An exploration of clinical teaching and learning within a preceptorship model in an acute care hospital in the Republic of Ireland

Thesis

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An Exploration of Clinical Teaching and Learning within a Preceptorship Model in an Acute Care Hospital in the Republic of Ireland

Doctorate of Education (EdD)

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Abstract

Preceptorship within clinical nurse teaching was introduced in Ireland in 2002. Little is known how this model has impacted upon the pedagogical practices of the preceptor or student learning in clinical practice. An international literature review highlighted the question of what constitutes effective teaching and learning in clinical practice which is the subject of this thesis.

An exploratory qualitative design was used to examine the clinical teaching and learning within the Irish preceptorship model. The sample comprised 13 students and 13 preceptors working together on four clinical areas in one hospital. Data were collected using semi-structured interviews and documentary analysis relating to the teaching and assessment of BNSc (general) students.

Main findings showed preceptors used strategies that fostered performance and understanding such as demonstration, coaching and scaffolding. Participants believed the key to effective learning was interactive dialogue and building the students' confidence within the confines of a consistent mutually respectful relationship where the preceptor had time to teach. Many variations in preceptors' teaching practices were illuminated. Some preceptors' utilised teaching methods that had the potential to enhance problem solving and students' self-directed learning ability. However, many did not use or value these cognitive approaches. Yet all preceptors expected students to make appropriate judgements within the unpredictable environment of practice. The student role as learner in many preceptor-students' relationships was not well understood or valued. Some cases of good practice were elucidated where professional education was the focus of students learning. Conversely in many cases the findings suggest that the students' education was driven by service
needs and values such as performance, team work and a work ethic. Other professional values such as patient empowerment and critical thinking were not a primary concern.

A best practice clinical teaching and learning model is offered based on the evidence of this study; recommendations as to its further modification and development are discussed. The research demonstrated how concepts such as cognitive apprenticeship (Collins 2006), situated teaching and learning in communities of practice (Lave 2009, Wenger 2009), and scaffolding (Vygotsky 1978) can be helpful in understanding the processes entailed in preceptorship. Therefore the research should provide both pragmatic guidance for nurse education in Ireland and more widely, and the development of our understanding about nurse education. The latter will add to the relatively weak theoretical underpinnings of much of the existing literature in nurse education research.
Chapter 1 Introduction

Introduction and personal interest
The study stemmed from my experience of clinical teaching and assessing in nursing, having qualified as a registered nurse in Ireland in 1986, and then working in the UK and the US. I was introduced to the concept of preceptorship in the US where I was oriented by a preceptor. I became a clinical leader with responsible for the preceptorship programme on my unit. I moved into nurse education in Ireland in 1996 and am currently employed as a nurse lecturer in a third level institution. Having been involved in initiatives to improve the teaching and assessment of student nurses in clinical practice, and having carried out two research projects concerning this issue (McSharry 2001; McSharry et al 2010), I had an interest in exploring the current clinical teaching practices of preceptors. At this stage my pre-study assumptions regarding teaching and learning in clinical practice were two fold. Firstly I assumed that students needed to participate in clinical practice in order to learn the practice of nursing. I expected that preceptors guided and facilitated students to participate in the delivery of nursing care. However, I was interested in learning more about how preceptors taught students. Secondly a number of issues had arisen from my experience that I felt important for me to explore further. At the initial stages of the study they were: the assessment process; the nature of what was assessed and the preceptors' ability to fulfil this role. I anticipated preceptors may have problems fulfilling their assessment role particularly in relation to failing students. Hence I had an interest in exploring both the teaching and assessing practices of the preceptor.
This chapter provides the context and rationale for the study, outlining changes in nurse education in the Republic of Ireland and describing the concept of preceptorship within an international context and its similarity to the concept of mentorship. It concludes by providing a brief outline of the structure of the thesis.

1.1. Nurse education in the Republic of Ireland

Nurse education in Ireland at undergraduate level has undergone a transformation over the past 14 years. In 1994 the traditional three year apprenticeship model of pre-registration nurse training was replaced with the registration diploma programme. In 2002 the diploma programme was replaced by a four year honours degree programme (BNSc) which is currently provided in universities and colleges of higher education throughout the country. These changes involved some significant differences in the way in which student nurses are educated. The move to third level brought Irish nurse education in line with many other countries across Europe, North America, Canada and Australia (Government of Ireland (GOI) 2000). The BNSc programme is approved by the Irish nursing board (An Bord Altranais (ABA) 2005) and complies with EU regulations (GOI 2000). On successful completion the graduate is entitled to register with ABA and is licensed to practice as a fully qualified registered nurse. The programme includes both theoretical and clinical instruction.

Clinical practice placements continue to be a central element of the programme. ABA (2005) stipulates that clinical instruction be no less than 81 weeks and theoretical instruction no less than 58 weeks, hence students spend more than half the programme in clinical practice. This practice is assessed using a competency based assessment strategy set out by the nursing board. There are four components to this assessment strategy which
are: domains of competencies and performance indicators; a three stage preceptor-student interview process; reflective practice and an adaption of Steinaker and Bell's (1979) experimental learning model to assess the student's level of practice. The five domains of competencies assessed are: professional/ethical practice; holistic approaches to care and integration of knowledge; interpersonal relationships; organisation and management of care; personal and professional development. Each educational institute is responsible for developing a competency assessment portfolio based on these requirements. Critical elements are devised at local level, which are statements that set out measurable learning outcomes that the students must achieve during their clinical practice placement (ABA 2006). Therefore the student's competency is assessed by both their observable ability to practice and the supporting written evidence they supply in their competency portfolios.

Students are supernumerary when in clinical practice except for the nine month internship period which occurs in the fourth year of the programme where they are paid employees of the health services (ABA 2005). Staff nurses, called preceptors, are responsible for facilitating learning, supervising and assessing students.

The notion of preceptorship was first introduced in 1994. However, the assessment role is relatively new as it was added to the expectations of a preceptor in 2002 with the introduction of the degree programme (GOI 2000). Prior to this, assessment was carried out by ward managers and was known as the proficiency assessment form. It consisted of questions regarding the student's performance and attitude and had a tick box format (McCarthy & Murphy 2010).
A further practice support role, the Clinical Placement Co-ordinator (CPC), was created in Ireland. CPCs are employed by each training hospital and are assigned several clinical areas each, where students are allocated. The CPC acts as a link between education and the practice setting and provides support to both students and preceptors to facilitate student learning in practice (Drennan 2002; McNamara 2007). However, their exact role in teaching and learning is not clearly defined and they do not assess the students' competencies (McCarthy & Murphy 2010; McSharry 2010). Nurse lecturers in third level colleges also perform a clinical link or liaison role which involves visiting students and liaising with preceptors and CPCs when difficulties arise with students reaching their competencies (McSharry et al 2010). These link lecturers are responsible for monitoring the quality of the learning environment in liaison with CPCs and preceptors (ABA 2005). Staff nurses in their role as preceptors are responsible for teaching students professional nursing practice and are required to assess their ability to perform according to professional standards. Hence preceptors are the gatekeepers of the students' clinical competency. Preceptors are not allocated protected time and do not receive remuneration for this role. Registered nurses in Ireland have traditionally held a teaching role. Their responsibility to teach junior colleagues is specifically set out in their code of conduct (ABA 2000).

The BNSc degree programme has now been in existence for eight years, yet scant evidence exists on how these changes have impacted the teaching and assessment of student nurses in clinical practice (Hegarty et al 2008). At the outset of the study I was interested to know how preceptors engaged in their role within this context. The concept of preceptorship as it is understood internationally and within undergraduate nurse education in Ireland is discussed and compared. Its relation to the similar clinical teaching model of mentorship is examined.
1.2. Preceptorship and mentorship: conceptual understandings

Preceptorship is a clinical teaching approach used by practice professionals such as nursing, medicine, physiotherapy, pharmacy, education, social work, law and dentistry (Billay & Yonge 2004). The concept of preceptorship in nursing appears to have originated in North America during the 1970s where it was, and continues to be used for senior baccalaureate student clinical orientation and staff nurse orientation to promote clinical competence, professional socialisation and staff retention (Hyrkas & Shoemaker 2007). Canadian writers, Billay and Myrick (2008), carried out a literature review and claimed that nursing and medicine are now legitimizing preceptorship as the teaching–learning model for students' preparation in these professions. Billay and Yonge (2004) analysed the concept of "preceptorship" and provided a theoretical operational definition for use in research and nursing theory. The focus of this concept analysis was an examination of the experiences of preceptorship models from international and multidisciplinary perspectives. Findings indicated that preceptors are role models for students who apply the principles of teaching and learning, give feedback and evaluate student performance in clinical practice. This international description aligns well to the Irish nursing board's understanding of the concept. The board has identified the following key components of the roles. The preceptor takes responsibility for students' learning, where they act as a teacher and a guide. Preceptors set objectives, provide learning opportunities for students, assist them to learn the practice of nursing, give regular feedback and evaluate students' performance (ABA 2003; 2005). Standards require that each student nurse be assigned a named preceptor during clinical placement to provide support and supervision. Preceptors should have completed a teaching and assessing course (ABA 2005), which varies from one to two days (see Appendix I for an outline of the preceptor preparation programme operating
in the local context). In addition to this, an online eLearning programme on 
student competency assessment is provided by ABA (2006)

