enhancement of student teachers' teaching practice should be situated within cultures that embrace such types of continual professional development and learning for trainees to develop and improve their pedagogical practices. Importantly, this study posits that student teachers need to reflect on their practice and thus educators and school institutions need to provide the appropriate means of reflective tools for student teachers to thrive and develop. Moreover, reflective skills, communities of practice, mentoring constructs, cognitive and pedagogical tools need to be embedded in the curriculum design and curriculum organisation of student teachers' education.

The findings disseminated within this study also advocate that educators need to provide a means of reflective-cognitive tools for student teachers; this study suggests that this can be achieved through collaborative learning, where stakeholders share equal responsibility for the development of one another's teaching practice. Importantly, this study suggests that this could be achieved through the introduction of four modes of reflective thinking: technological thinking, situational thinking, deliberate thinking, and dialectical thinking (Ghaye, 2011). Through this context, peer-involvement, specifically that of peer-mentoring are endorsed as significant elements for productive reflective practice.

The impact of teacher educators is important in such considerations and recommendation for reflective practice among student teachers. Practitioners in such positions on ITT programmes of study can most effectively coach student teachers in reflective practice by using students' personal histories, and dialogue journals, to facilitate small- and large-group discussions about their experiences to help trainees reflect upon and improve their pedagogical practices. This acknowledges that the mentor within a placement or peer-mentoring context; plays a significant role in enhancing reflective practice for student teachers. The implementation of such practices facilitates realistic and systematic approaches, which stimulate on-going teacher improvement through focused reflection and collaborative learning on teaching experiences. Importantly, reflexive processes can be facilitated and modelled by practitioners of mentoring that demonstrate the skills associated with critical questioning, as a means to examine areas for improvement in student teachers' professional learning.

In considering, the potential for peer-mentoring to inform reflective practice, one aspect which could be utilised among student teachers and practitioners is the adoption of the thinking-coach. In this respect, areas for improvement can be addressed in light of the student teacher's lack of provision of cognitive tools as means to acquire reflective skills for developing professional practice (Boud and Walker, 1998). Significantly, this study has indicated that in some cases, student teachers were not given opportunities to engage in reflexive dialogue and express with their peers (external of the peer-mentoring intervention) and subject mentors concerns, fears, worries and areas of development regarding their teaching practice. Hence, this study suggests that some ITT programmes are also significant contributors towards hindering reflection among student teachers.

Further recommendations highlight the importance of documenting reflective experiences for student teaching, as a reflective tool for tracking and measuring their professional growth. Within this study such reflective writings allowed for the presentation of opinions, ideas, values and beliefs within a peer-environment. The use of peer-reflective and communal groups, within this study encouraged student teachers to challenge existing theories and their own pre-conceived views of teaching while, engaging in a collaborative style of professional development that will be beneficial throughout their teaching careers if maintained. Licklider (1997) found that self-directness including self-learning from experience in natural settings is an important component of reflection. In accordance with this conception, this study recommends that reflective skills should include activities such as communities of practice, cultures for collaborative learning and peer-mentoring in which student teachers continuously examine their practices including

practices outside the teaching context. Further, this study also indicates that educators need to enhance guided reflection through developing the student teachers' ability to reflect on their pedagogical practices and on their teaching practices. Importantly, this study suggests that this occurs through involving student teachers in professional enquiry activities and providing them with guided reflection sessions, which also facilitates professional autonomy (Hourani, 2013).

Importantly, this study acknowledges that facilitating professional reflective practice among student teachers is a complex endeavour. The implementation, dimensions and logistics of reflection, embody a series of multi-layered and interwoven limitations and constraints that need to be addressed through redesigning and restructuring the reflective provision required for improved teaching practices, particularly among student teachers in the infancy of their induction into the teaching profession. Initial teacher training programmes of study need to structure and model their initial teacher training practices in teacher education on the basis of the appropriate linguistic, cognitive and pedagogical means needed to promote reflective skills for better teaching practice (Hourani, 2013; Pollard, 2011).

Implications for teacher educators

The commitment for student teachers to take professional ownership and responsibility of their own teaching is considered by Government as a requirement to satisfy the Standards for the award of QTS (CfBT, 2010; DfE, 2012; Universities UK, 2014). It has also been associated with professional accountability (Eraut, 1994), professional development (Day, 1999; Hoyle and John, 1995; Lave and Wenger, 1991) and identified as a key attribute of extended professionals (Stenhouse, 1975). Within this study, the student teachers' demonstrated a commitment and desire to continue to improve their own teaching, through utilising a variation of reflective practices.