While 'preceptor' is the accepted term used to describe the staff nurses'
teaching role in Ireland, other terms such as supervisor and mentor are used
to describe a similar role across Europe (Fulton et al 2007). It has been 
suggested that confusion exists with the terminology (Fulton et al 2007;
Yonge et al 2007)

Whilst the concepts of mentor and preceptor overlap to some degree, the term
'mentor' often entails the formation of a long term nurturing collegial
relationship with no formal evaluation. The role is based on career
progression and improving clinical practice, whereas 'preceptor' implies a
formal short term teaching and assessing role based on acquiring competence
(Billay & Yonge 2004; Mills et al 2005; Yonge et al 2007) (see Appendix II for
preceptor–mentor comparison table). Yonge et al (2007) contended that the
term preceptor is more appropriate when referring to the clinical teaching
relationship with a programme of instruction. They argue that using these
terms interchangeably can cause confusion in terminology and meaning in the
area of undergraduate clinical education. However, mentorship is the most
common term applied in the UK when describing the practitioners' clinical
teaching and supervision role in regard to pre-registration nursing students
(Jinks 2007). The mentor role is clearly defined in relation to the
undergraduate context in the UK (Nursing & Midwifery Council (NMC) 2008)
and is almost identical to the Irish Nursing Board's description of the
preceptor role.

Fulton et al (2007) reported on a European Union funded project which
devised a framework for mentor preparation programmes specifically for use
in pre-registration nursing programmes within the European Union. They found that while many terms were used to describe the staff nurses' supervisory role, the term mentor was commonly used across Europe within the undergraduate context. They found countries such as Norway, Sweden, Iceland, Poland, Portugal and the UK shared a conceptual understanding of mentorship in relation to the staff nurse's teaching role. This focused on student outcomes and a short term functional student-mentor relationship rather than the long term friendly relationship which is the usual understanding of the term in the business world. It has been widely reported that the terms preceptor and mentor are used interchangeably throughout the international literature, particularly in the context of undergraduate education (McCarthy & Higgins 2003; Yonge et al 2007; Fulton et al 2007; Jinks 2007). Therefore for the purposes of this study the terms preceptor and mentor are considered to have a similar meaning within this context (Fulton et al 2007; Jinks 2007). Hence literature pertaining to mentorship on pre-registration programmes has been examined alongside literature relating to preceptorship, since both these terms are used to describe the role of the staff nurse in relation to teaching and assessing student nurses throughout the international literature (Fulton et al 2007).

1.3 International models of clinical education

Comparing the preceptorship model as it is perceived and practised in Ireland and internationally has its limitations. Nurse educational programmes differ from country to country and various models of clinical teaching exist. While the preceptorship and mentorship model are commonly utilised on pre-registration programmes internationally they may not be used exclusively. In many countries clinical teachers are employed by the university to supervise, teach and evaluate student nurses with various student–teacher ratios
reported from eight to sixteen (Kimberly 2007; Croxon & Maginnis 2009, Barnett et al 2010). Some publications suggest preceptorship is adopted only in final clinical placements for undergraduate students in North America (Seldomridge & Walsh 2006; Lillibridge 2007). Hence students may be exposed to both these models of clinical teaching during their programme.

Another variable to consider when comparing international literature on the subject of preceptorship is the amount of time students spend in clinical practice, which differs from country to country. For example the European Union council directive 77/453/EEC sets down the length of clinical instruction as no less than 2300 hours for all member states. In the UK and Ireland clinical practice constitutes at least 50% of the programme (ABA 2005; NMC 2008) while in Australia students undertake 800 hours of clinical practice (Levett-Jones & Lathlean 2009c). The amount of time allocated to clinical practice may have implications on the demand for clinical placements, the selection of preceptors and the expectations of students' performance in clinical practice.

Preceptors/mentors are often supported by educationalists. This educational support varies across the international literature in terms of names and roles. The roles can include any or all of the following, a pastoral support, advising clinical staff regarding educational issues, teaching students in practice, participating in reflective practice and taking part in the clinical assessment of students (McSharry et al 2010). Various models of support exist such as: CPC and link lecturer in Ireland (McSharry et al 2010); practice educator, lecturer-practitioner and link lecturer in the UK (Mallik & Mc Gowan 2007); clinical facilitator in Australia (Barnett et al 2009); faculty in North America (Seldomridge & Walsh 2006); clinical lecturer and clinical senior lecturer in
Sweden (Ehrenberg & Haggblom 2007) and nurse teacher in Finland (Saarikoski et al. 2009). The level of support the preceptor receives and the role of the educationalist in practice will impact the teaching and assessing practises of the preceptor. Therefore how the preceptors/mentors engage in their teaching role may differ in each country and indeed may be context specific.

Many common understandings and similarities exist internationally regarding the nature and role of the preceptor or mentor in teaching the pre-registration student. However, cognisance of the differences as outlined above is taken when interpreting findings from international empirical studies presented on mentorship and preceptorship in this literature review. As discussed earlier the terms mentor and preceptor are considered to be one and the same in the context of undergraduate education. For the purposes of this study preceptorship and preceptor are the preferred terms.

1.3. Evaluation of an Irish model

Irish studies were found which provided some insights into the current preceptorship model. The findings from them highlighted deficits in the Irish model which centred on certain key issues. They included: preceptors reporting insufficient time for the role of assessment and lack of contact time with the students (O Connor et al. 2009; McCarthy & Murphy 2010); insufficient time to teach (Duffy 2009; McCarthy & Murphy 2010); a lack of understanding of the assessment terminology and poor understanding of reflection (McCarthy & Murphy 2008; Duffy 2009); and inadequate preparation for the role of assessment (O Connor et al. 2009; McCarthy & Murphy 2010). Preceptors also reported a lack of support from CPCs and management, a difficulty in failing students (Duffy 2009; McCarthy & Murphy 2010) and insufficient feedback on their role as a preceptor (McCarthy & Murphy 2010).
Timmons and Dunne (2009) found that critical thinking or the ability to link theory to practice was not demonstrated in students' competence document portfolios and students reported inadequate guidance on completing these portfolios in practice.

Heffernan et al (2009) reported that the teaching attributes of being approachable, supportive and having knowledge were rated highly by both preceptors and students, whereas teaching approaches such as reflecting and challenging the students to think about practice were rated the lowest. McCarthy (2006) found that teaching was focused on the task oriented skills and the medical model and preceptors felt confident in teaching practical skills but did not feel comfortable in being questioned on theoretical principles. Duffy (2009) also found that preceptors did not feel confident in teaching the theoretical base to their practice but felt comfortable in demonstrating nursing practice. Higgins and McCarthy (2005) found that when students had a preceptor on their first clinical placement they observed and participated in practice and it reduced their anxiety and increased their confidence. However, when they did not work alongside their preceptor they felt isolated.

The findings of these studies have provided some insights into the teaching and assessment practises of preceptors in Ireland. However, the following methodological limitations need to be considered when evaluating this evidence. Three studies were small scale qualitative studies, hence findings need further exploration (Higgins & McCarthy 2005; McCarthy 2006; Duffy 2009). O Connors et al's (2009) quantitative study had a small sample size which prevents generalisability. Low response rates were reported in Heffernan et al (2009) and Timmins and Dunne's (2009) quantitative studies. The self-reporting nature of data collection from the preceptors' perspective
only, and sole use of the survey method in McCarthy and Murphy's (2008; 2010) quantitative study are limiting factors. Furthermore four of these studies focused primarily on the assessment process (McCarthy & Murphy 2008; O Connor et al 2009; Timmins & Dunne 2009), while the other three investigated preceptors preferred teaching attributes rather than broader aspects (Heffernan et al 2009). Two others explored how preceptors taught in practice from the perspective of patient-centred care (McCarthy 2006) and preceptors' use of reflective practice (Duffy 2009). No study was found that investigated how preceptors both taught and assessed in practice from both the students' and preceptors' perspective. The following questions also remained unanswered in terms of the Irish context. For example, how do preceptors actually engage in the clinical teaching and assessment of student nurses and what teaching methods are they using? What content are they teaching students and what influences this learning / teaching experience?

With these concerns in mind an in-depth analysis of the international literature was carried out and is presented in Chapter 2.

1.4. Structure of the thesis

This thesis consists of six chapters. Chapter 2 provides a review of the literature which focuses on four areas: the relevance of the theories of situated learning to teaching and learning in clinical practice; preceptors’ teaching techniques; teaching practices and student learning; the theory and skills that are taught and assessed in clinical practice and the learning context. Chapter 3 describes the chosen research approach, a qualitative study underpinned by the philosophy of social constructivism. Within this chapter sampling, data collection and analysis methods used are presented; ethical considerations and methodological limitations are discussed. Findings are presented in Chapter 4. This is followed in Chapter 5 by a discussion of how these findings contribute to the current knowledge. Chapter 6 offers
conclusions and recommendations for practice, policy and research which emanate from the findings.
Chapter 2 Literature Review

Introduction
The purpose of this review is three-fold: to identify the knowledge base regarding undergraduate clinical teaching and learning within preceptorship models internationally; to ascertain gaps within this literature and to identify a theoretical framework to inform the study and clarify the research questions.

Search engines used to access literature were: EBSCO host health source; Nursing/academic edition; Psychology and behavioural sciences collection; Business source; CINAHL plus; Soc Index academic search premier; Science Direct; UK/Eire reference centre; Medline; Google Scholar; Academic Search Complete (EBSCO); Web of Science; Jstor and Publishing opportunities databases.

Initially the combined search terms used were: preceptor; mentor; preceptorship; mentorship; clinical teaching; clinical learning. While a range of publications were read the focus was on literature pertaining to undergraduate nursing. Hence the search was further refined to this context using the terms undergraduate, pre-registration nurse education and student nurse. This yielded 250 research papers which were reviewed.

Specific issues that were inherent in the activities of teaching and learning in clinical practice needed further exploration. Hence the literature was searched using the terms: preceptors’ teaching strategies, student assessment in clinical practice; preceptor education; competency assessment; unsafe clinical practice and traditional apprenticeship training. Fifty suitable research articles
from the disciplines of nursing, medicine and other health care professionals were reviewed.

The suitability of the situated and activity theories of learning to underpin clinical teaching and learning lead to searching the literature using the combined terms of situated learning, Vygotsky's theories, cognitive apprenticeship model and clinical practice. These searches lead to a critique of 30 research articles. Finally in order to identify all the research in relation to clinical education carried out specifically within the Irish context, a combination of the aforementioned terms, limited by the terms Ireland and Republic of Ireland, were used; 20 articles relating specifically to nurse education in Ireland were reviewed.

These searches were limited to published literature from 1994 onwards as changes to nurse education in Ireland occurred at this time. However, older frequently cited seminal research was accessed. Adapted versions of the critical appraisal tools developed by CASP (2010) were used to examine and evaluate the literature found.

This chapter is structured into five sections which reflect the chosen theoretical underpinnings and the key relevant concepts that were identified in the literature. Thus the first presents theories of situated learning and cognitive apprenticeship. The second discusses the pedagogical practices of the preceptor and the third, the teaching practices and their impact on student learning. Theory and skills taught and assessed in clinical practice are presented in Section 4. The context for learning is analysed in Section 5. Finally within the conclusion the clarified research objectives complete the chapter.
2.1. Situated learning theories; their relevance to clinical practice

Vygotsky's (1978) theory of learning corresponds with the central tenets of social constructivism, which is that knowledge is not passive but is constructed through making sense of an experience and these experiences are interpreted and influenced by historical and socio-cultural backgrounds. This knowledge becomes a shared understanding and is portrayed through practice and language (Schwandt 2003). The clinical area can be likened to Vygotsky's (1978) learning context where the preceptors or teachers can enable the student nurse to develop across the developmental stages of learning and make sense of the clinical practice under study. The distance between the students' current level of practice and potential level of practice under expert guidance is known as the Zone of Proximal Development (ZPD). Instructional scaffolding such as questioning, focusing attention or guided instruction is the pedagogical approach that applies the notion of the ZPD (Moll 1990). A predominant feature of Vygotsky's (1978) theory is the use of speech as a tool to mediate learning.

Lave and Wenger's (1991) theory claimed that learning takes place in communities of practice. They developed their theory of situated learning from analysing five cases of apprenticeship learning. They described how novices advanced their participation in their trade over time as they learned the sub skills or routines until they became as competent as their masters. They emphasised that novices need to be allowed to participate in practice in order to learn. The term used to describe this concept is legitimate peripheral participation (LPP). They advise that LPP is not a pedagogical strategy yet they refer to Vygotsky's (1978) work when they illustrate how the novice learns from the master through discourse and practice.
Lave and Wenger (1991) proposed that the goal for the novice is full
participation in their practice and therein lies the motivation to learn. As the
newcomer gains competence, a sense of value to the community is developed
and the learner wants to become part of the community. Hence the learner’s
developing identity is linked to motivation. They provide the caution that the
type of learning or identity that is developed depends on the nature of the
community of practice. Problems that can occur in the situated context
include the desire for labour over learning, or when the learning environments
do not reflect standards of practices of the trade (Lave & Wenger 1991). These
inhibiting factors to learning the practice of nursing have been reported in the
nursing literature. In relation to the first issue, nursing studies continue to
report that students in some instances are being used to carry out labour
tasks at the expense of experiencing other valuable learning opportunities
(Levett-Jones 2008a; Kimberly 2007; Webb & Shakespeare 2008). In relation to
the second contradiction, studies have reported practice placements that are
not practicing contemporary nursing and do not espouse professional values
(McCarthy 2006; Brown et al 2008). The impact of these types of placement
can lead to deprofessionalisation and inhibit learning (Brown et al 2008).

Nonetheless, whilst Lave and Wenger (1991) accepted that contradictions in
practice naturally exist, they believe these can be negotiated through the
reciprocal learning that occurs between new comers and old timers. Through
continual interaction between the learner and master new knowledge is
socially constructed, facilitating the transformation of practice. Reciprocal
learning has been reported as a benefit of preceptorship in that the student
learns the practice of nursing while the preceptor is motivated to develop
professionally (Lillibridge 2007; Myall et al 2008; Carlson et al 2010).
Critiques of situated learning suggest that while Lave's work illuminates how students learn in practice it does not make explicit the difference between occupational socialisation and learning (Arnseth 2008). Mayer (2004) warned against this approach which he referred to as discovery learning. He claims students are expected to learn in environments that focus on behavioural activity rather than developing a deep understanding of targeted principles and strategies. Hence students may fail to come into contact with essential programme material. In fact, Kirschner et al (2006) suggested that these methods could lead to the student acquiring partial disorganised knowledge and uncorrected misconceptions could remain. Vosniadou (2007) advised against the exclusive use of situated or socio cultural perspectives of learning as the problem of knowledge transfer to new contexts is not made clear in these theories of learning. His argument is that conceptual change, such as new ways of doing things or old theories found to be irrelevant, is not all generated out of collective practice. He claims there is a need to bridge the cognitive and situated learning approach. Due to the constant change in society, technology and an explosion of research evidence, student nurses need to be equipped with problem solving and lifelong learning skills to enable them to reconceptualise their nursing practice on an on-going basis (Spouse 2001; ABA 2003; 2006).

It is accepted that the social constructivist and situated learning theories of Lave and Wenger (1991) and Vygotsky (1978) provide some explanation of the educational foundation for clinical teaching and learning. The concepts of advancing the student's ZPD and the nature of the community of practice formed part of the theoretical framework that underpins this study. However, the type of teaching guidance required and the cognitive element that encourages the student to think abstractly and problem solve is not made
explicit in these theories. Hence there is a need to examine the suitability of
the cognitive apprenticeship theory to address these gaps.

2.1.1. Cognitive apprenticeship

Alan Collins and his colleagues developed a pedagogical theory of situated
cognition known as the cognitive apprenticeship model (Collins et al 1991).
Collins (2006) explained that this theory was constructed from theories of
meta-cognition, problem solving in maths and situated learning. He
suggested that the model facilitates the learner to access the teacher's
reasoning skills i.e. how experts use knowledge to unravel problems in
practice. It is described in terms of teaching methods that are embedded in
authentic learning environments. Some of these approaches were developed
from Vygotsky's (1978) concept of the ZPD. The theory also builds on the idea
of LPP and membership of a community of practice (Collins 2006).

The theory involves six techniques that can be used in the social world when a
master teaches a student. The first one is modelling where the master
demonstrates the object to be learned, followed by coaching which involves
observation of the student's performance and the provision of appropriate
feedback. The scaffolding technique accesses what level the novice is at and
plans activities to process the student along the learning continuum.
Articulation is where the master questions the novice to elicit their problem
solving skills and encourages self-reflection on their performance. Finally
exploration encourages the student to set their future learning goals (Collins

Collins (2006) claimed that Lave and Wenger's (1991) study, based on
traditional apprentices, involved the first three characteristics of this theory;
modelling, coaching and scaffolding. Nursing studies too have illustrated the
benefits of these techniques. Modelling allows the student to develop a conceptual model of the holistic task. Coaching and scaffolding are strategies where the student can integrate their knowledge and skills (Cope et al 2000; Spouse 2001). However, studies within the disciplines of medicine and physiotherapy claim it is articulation, reflection and exploration that allow the student to gain access and control their own problem solving methods or metacognition processes (Page 2004; Stalmelijer et al 2008; 2009).

Within this theory articulation and reflection are the teaching strategies used to develop critical analytical reasoning, whereas coaching and modelling focus on the acquisition of formal knowledge and the performance of tasks (Taylor & Care 1999). However, nursing competencies are highly cognitive, multifaceted and immersed in practice situations (Taylor & Care 1999; ABA 2005; 2006). Therefore students need to learn how to perform the practice of nursing, but also to have the cognitive and metacognitive processes brought clearly to their attention to guide their decision making (Taylor & Care 1999). In order to achieve these outcomes it is argued that preceptors who teach and assess student nurses need to be competent in all the aforementioned pedagogical methods.