7.9 How does the researcher define reflective practice upon completing this study?

Upon conducting this research study, the researcher had a perspective on reflection that had entirely resonated with Schon's interpretation, that of reflection-in-action and reflection-on-action. In considering the researcher's own definition, it is important to acknowledge how Schon's definition has framed the concept, as this has been the overarching theoretical framework for this study. The researcher's own definition of reflection is aligned to developing the capacity to be able to reflect on one's own practice. In other words, as has been the case in this study, practitioners should be provided with professional abilities to be able to analyse their

own teaching, reflect on pedagogical components, and improve concentrated aspects of their teaching through collaborative and supportive dialogue. Importantly, the impact for this definition on teaching and learning is aligned with encouraging practitioners to engage and develop reflection through collaborative processes which should be supported and stimulated by educational environments that place reflection at the heart of their teaching and pedagogical development. The problems inherent in embracing this definition of reflection are aligned with school cultures. Dependent on what the ethos maybe in the school regarding the professional development and refinement of teaching practices, this has a significant impact regarding practitioners' views on reflection. For example, school leadership teams that prioritise this agenda may designate considerable time, finance and resources to this particular endeavour to ensure that it thrives within their schools and amongst their staff. Contrastingly, this may not resonate as a priority for the school and therefore this becomes problematic because a reflective and professional development culture in relation to teaching and learning becomes non-existent. Therefore, as mentioned throughout the conclusion of this thesis the development of professional capabilities to enable to reflection, needs to be prioritised among significant stakeholders and policy makers, so that such endeavour becomes compulsory for all professional teachers and schools.

7.10 Recommendations for further research

This study primarily engaged with a conceptual framework to explore peer-mentoring among student teachers to help inform reflective practices, within the context of context of action research, replication of this study is highly recommended. Replication with student teacher cohorts within the primary and secondary tiers of education could be beneficial for comparison purposes. Replication in other subject areas can also add validity to these findings. A larger sample is suggested so that findings can be generalised.

The mentoring intervention was designed to capture pedagogical moments in the context of the student teacher's discursive history, which aimed to frame reflective conversations which would inform teaching practice (MacDonald and Tinning, 2003). To that end, an exploration of their experience as student teachers mentoring each other through their initial teacher training was undertaken by unpicking challenges of teaching and learning, peer-mentoring and being involved in teacher training. Future studies might explore how particular models of mentoring can be utilised and built upon within other contexts of pedagogy about teaching and learning, for

example, about how to teach, particularly as reflective practice, is regarded as the catalyst for professional growth and enquiry.

A shared understanding and cooperation between universities and schools is necessary for supporting the professional development of student teachers. Results of this study suggest there may have been conflict of interests, in certain areas of school recruitment for student teachers experiential learning, which has the potential to influence the experiences of some student teachers. Thus, possible ways in which school-based and university staff can be included or involved within the action research experience of student teachers could be further explored.

7.11 What is the contribution to knowledge from this thesis?

The contribution to knowledge from this thesis indicates some new considerations for schools, such as creating formal and accredited inset programmes around peer-development; creating formal programmes of initiation with early-career teachers for new entrants into teaching and designating specified time for such initiatives centred around reciprocal learning, with regards to initiating and creating professional learning cultures that support the collegial activity of teachers, particularly student and early-career teachers mentoring one another.

Importantly, these contexts also filter through to initial teacher education generally, where Initial Teacher Training (ITT) programmes, need to embed a formalised and structured programme for peer-mentoring among student teachers, and make this process compulsory by embedding this within assessments, or using this as one of the benchmarks to satisfy the award of QTS. The contribution to knowledge posited from this study towards this context also advocates the use of peer-mentoring, action research, narratives and reflective processes between trainee teachers, as a method of verbalising concerns and documenting issues during teacher training, in addition to challenging their own personal values and orthodoxies about teaching and learning.

Additionally, this contribution to knowledge suggests that because student teachers are immersed and continuous participants within their induction into the teaching profession, they are best positioned to advise and support one another based on the following variables: familiarity and commonality of experience; equal distribution of power; and an understanding of teaching in the present context, that has not been influenced by previous interpretations of initial teacher training or practitioner experience. This is an important acknowledgement in that the contexts for education, in particular teacher training within a post-modernised context are a continuously

changing concept, with differing dialogues, according to Government policy aims and objectives regarding the training of teachers.

7.12 How does the researcher now define action research and why is the relationship between mentoring and reflection important?

Within this research study, the premise for action research was heavily defined by processes of continuous self-evaluation through individual and collaborative processes. The definition which has emerged from this study recognises action research as an integral process towards developing teaching capacities, reflecting on one's own practice and the continuous challenging of beliefs and values aligned to teaching and learning. In acknowledging action research processes through this premise, mentoring and reflection are considered as stimuli for engaging in this process. The relationship between mentoring and reflection allows practitioners to align evaluating their own teaching behaviours, with engaging in socially constructed environments, in other words, collaborating with another practitioner or a group of practitioners. The importance attributed to the relationship between mentoring and reflection is imperative because from an individualistic or collaborative perspective reflection can occur in a vacuum; however, mentoring can only occur in a social constructed and collaborative capacity. Therefore, the synergy between the two components is paramount because ultimately, when utilised productively, mentoring and reflection complement one another and most importantly contribute towards the dissemination of problems inherent in practice and solutions for best practice regarding teaching and learning.