The second aspect of the cognitive apprenticeship theory is the need for a suitably designed learning environment which is based on three principles; content, sequencing participation under guidance and situated learning within communities of practice (Collins et al 1991; Collins 2006). Collins et al (1991) described content as the tacit knowledge that experts use to solve problems in practice. Content consists of four components: subject matter, knowledge or theory, rules of thumb or heuristics, the learning strategies of self-assessment and knowing how to find out information. When teachers provide
students access to this tacit knowledge they learn metacognitive techniques which develops their problem solving ability (Collins 2006).

Sequencing learning activities is the second principle; this is where global skills are demonstrated. The student focuses on sub skills and the difficulty and complexity of tasks are increased gradually. The last principle is concerned with practicing in authentic or situated environments. In line with Lave and Wenger's (1991) theory, the student must have a role in the community of practice. They need to have a sense of belonging which enhances the student's intrinsic motivation (Collins et al 1989; 1991).

The cognitive apprenticeship model has been widely used in the last decade as an educational theory to analyse and implement practice education in both health care professional and teacher education (Denner & Burner 2008). The studies found most relevant to my enquiry which used this model included that by Cope et al (2000). This study applied the cognitive apprenticeship model as a framework to analyse practice learning in pre-registration nurse education. Two other studies used the model to analyse the teaching behaviours of clinical teachers in medicine (Stalmeijer et al 2008 ;2009).

In conclusion, it is widely recognised that cognitive apprenticeship brings thinking to the surface in the context of situated learning. Taking cognisance of this principle it is deemed a suitable educational framework to investigate clinical learning. Hence the concepts that have provided the theoretical framework to underpin my study are: the cognitive apprenticeship model; instructional scaffolding and the Zone of Proximal Development(ZPD) (Moll1990); and Legitimate Peripheral Participation (LPP) within communities of practice (Lave & Wenger 1991).
2.2. The pedagogical practices of the preceptor

Many studies have reported findings which describe preceptors' teaching and assessing techniques. However, this is often not the sole purpose of their aim, and research that has investigated specific techniques in depth appears to be limited.

Spouse (1998a;1998b) undertook a naturalistic longitudinal study in the late nineties which illuminated the teaching practices of the preceptor. Findings suggested that the activity theories of Vygotsky (1978) and situated learning theories of Lave and Wenger (1991) provided the theoretical underpinning for the teaching and assessing role of the preceptor. Spouse (2003) explored how eight pre-registration nursing students within a four year degree programme in the UK acquired professional knowledge in the clinical setting. The type of guidance and support students received from preceptors was found to greatly influence the students' acquisition of professional knowledge. Spouse (2001) described guidance in terms of assessing students' curriculum and individual learning needs, setting appropriate learning goals for the student and facilitating the student to observe and participate in all aspects of care according to their capabilities. She identified the teaching strategies used by the preceptor. For example, the preceptor dialogued practice by explaining what they were doing and why, whilst allowing the student the opportunity to ask questions. This approach enabled the student to construct the information from a social and cognitive perspective.

Spouse (1998b) equated this method of teaching to Schon's theory of coaching and to Vygotsky's instructional scaffolding. She describes how the preceptor scaffolds the student from the inner to the outer boundary of practice by providing challenging cognitive and practice opportunities, by dialoguing practice and providing feedback. In order to do this effectively the
preceptor assesses the student's inner boundaries of knowledge and then monitors their learning progress as they participate together in practice. This method of advancing the students' knowledge and practice is linked to Vygotsky's (1978) concept of the ZPD (Spouse 2003). The teaching approaches of modelling, coaching and scaffolding within the cognitive apprenticeship model (Collins et al 1991) are comparable to those utilised by preceptors in Spouse's (2003) study.

Data collection in Spouse's (2003) study included focus group discussions, individual interviews, non-participant observation of practice, documentary evidence of students' reflective accounts of critical incidents and illuminative art work. A convenience sample was used within a single educational setting. Eight participants from a class of 35 undergraduate students took part. Two joined in the 2nd year and only five completed the newly implemented degree course. This study is limited by the single unique educational setting and small sample size. Nonetheless the longitudinal nature and multi-method approach to data collection gives a holistic perspective of students' learning experiences. Even though this study is over a decade old it is one of the few studies which have elucidated the teaching practices of the preceptor in such depth. However, this was not the focus of Spouse's (2003) study which was to illuminate the participants' experiences of becoming a nurse. Hence her findings provide a broad multifactorial insight into this phenomenon (Spouse 2003). A more focused review on the specific nature of the students' and preceptors' experiences of teaching and learning within an established preceptorship model may provide new insights or build on these findings.

Spouse's (2003) findings have been endorsed by other studies. Two qualitative studies by Lillibridge (2007) (n=5) and Å-hrling and Hallberg (2001) (n=17) explored preceptors' experiences and perceptions of their teaching role using
interviews. They found similar teaching strategies that involved dialoguing practice and guiding the students along the continuum of clinical learning. Preceptors sequenced learning where students were taught and encouraged to practise subtasks, whole tasks and then more complex tasks. This type of sequencing is a component of the cognitive apprenticeship model (Collins 2006). However, theoretical underpinnings were not offered in either of these studies.

The teaching methods of coaching and scaffolding described by Spouse were also found in Cope et al's (2000) retrospective qualitative study exploring students (n=30) clinical learning. Data collection and analysis were underpinned by the cognitive apprenticeship model. Semi-structured interviews were undertaken with both traditionally trained (n=11) and diploma students (n=19) on completion and near completion of their courses. Students learned from mentors who modelled and articulated professional practice. They implemented appropriate guided instruction yet gradually decreased their level of supervision as the student gained competency, otherwise known as "fading".

The writers claimed that clinical nursing knowledge can be taught to students using the cognitive apprenticeship model. However, this conclusion may be limited as the findings reported only the student's perspectives of effective teaching methods. This study is 12 years old and students' learning outcomes with the advent of the degree programme now place greater emphasis on critical analytical thinking. Moreover the strategies of reflection and articulation which foster this type of learning were not illustrated in the findings presented. Nonetheless the findings build on Spouse's work by endorsing the appropriateness of theories of situated cognition and situated learning to underpin the preceptors' clinical teaching role. Therefore a more
holistic examination with a similar focus could further validate findings in the current context of nurse education.

Two other studies from medicine were found which examined clinical learning underpinned by the theoretical perspective of the cognitive apprenticeship model. Stalmeijer et al (2008) developed an instrument based on the six teaching methods of cognitive apprenticeship to evaluate clinical teachers' teaching techniques. It was tested for validity using a convenience sample of educationalists (n=12), doctors (n=16) and senior medical students (n=12). The relevance of the descriptors in relation to the six strategies was highly rated by all stakeholders. Minimal adjustments were made to the descriptors in line with findings. All three groups rated giving feedback as an important teaching strategy. Reflection received a low rating from students. Their qualitative comments suggested that this teaching method was not the role of the clinical teacher. Findings justify the appropriateness of the cognitive apprenticeship model as a tool to examine clinical teaching; however, its validity in the nursing context would need to be explored.

Stalmeijer et al's (2009) subsequent study explored the use of these six teaching methods during medical students' clinical placement. They hypothesised that the methods of this model and certain elements of the learning environment constituted a theoretical framework for good clinical teaching practice. Three focus groups where held with a total of 21 volunteer participants. This convenience sample was drawn from a population of 344 sixth year medical students. Vignettes were used to provide examples of the six teaching methods of modelling, coaching, scaffolding, articulation, reflection and exploration and a desirable learning climate was presented. All participants had experienced supervisors using these teaching techniques at times during their clinical placement and students valued the use of these
strategies in clinical practice. However, these techniques were employed more frequently in longer placements and when the medical students had one assigned clinical instructor. Usage also depended on the supervisor’s level of formal training and time available in practice. The techniques used least frequently were: articulation which involved the use of probing questions; reflection on the students’ strengths and weakness and exploration that is when student set their own learning goals. Students desired more explanation from preceptors when demonstrating and greater feedback when they were being coached. These results are interesting as they identify some issues that hinder and foster effective pedagogy. The findings of these studies provide evidence that this teaching model is useful to examine teaching practices in the clinical context. It would be useful to explore its relevance to the type of teaching that occurs in the preceptorship model in the nursing context.

The only study found which focused solely on describing the strategies and techniques preceptors used to teach undergraduate student nurses was a study carried out in Sweden (Carlson et al 2009). This study employed an ethnographic approach. Thirteen staff nurses were observed for 120 hours while precepting students within a cardiology and surgical ward. Subsequently focus group interviews were held with 16 preceptors, two of whom were observed during field work. Purposive sampling was used to gain both a deeper understanding and confirmation of findings from observation.

Three themes emerged from these data. The first theme was “adjusting level of precepting” which involved setting learning goals with students. The second was “performing precepting strategies”; these strategies included demonstration and guided participation which were carried out in an environment of trust where students were free to ask questions. Situational feedback was considered an important component of teaching. The type of
questioning frequently used only accessed knowledge. Occasionally reflective and probing questions were used to stimulate critical thinking and encourage the students to articulate their thinking. The final theme "evaluating preceptorship" reported on the assessment of clinical practice. Preceptors considered assessment as an important element of the role. Reflecting on action which occurred at the end of the shift informed this process. They used the interview process to give the student feedback on their progress.