7.13 Final Remarks

The following conclusions and recommendations have been drawn from the findings of this study and relate to the research questions posed. As mentioned earlier, within the sub-section, caution should be exercised concerning the generalisability of these conclusions, as they are specific to the confines of this particular study. Mentoring and reflective practice is a complex, multi-dimensional phenomenon, which underpins much of the dialogue and discourse in initial teacher education. The elusive and fluid conception of both these areas makes it difficult to accurately capture. The purpose of this research was to explore peer-mentoring among student teachers to inform reflective practice, utilising action research and constructivist thinking as a vehicle to steer this agenda, in attempting to identify what qualitative distinctions in mentoring and reflective practice could be drawn among student teachers. Few studies have examined how student teachers learn the processes inherent within mentoring and reflective practice, and more

importantly, how they draw connections between classroom enquiry and professional practice. Mentoring, collaborative learning and reflective practice, as defined in this study, can be situated at the heart of these learning processes. This research has therefore attempted to contribute to the research currently available in educational literature, which focuses on the impact strategies used to develop reflective practice in student teachers, to inform professional development and pedagogical practice. The student teachers' that participated in this study highlighted that their enjoyment in utilising peer-mentoring to inform reflective practice influenced their capacity and commitment to: (1) study their own teaching for personal improvement; (2) systematically evaluate their own teaching; (3) consider alternative perspectives and possibilities; (4) critically reflect on their own teaching; and, (5) continue to improve their own teaching.

The underlying aim of this thesis was to gain a better understanding of mentoring and reflective practice among student teachers, in considering how this could facilitate collaborative and collegiate learning. Through an extensive review of literature and analysis of the narrative data collected, the aims of this study were modestly achieved. This particular study contends that further research is recommended into: firstly, how educational institutions can create learning cultures where collaborative activity is embodied, secondly, how can reflective practice be encouraged throughout professional teaching careers, and finally, how can the challenges of peer-mentoring be minimised in attempting to encourage such endeavour among student teachers.

Explorations of mentoring in this study have occurred to encourage mentoring and define this practice not as a hierarchical expert-novice construct, as inferred to traditionally, but as a tool to facilitate mutual learning by sharing and disseminating experiences related to teaching and learning among student teachers. Importantly, this study posits that collaborative mentoring relationships informed by constructivist theory have the potential to facilitate reciprocal learning and professional development of both supporter teachers, university tutors (teacher trainers) and student teachers. Conversely, it is also important to note that collaborative mentoring relationships cannot be enacted without some challenges. However, the guiding principles encapsulated within this section hope to contribute towards minimising some of challenges encountered with mentoring within the professional educational landscape. To this end, providing student teachers with an opportunity to engage in contextually focused research activity which enables them progressively to become more effective teaching practitioners and pedagogues in being able to accurately assess a situation, select appropriate courses of action,

implement a plan of action and professionally develop through reflecting upon practice. Additionally, the emergence or development of communities of practice which embody peer-mentoring as a tool for developing pedagogical practices in teaching and learning is imperative for teachers to flourish professionally. More importantly, this resonates with ideas concerning professional growth and enquiry within the landscape of teacher education (Bradbury et al., 2010; Moon, 2005a; Moon, 2005b).

Teacher collaboration is essential to school reform (Hammerness et al., 2005; Goodlad, 1990). While reform efforts call for schools to encourage more collaborative cultures, most teachers (early-career and experienced) continue to practice in isolation from one another, follow a policy of non-interference, and are hesitant to engage in pedagogic dialogue (Feiman-Nemser, 2001; Goodlad, 1990; Jackson, 1990; Little, 1999).