Although the credibility of findings is strengthened by the triangulation of data collection methods, exploration of the students' perspective may have further confirmed the evidence presented and how effective these approaches described were to students' learning. Furthermore the use of purposive sampling when interviewing preceptors may have limited findings. Nonetheless findings confirm and expand on the teaching approaches described in the studies presented thus far. However, no links are made to an educational theoretical perspective. What types of knowledge or practices were taught and whether these were based on professional knowledge and contemporary practice was not explored in this study.

Findings from a Canadian study by Luhanga et al (2008a) have provided some empirical evidence illuminating the teaching approaches used by preceptors when teaching the student who is not performing to the standard expected. In these cases the preceptor allowed the student to practise under close supervision and observation. Gradual clinical independence was encouraged when the student's performance improved. The teaching strategies preceptors used included: giving demonstrations with cues and prompts, questioning the students on rationale for care and giving reading assignments. The need to give on-going, timely, honest, constructive feedback in private and to foster the students' self-evaluation was considered important. A remedial
intervention undertaken in these cases was reducing the student's case load. Approaches used to prevent failure included setting clear expectations with the student, early identification of unsafe practices, communicating the problem to the students and developing an action plan with the lecturer. It appears clear from these findings that a pedagogical competent preceptor who has time to give to this intensive instructional approach is required.

A grounded theory approach was used in this study to explain the processes of precepting an unsafe student (Luhanga et al 2008a; 2008b; 2008c). Semi-structured interviews were held with 22 preceptors and relevant course documents were analysed. Issues of rigour and credibility of findings were addressed satisfactorily in this study. The teaching strategies outlined in relation to the underperforming student have some similarities to the teaching approaches described in the other studies presented thus far. However, the need to encourage the student to self-evaluate is clearly illuminated in this study. Collins et al (1989) described the teaching approach that facilitates self-assessment as reflection, where the student is asked to articulate their strengths and weaknesses in practice. The evidence presented suggests that teaching strategies need to be intensified for students not achieving standard. Therefore it would be useful in the first instance to explore the preceptors' teaching techniques in relation to all students.

2.2.1. Summary

There appears to be a small number of studies which explored how preceptors teach clinical practice. Collectively these studies have described common strategies employed by preceptors. They consist of setting goals, role modelling and coaching the student by dialoguing practice. The preceptor facilitates the student to move along a continuum of learning by sequencing and scaffolding their learning. Students are encouraged to ask questions and
Preceptors provide feedback. The teaching methods found share similarities with the cognitive apprenticeship model. The least used methods reported were the use of probing questions to encourage problem solving and facilitating students to reflect on their performance in practice. The next section examines literature pertaining to preceptors’ teaching practices and their impact on students’ learning in practice.

2.3. Teaching practice and students’ learning in clinical practice

Some studies have reported on the teaching techniques that students value. In summary they include the following: the preceptor having knowledge; being a good role model; facilitating the student to move along a continuum of observation to active participation (Donaldson & Carter 2005; Myall et al 2008; Grealish & Ranse 2009); giving constructive feedback (Donaldson & Carter 2005) and challenging the student to reflect (Myall et al 2008). Table I examine the findings and methodology from these studies and are provided in Appendix III.

Heffernan et al (2009) carried out a quantitative study in Ireland addressing this query. This study investigated preceptors’ (n=191) and students’ (n=208) views of the preceptor characteristics they considered important and which ones were demonstrated in practice (see Appendix IV for methodological details). Students ranked the characteristics of being approachable, supportive and having good communication skills as most important. That of preceptors maintaining their own education was considered least important. Communication skills were also considered most important by preceptors and understanding the undergraduate programme least important. With regards to the characteristics that preceptors demonstrated, students reported knowledge and confidence as the most prevalent and understanding of reflection the least. This study reflects the findings of the studies cited above.
in that interpersonal skills are valued by both preceptors and students, whereas teaching approaches that challenge the students to think were demonstrated by preceptors the least. Students may value teaching strategies that do not necessarily enhance professional learning. Therefore it is necessary to explore studies that focus on effective teaching methods that enhance student learning.

Structured supervision and reflection strategies have been shown to improve students' learning in some studies. For example benefits in clinical learning were reported in an evaluation study by Ehrenberg and Häggblom (2007), which was carried out following the implementation of a problem based learning and structured supervision model in Sweden. Both students (n=45) and preceptors (n=30) who were involved in this initiative completed questionnaires which included both a visual analogue scale and free text. The authors reported mainly on the qualitative responses. Students benefitted from the facilitated reflective sessions and one-to-one consistent supervision. Findings indicated that students developed lifelong learning and critical thinking approaches to their practice. In this study students presented patient scenarios at seminars. Some preceptors and students perceived the emphasis on theory through this problem based approach negatively affected the time available to practise. The authors acknowledged the limitations of free text responses in comparison to in-depth interviewing. The small sample size and unique innovation limits generalizability.

Another case study carried out by Forneris and Peden-McAlpine (2009) examined an intervention to improve preceptors' coaching ability in relation to developing students' critical thinking. It found that teaching strategies similar to articulation and reflection as described by Collins et al (1991) stimulated critically analysis and developed reasoning skills in student nurses. This article
reported only on the analysis of data collected during two preceptor (n=6)/instructor sessions held before and after the intervention. Findings, although limited by the single perspective of the preceptor, illustrated the effectiveness of this type of intervention. Preceptors in this study learned how to talk through practice and invite student questions in a critical manner. Practical wisdom was imparted when the preceptor dialogued and reflected with the preceptee within the context of patient-care. Specific interventions were introduced to improve preceptors' teaching practices and students' learning in these two studies (Ehrenberg & Häggblom 2007; Forneris & Peden-McAlpine 2009). Therefore it cannot be presumed that preceptors are supported to this extent and have this level of pedagogical competence within other preceptorship models.

A quantitative study using a correlation design investigated preceptors' teaching practices that affected the perceived competency of senior baccalaureate students (n=102) within a US nursing programme (Kimberly 2007). The practices that students perceived influenced their competence were setting goals with the preceptor, receiving constructive feedback and being facilitated to self-evaluate. Consistent structured supervision and reflection also increased perceived competence. Some students (20%) did not value partaking in classes or team conferences when in clinical practice. It appears from these findings that students valued cognitive teaching methods used in the milieu of practice rather than a class format. The use of a self-reporting questionnaire and the small single setting sample limits the generalizability of these findings. However, a high response rate (92%) was achieved.

Another study, (van Eps et al 2006), using a descriptive exploratory design evaluated a yearlong mentorship programme in Australia and identified
preceptors’ teaching practices that stimulated both the technical and cognitive domain of learning for students. Methods included a survey, focus group discussions and interviews with 39 students. During this programme, final year students had access to their personal mentor while on their ten-week clinical placement and at other times during the semesters. Owing to this continuous supportive relationship, students reported being allowed to perform complex psychomotor skills as needed throughout the year. They applied theory to practice and preceptors facilitated them to make judgements, self-critique, manage their time, prioritise care and problem solve. The longitudinal nature of this study where data were collected over four years, and the mixed method approach to its collection strengthens findings. However, these findings may not be transferable as preceptors are usually assigned to students only for the duration of the clinical placement in the UK and Ireland (ABA 2003; NMC 2008).

The evidence presented this far suggests that students benefit from structured consistent one-to-one supervision from preceptors where the preceptors are approachable, have good communication skills and employ teaching strategies such as linking theory to practice, coaching, reflection and giving the student feedback. However, evidence was found that suggested preceptors had difficulty in fulfilling the teaching aspects of their role.

Irish studies have reported that preceptors have difficulties in fulfilling their role in terms of a poor understanding of reflection (McCarthy & Murphy 2008; Duffy 2009) and a lack of confidence in teaching the theoretical basis for their practice (McCarthy 2006). These types of concerns were also reported in a survey (n=84) investigating preceptors’ views on the difficult or easy parts of their role (Moseley 2008). With regard to teaching techniques, mentors scored cognitive issues such as understanding theoretical study, keeping up to date,
giving feedback and assessment negatively. Conversely the interpersonal aspect of their role was viewed positively. Although the response rate was high (86%) and both descriptive and inferential statistics were carried out, the convenience nature and extremely small sample size limits generalizability.

The lack of pedagogical confidence in assessing underperforming students' practice and the reluctance of preceptors to fail students who they deem clinically incompetent is cited in many studies, both Irish (Duffy 2009; McCarthy & Murphy 2010) and international (Duffy 2003; Luhanga et al 2008c). Duffy's (2003) research in the UK used a grounded theory approach with theoretical sampling to interview 14 lecturers and 26 mentors until data saturation occurred. Preceptors reported that they did not feel confident in their judgements and needed more training on how to give constructive criticism. They did not have enough time to identify or fail "weak students" and they did not feel supported by educationalists to challenge students who were not performing to standard. Luhanga et al (2008d) also found that preceptors required more support from faculty when failing students. Findings in Duffy's (2003) study give some insight into the pedagogical deficits of the preceptor and illuminate some issues in terms of educational and organisational support when failing students. However, the focus of the study did not explore how the preceptor taught the weaker student. Therefore the question remains as to whether these preceptors were confident and competent to teach and assess main stream students.

Preceptors have reported in other studies that they need more time to teach. Carlson et al (2010) carried out an ethnographic study which described the conditions that supported or inhibited preceptors' clinical teaching practices. Data were collected initially by participant observation of 13 preceptors working in acute care units over a six month period. Four focus groups were
held with 16 different preceptors to validate initial findings. The study identified that the main inhibitor to teaching students was inadequate time. Patient-care and organisational workload was prioritised, hence leaving insufficient time to teach and assess. The study was carried out in one hospital in Sweden which may limit transferability of findings. However, similar conclusions have been drawn in other international studies (e.g. Duffy 2003; Bray & Nettleton 2008; Duffy 2009; O Connor et al 2009; Stalmeijer et al 2009; McCarthy & Murphy 2010) suggesting that preceptors required organisation support for the role in terms of workload distribution.

2.3.1. Summary
These studies have found that students valued preceptors who are approachable, facilitate them to practise, have some teaching skills and are professionally competent. Evidence indicated that students' critical thinking ability can be enhanced through extended one-to-one supervision when preceptors provide both performance and cognitive coaching. However, studies have found preceptors have problems with the cognitive component of their role, in particular in the area of assessment. Factors that hinder preceptors' teaching practices are inadequate dedicated time and insufficient educational and organisational support for the role. In order to further understand what constitutes effective teaching in clinical practice it was necessary to explore the literature as to what is being taught and hence learned.

2.4. Theory and skills taught and assessed in clinical practice
A standardised competency assessment framework outlined in Chapter 1 was implemented nationally which incorporates a holistic approach to assessment. It is underpinned by a "fit for purpose" ideology (ABA 2005). The aim is to ensure that students acquire critical analysis, problem solving, decision
making and reflective skills (ABA 2005). Therefore the type of professional knowledge required for clinical practice includes both the application of scientific knowledge and tacit knowledge. Both Benner (2004) and Myrick et al (2010) carried out studies which elucidated both the nature of practical knowledge and how students acquired it.

Benner (2004) presented findings from three key studies over 21 years. Her first, a large scale phenomenological study, with a sample based on 21 pairs of preceptors and newly graduated nurses, 51 experienced nurses, 11 newly graduated nurses and 5 senior students, used interviews and observation (Benner 1984). The second qualitative study investigated skill acquisition of critical care nurses (n=130). This study described the type of practical knowledge inherent in expert practice. The third study was an extension of this study and included a further 71 nurses with speciality practice from both home and acute care areas (Benner 2004).

Findings from this collective research (Benner 2004; 2009) extended the understanding of Dreyfus and Dreyfus Model of Skill Acquisition to the nursing professional and therein described the characteristics of nurse performance at different levels. This suggested that nurses move from a continuum of novice to expert when they become personally involved in situations and skills. This experience allows them to gain tacit knowledge, commonly referred to as "knowing how". These studies illuminated the type of knowledge the learner acquired at each stage. Novices focus on rules for practice, text books guidance from preceptors and expectations of the subculture in the unit to guide their practice. Advanced beginners rely heavily on their assessment criteria and asking questions from senior colleagues. Competent nurses have developed rules of thumb based on past experience; they are aware of the unpredictability of practice and hence develop a sense of
salience and finely tuned planning skills. Proficient nurses have gained and continue to gain a practical grasp of each unique patient's situation.

Benner (2004) found that expert nurses used both "techne" (standardised knowledge) and "phronesis" which she describes as practical wisdom or "situated actions based on skill, judgment, character, and wisdom"p189. Nurses who had trouble in engaging in problem identification and had difficulty with interpersonal skills did not become expert nurses. Hence one could conclude from the combined findings of these studies that it is essential that student nurses acquire interpersonal skills, professional skills, and the ability to apply theory to practice. They also need to develop the cognitive skills of problem identification, planning and reflection. Benner's (1984; 2004; 2009) work shed some light on the concept of practical knowledge. She has also offered different teaching approaches that can advance these levels such as coaching and questionig the students in practice. However, her specific focus has not been on clinical teaching and undergraduate education. It would be interesting to explore how practical knowledge is taught within this context.

The concept of tacit knowledge and its relevance to clinical teaching in the undergraduate context is explored in a Canadian study (Myrick et al 2010). The term used in this study is practical wisdom. The processes applied by preceptors (n=12) to fostered practical wisdom in fourth year undergraduate students (n=10) were explored using a grounded theory methodology. Data collection included 41 semi structured interviews, documentation of field notes and journaling. The writers describe practical wisdom in terms of the application of theory to practice in an altruistic manner. They claim it is not just limited to critical thinking but to making the most effective choice within the constraints of practice. The types of preceptors' attributes that constituted
this type of wisdom were doing good, being sensitive to patient needs and compassionate to the patient. Students were taught practical wisdom from preceptors who had altruistic professional identities and who were interested in realising the students' potential by encouraging them to participate in practice. Students were taught technical, caring and thinking skills in this way. In this study practical wisdom was described by participants as intuition and "common sense" and an ability to read between the lines. How the preceptor taught these skills of "reading between the lines" was not described. This study's methodology appears quite robust in terms of trustworthiness and staying true to a grounded theory approach. Myrick et al's (2010) understanding of practical wisdom, while somewhat similar to Benner's (2004) understanding, seems to hone in on the ethical dimension of professional practice rather than the judgements and skills required.

Spouse's (2003) study also identified the key components of what was learned in practice. These included technical and craft knowledge, organisational and team working skills, therapeutic communication and personal development skills. Students found it difficult to access preceptors' craft knowledge. They had to rely on their text books and their critical Incident competencies documents to construct their professional knowledge. Some preceptors were unable to verbalise their practice in terms of articulating their rationales for care. Spouse's study was undertaken over a decade ago, and the advances in nurse education could potentially have addressed this deficit.

However, evidence from a small Irish qualitative case study (n=6 preceptors) has shown this not to be the case (McCarthy 2006) (see Appendix IV). In fact this study not only reported deficits in relation to preceptors' teaching abilities, it raised other concerns in relation to the practices students were taught. Preceptors in this study taught students facts and important things to
They were sceptical regarding the value of theory. There was no evidence of challenging the students thinking. They discussed nursing in terms of task oriented skills. Nursing care was focused on addressing the patient's physical needs rather than individual needs. Communication was superficial and centred on information giving instead of assessing patient needs. Attributes that were considered to be important for students were to be respectful, have good manners, and provide comfort and reassurance to the patient. While some interpersonal skills and physical needs were being taught in practice, a holistic individualised approach to nursing care and the type of knowledge that fosters the previously described professional practical wisdom were absent in the findings presented.

Cognitive, affective and psychomotor skills are all required to fulfil the profession's understanding of clinical competence (ABA 2005). It is presumed these elements are taught and hence are being assessed in practice. Bray and Nettleton's (2007) UK study found mentors assess such things as students' attitudes, how they react in clinical situations and how they manage their workload. The assessment paper work does not always correspond to what they are assessing. Students discussed assessment as a paper exercise where most mentors did not have the time to understand their learning outcomes. Preceptors' lack of understanding of the assessment tools was reported in other studies (e.g. Neary 2000; McCarthy & Murphy 2008; O'Connor et al 2009). Bray and Nettleton's (2007) study used mixed methods and involved a quantitative and qualitative phase. The findings presented were drawn from data collected from semi-structured interviews (mentor n= 20; mentee n =20). The fact that the perspectives of both mentors and mentees were sought strengthens findings.
Another UK qualitative study by Webb and Shakespeare (2008) validated some of these findings. They explored how mentors make judgements about students' clinical practice. Both students (n=9) and mentors (n=15) were interviewed. Mentors discussed students in terms of attitudes and manners such as being enthusiastic, confident and assertive. Mentors made judgements on these types of subjective attributes rather than objective learning outcomes. Students felt they had to invest heavily in developing a relationship with the mentor. A critical incident technique was used where participants were asked to recount a key incident in their mentoring relationship. Other approaches to data collection with a direct focus on the knowledge, skills and values deemed necessary for practice may have yielded further understandings of assessment practices.

An Irish study (Timmins & Dunne's 2009) was found which shed some light on the written practice knowledge that is assessed in students' competency documents. This quantitative study examined students' completed competency documents (n=480) and surveyed students' perceptions of the process (n=100). The written accounts presented were descriptive with no evidence of linkage to theory or reflective learning. The students reported that portfolios were beneficial to their learning (>3.4 on a Likert scale of 1-5). However, they rated the guidance they received negatively (<2.5). Similar findings in terms of guidance were reported in another Irish study by O Connor et al. (2009) (see Appendix IV for critique of these studies). The argument may be made that students found it difficult to write in a critical way yet they may have demonstrated this type of learning in practice. How this type of critical thinking is assessed in practice is not known.
2.4.1. Summary

The type of knowledge required for practice has two components which are formal knowledge and craft knowledge. Myrick et al (2010) and Benner (2004) described this knowledge as practical wisdom. The constituents of practical wisdom include critical thinking, judgement, altruistic behaviour, the application of theory to practice and the ability to make appropriate decisions based on the situated context. Findings presented in this theme suggest that the knowledge, skills and values that are taught and assessed in practice focus on interpersonal, technical and organisational skills with little emphasis on the cognitive domain of nursing practice. Furthermore assessment tools may not correspond to what is assessed. The practical knowledge and skills that are taught in clinical practice and how they are taught and assessed needs further exploration.