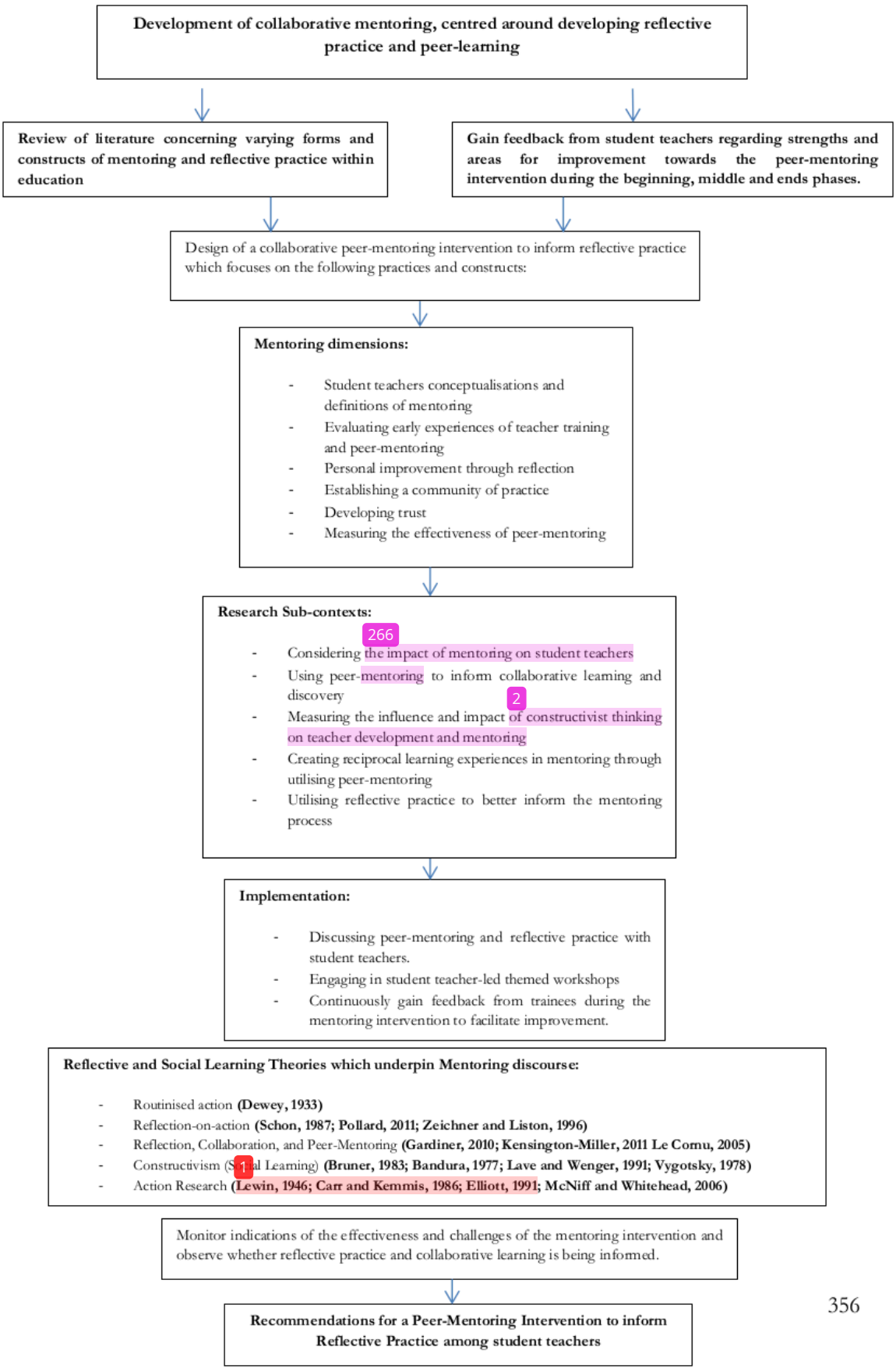
Within this context, peer-mentoring programs offer considerable potential for achieving positive professional interactions concerning teaching and learning, in addition to improving reflexive processes. These benefits appear to be enhanced when student teachers are linked with mentors who have previously undertaken some form of formal mentoring training, and have an understanding for the issues and apprehensions that trainees may have upon entering the teaching profession. Additionally, commonality of experience regarding the peer-mentors and subject mentors are pivotal to the development of such endeavour. Recognising and understanding mentor characteristics that are pertinent to developing student teachers' capacities to benefit from the professional relationships, while also providing mutual benefits to the mentors are important considerations for institutions interested in creating effective peer-mentoring programs within initial teacher education.

Peer-mentoring is not just reflective of the support given to new teachers entering the teaching profession, but additionally it is also indicative of the longer-term relationships made between peers (student teachers) encountering similar experiences. Positive environments in which peer-mentoring relationships can grow and flourish, can also significantly contribute towards HEI's enhancing the student experience.

An important aspect of the approach utilised in this study, is the recognition that peer-mentoring beings with a social, collegial and collaborative remit. Over significant periods this then develops to encapsulate academic considerations as well as pastoral support. Essentially, peer-mentoring works because of the emphasis placed on engendering peer-relationships that, without infringing on any academic boundaries, grow to include the 'tacit' study related knowledge and pedagogical

components that student teachers require to succeed during their initial teacher training (Gardiner and Shipley, 2009).

Figure 7.1: The Conceptual Framework of this study



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