2.5. The impact of the learning context

The literature that reports on the impact of the clinical context on student learning will be explored within this theme. Levett-Jones et al’s (2009a) research illuminated many factors that influence students’ learning in clinical practice. This study explored nursing students’ experience of belongingness when undertaking clinical practice. It was a cross national multisite case study using a mixed methods design. The case consisted of third year pre-registration nursing students from three universities, two Australian and one English. A total of 362 students participated in the quantitative phase and 18 in the qualitative phase. Qualitative findings reported that to achieve competence the following conditions need to be met: student safety and security, belongingness, positive self-concept and a positive attitude to learning. These needs were found to be hierarchical in nature.
The staff–student relationship was central to the students' experience of belonging. This involved issues such as the level of challenge and support the mentor gave the student. Negative aspects were having too high expectations of the students, been held back or undermining the students' confidence, while pushing the students' boundaries was a positive influence (Levett-Jones et al 2009b). When this occurred they asked questions and challenged practice. When they felt they were being a nuisance and their contribution was not acknowledged this had a negative impact on their learning. When students did not have structured mentor support they often felt excluded and on the outskirts of the team, reporting feelings of disempowerment. Other studies reported similar findings (Cope et al 2000; Spouse 2003; Higgins & McCarthy 2005; Edgecombe & Bowden 2009). Students lacked motivation and suffered anxiety and stress when they did not experience belonging. When they felt alienated or insecure they were more likely to conform to practices not consistent with their professional values or knowledge. Their need to belong was more powerful than providing quality care (Levett-Jones & Lathlean 2009c). Findings from the quantitative aspect of the study (Levett-Jones et al 2009d) further validated these themes.

While Levett-Jones et al's study (2009) reported the students' perspectives only, the combined use of survey and interview provided an in-depth understanding of the significance of belonging for the student and the factors that affect the student's ability to learn in practice. These factors support the concept of Legitimate peripheral participation (LPP) where the motivation to learn is fuelled by the goal of becoming a valued member of the community of practice (Lave and Wenger 1991). Spouse (2003) and Myrick et al's (2010) findings further supports the notion that students' professional knowledge and identity is enhanced by the extent they are involved in practice. Students needed to feel useful and valued as a member of the team. The type of
preceptor–preceptee relationships that supported this learning were based on the principles of equality, trust, mutual respect, support and personal interest.

Levett-Jones et al's (2009d) online survey of pre-registration students (n=362) reported that the duration and structure of clinical placements was one of the most significant factors that influenced students' experience of belonging. Cope et al (2000) supported these findings where the time spent with the preceptor was a variable in students' learning. Shorter placements lead to feelings of isolation. Spouse's (2003) study found that professional learning occurred when students spent time working alongside the mentor delivering care. When this type of support did not occur students could not gain access to practice. Kimberly (2007) reported a relationship between senior nursing students' perceived competence and time spent with the preceptor. Other studies found that students need to spend time in clinical practice in order to become competent (Duffy 2003; Duffy 2009; Edgecombe & Bowden 2009).

The nature of nursing practice that students participate in and role models they learn from can influence student learning (ABA 2003). The positive and negative effects on students' learning of an enriched or impoverished environment of care for an older person are reported in a large three and half year multi-method longitudinal study (Brown et al 2008). Students who witnessed poor standards of care had negative attitudes towards caring for older people. On the other hand when they experienced enriched environments with contemporary nursing values involving a patient-centred holistic approach, they viewed gerontological nursing in a more positive light. Classroom teaching had no effect on students' attitudes to gerontological nursing. Data collection for this study included a postal survey (718 student nurses and 300 general public) and focus groups (n= 67 student nurses). This
evidence suggests that the socialisation process that occurs in clinical practice has a powerful effect on what students learn. Areas that do not practise contemporary nursing can lead to deprofessionalisation and inhibit learning.

Webb and Shakespeare (2008) reported that students will try to impress the preceptor in order to pass the placement. They found students did not object when supernumerary status was ignored and they were treated as workers. In other studies students have reported a pressure to comply with ward practices not consistent with professional practice (Calman et al. 2002; Pearcey & Elliott 2004; Levett-Jones and Lathlean 2009c). One could deduce from this evidence that students hold passive positions within practice and their learning is greatly influenced by the preceptors they work with. However, while some studies report that students developed professional identities from ideal role models, they also found that learning occurred when they witnessed unprofessional practice. In these instances they learned how not to practise as a nurse (Pearcey & Elliott 2004; Grealish & Ranse 2009; Myrick et al. 2010).

2.5.1. Summary

These studies have shown that student learning and competency attainment takes place when students experience supportive, appropriate supervision and belong to a community of practice. When students experience exclusion this negatively impacts their learning. Evidence presented shows how the processes of socialisation in practice can impact the students' learning either positively or negatively. These issues require further exploration.

2.6. Literature review summary and conclusion

Vygotsky's (1978) concepts of instructional scaffolding and the ZPD, and Lave and Wenger’s (1991) idea of LPP within communities of practice describe how learning occurs in the situated environments. However, the teaching
techniques that promote the cognitive element of learning were not made explicit in these authors' writings. The cognitive apprenticeship model (Collins et al 1991) addressed this deficit. Studies focusing on practice education underpinned by these theories were presented. Hence the suitability of using these three theories as the theoretical framework to inform this study was justified.

A small number of studies were found which explored how preceptors teach clinical practice. Only two studies from nurse education used educational theories to underpin their inquiry (Cope et al 2000; Spouse 2001). Only six Irish studies were found that related to this issue which highlighted concerns particularly in the area of assessment. Therefore little is known about the current pedagogical practices of the Irish preceptor. Furthermore the educational theory of clinical teaching needs further refinement. Hence it is timely to build on this body of knowledge and explore the pedagogical practices of the preceptor through an educational lens in order to be able to describe fully what constitutes effective clinical teaching.

Evidence indicates that preceptors require three factors to fulfil their clinical teaching role effectively. They are a high level of pedagogical and professional competence, time to dedicate to teaching and organisational and educational support for the role. The clinical teaching methods and processes that achieve effective clinical learning within an Irish preceptorship model have yet to be identified. Hence it would be beneficial to identify preceptors' pedagogical practices and ascertain a best practice model within an Irish context.

Studies have found that students learn interpersonal, technical and organisational skills in practice. They also learn tacit knowledge which involves the application of scientific knowledge and practical wisdom. There
appears to be a paucity of literature that describes the components of tacit knowledge and how this is taught in practice. The question remains as to what kind of knowledge, skills and values are being taught and assessed in undergraduate students' clinical practice. More importantly do these match both professional standards and those of a degree level education? Studies have shown that students construct their professional identity from both positive and negative experiences in practice. It is therefore necessary to explore how preceptors engage in clinical teaching, the clinical learning processes that are being utilised and the impact this has on students' learning in an Irish context.

There are a large number of small scale studies investigating elements of the clinical teaching and learning within undergraduate preceptorship which have yielded valuable insights. However, as a result of the small scale nature of these studies, or the focus and location of their inquiries, this phenomenon requires further exploration. It was decided that an in-depth holistic exploration of clinical teaching and learning within an Irish preceptorship model could yield new understandings and build on the existing knowledge.

In the earlier stages of this study the research questions focused on how preceptors engaged in the clinical teaching and assessment of student nurses and the influences on the teaching–learning experience. The literature review shed new light on these questions. A gap identified in the literature that needed to be addressed was: what teaching methods were used by preceptors and what learning processes were utilised within preceptorship in the Irish context? Furthermore do these practices and processes meet the learning requirements of a BNSc curriculum which has been in existence in Ireland for the past decade? Hence it was necessary to expand the original research questions to include an exploration of the pedagogical practices of the
preceptor, the clinical learning processes being utilised within the preceptor-student relationship and the professional values, skills and knowledge that underpin these processes in practice. From reviewing the international literature it became clear that the question of what constitutes effective clinical teaching from an educational theoretical perspective had not been fully answered and required further exploration. Therefore I was interested to identify when best practice occurred based on current theoretical and professional principles, in particular from the educational perspective of cognitive apprenticeship (Collins 2006), situated teaching and learning in communities of practice (Lave 2009, Wenger 2009), and scaffolding (Vygotsky 1978).

The research questions identified were formulated to guide the study design and are presented at the beginning of Chapter 3.
Chapter 3: Methodology

Introduction

This chapter describes the epistemological orientation, study design and the methods of data collection and analysis. Section 1 outlines the aim of the study and research questions. Section 2 discusses the rationale for using an in-depth exploratory qualitative design, the ontological and epistemological underpinnings of this methodology, strategies to enhance methodological rigour, ethical considerations and the initial study. Section 3 describes the approach to access, sample selection, data collection and data analysis. Section 3 offers a reflexive account of the role as an insider researcher and conclusions.

3.1. Aim

The overall aim of this study was to explore the clinical teaching and learning within a preceptorship model in an acute care hospital in Ireland. The original research questions focused on how preceptors engaged in teaching and assessing students and what factors influenced clinical learning. Following a more in-depth examination of the literature pertaining to clinical teaching it became apparent that other areas needed exploration. They were: what were the pedagogical practices of the preceptor and do these teaching practices meet the learning requirements of the curriculum? What professional knowledge and values underpinned the learning processes used and when did best practice based on educational and professional principles occur? The key question that arose was what constitutes effective clinical teaching, thus the theoretical perspective that was deemed to be most appropriate for my study
stems from the work of Lave and Wenger (1991), Vygotsky (1978) and Collins et al (1991). This has been explored at length in the previous chapter.

3.1.1. Research questions

The following four broad questions were devised to address the aim and guide the research design:

1. How do preceptors engage in the clinical teaching and assessment of undergraduate BNSc (general) students?
2. What are the pedagogical practices of the preceptor when teaching and assessing the undergraduate BNSc general students?
3. What clinical learning processes are being utilised and what professional values, skills and knowledge underpin these processes in practice?
4. When does best practice based on current theoretical professional and educational principles (in particular cognitive apprenticeship and situated learning), in relation to the clinical teaching and assessment of undergraduate BNSc (general) students occur?

3.2. In-depth exploratory qualitative design: epistemological and ontological orientation

A qualitative exploratory design underpinned by the philosophy of social constructivism was the method chosen for this study. This approach was selected as it addressed the aim of study and the nature of knowledge that was being elicited (Creswell 2003). The literature review showed that whilst clinical education has been the subject of much research, there was a gap and a lack of robust research when it came to the role and practices of the preceptor within an Irish setting. Therefore I was interested in acquiring an in-depth holistic understanding of both students' and preceptors' experiences, intentions, motivations, thinking and behaviour in relation to clinical teaching and learning within an Irish context. Parahoo (2006) suggested that exploring
a phenomenon in order to understand participants' perceptions and actions is a principle facet of the qualitative paradigm.

Qualitative research is described as a systematic approach which values subjectivity, and is used to describe life experiences and give them meaning. It provides a detailed account of a phenomenon from an 'emic' perspective (Denzin and Lincoln 2003a). This aims to explore the social reality as experienced by the respondents and is used when one wishes to explore, explain, evaluate, describe, discover and understand a social and cultural phenomenon (Burns & Grove 2009). This study is interested in addressing all these descriptors to examine the practices and reality of preceptorship, therein answering the previously set out research questions.

International studies have offered some insight as to what constitutes effective preceptorship and some theoretical perspectives have been developed. However, the important variables with regards to teaching and learning that need to be examined are not clear. Furthermore the role of the preceptor is relativity new in the Irish context, and the cultural and social influences have not been fully explored. I was interested in generating new knowledge and developing existing theoretical perspectives in relation to this phenomenon. The positivistic approach of testing existing premises or theories of clinical teaching was not appropriate in this instance because insufficient was known about the phenomenon (Bryman 2004). Hence a qualitative, interpretative methodology underpinned by the philosophy of the social constructivist paradigm was deemed the most suitable for this study.

It became apparent from the literature reviewed that the pedagogical practices and the knowledge taught by the preceptor were rarely the focus of research. However, this issue could not be investigated in isolation as other factors were
found to be very influential in the student's perceptions of an effective learning experience. These included: the interpersonal aspect of the teaching-learning experience; organisational influences such as time and the structure of the preceptorship model. The use of an exploratory qualitative design allowed for a holistic exploration of both the students' and preceptors' experience of teaching and learning. As Parahoo (2006) suggested, using this design participants could share their complete experience and the contextual influences on those experiences.

In order to facilitate an in-depth exploration and understanding of the teaching and learning that occurs between the preceptor and student different sources of evidence were chosen to illuminate this phenomenon (Denzin & Lincoln 2003a). Hence data triangulation was utilised to ensure the completeness of findings (Streubert & Carpenter 2011). Both students' and preceptors' views and experience of clinical teaching and learning were investigated. Interviews were used to generate perceptions and views whilst documentation was used to gain insights into the processes, standards and content of clinical teaching and learning. Furthermore by interviewing both preceptors and students on different units, potentially different ways in which the phenomenon was practised be explored (Silverman 2005). Clinical Placement Coordinators (CPCs) and link lecturers have a role to support preceptors to teach and students to learn within preceptorship models in Ireland. However, these support roles were not a key element of my inquiry. The focus of this study was on the clinical teaching and learning process as experienced by both preceptors and students and, while their experience of the type of support that influenced this process was explored, the nature of these support roles was not. Therefore I did not include CPCs or link lecturers as participants in this study.
The exploratory qualitative design used in this study was underpinned by social constructivism and the interpretative approach. Constructivism aims to discover how language or utterances work, understanding what knowledge underpins social practices and discovering the strategies at play (Schwandt 2003). This demanded an inductive interpretative approach where I was open to new ideas by listening to participants and examining my own perspective. This ontological stance acknowledges that there is no singular truth or reality; rather multiple realities exist based on individuals' interpretations of reality (Parahoo 2006).

While Silverman (2005) claims that the methodology chosen needs to be the most appropriate for the aim of the study, he also suggested it is important that the design corresponds with the researcher's epistemology and philosophical view point. I acknowledge the holistic nature of reality and recognise the value of studying phenomena in the natural uncontrolled environment. I recognise that a qualitative interpretive approach does not produce an ultimate truth or 'proof' because this approach to research promotes the idea of numerous realities. Indeed, the purpose of this research was to shed new light on and theoretical understanding about clinical teaching and learning within a preceptorship model and, to this end, it was possible that different perspectives would be found (Denzin & Lincoln 2003a).

Furthermore my beliefs aligns with to those of social constructivism which claims that knowledge is not passive but is constructed through making sense of experience and these experiences are interpreted and influenced by historical and socio-cultural backgrounds (Schwandt 2003). This epistemology informed the research design and methods.
As the researcher I was part of the hermeneutic cycle of interpretation (Streubert & Carpenter 2011). Hence while I needed to examine and interrogate my preconceived ideas or theories gleaned from my experiences and the literature I did not attempt to bracket these theories or preconceptions. Koch (1996) claimed that hermeneutic inquiry is where data are gleaned from participants; it is then fused with the experiences of the researcher and placed in context. She refers to this as the co-constitution of data. As indicated I am already knowledgeable about the subject of this study, i.e. teaching and learning from my professional, clinical and educational background. However, I have made visible the perspectives I bring to analysis and interpretations which have been outlined in the first chapter and will be discussed in later sections.

A distinctive characteristic of qualitative research is the fact that it involves interaction with the participants under study to illuminate the meanings they ascribe to their experience and to understand their perspective (Holloway 2005). As is advised by many authors, (e.g. Guba & Lincoln 2005; Holloway & Wheeler 2010), reflexivity underpinned my inquiry. As I was the instrument in the collection and analysis of data it was essential to develop the ability to critically reflect about myself as researcher. Sensitivity to my personal introspection was developed. It is acknowledged that all inquiry is laden with values and biases. In this study these were explored, interrogated and critiqued throughout the research process. New learning and knowledge was constructed as a result (Guba & Lincoln 2005). A reflective diary was used to facilitate these deliberations. My experiences of being an insider researcher are discussed in Section 3.4.
Holloway and Wheeler (2010) suggested that theoretical frameworks are required in qualitative studies to ensure a focused in-depth examination of the core issues. These can emanate from personal experience, theories or data gleaned from empirical evidence. These frameworks develop lines of inquiry or propositions that help to develop the research questions and in-depth exploration of key concepts (Anfara & Mertz 2006). Many qualitative writers have claimed that evidence cannot be divorced from theory and clear theoretical assumptions are required to inform the research design (Silverman 2005; Anfara & Mertz 2006; Holloway & Wheeler 2010). A key proviso to the application of theories in qualitative work is that they be used in a flexible manner rather than setting out to prove or disprove them (Silverman 2005; Holloway & Wheeler 2010). The previously described theoretical framework used in this study and its inherent propositions informed both the interview guide and the initial analytically framework. However, many other concepts and experiences were discovered and explored during the data collection and analysis stage of this study. Therefore, in keeping with an exploratory qualitative approach, both induction and deduction featured in the collection and analysis of data (Silverman 2005). This issue will be discussed further in section three.

3.2.1. Research Site
The hospital setting selected to explore the phenomenon of clinical teaching and learning is considered typical of other acute care hospitals in Ireland and would share many similarities. It is a 323 bedded teaching hospital with a facility for 67 day cases. It is one of the 51 acute care hospitals in Ireland where undergraduate and post graduate education for all health service professionals takes place. It employs 593 general registered nurses. The hospital has specialities in medicine, surgery, obstetrics, gynaecology and paediatrics. This setting is relevant to the issues and questions of interests
proposed in this study as this hospital is the main clinical site for general trained nurses who are students of a university in Ireland. The hospital and all clinical sites therein were accessible to me which afforded me the greatest opportunity to learn about preceptors' teaching and assessing practices and students' learning (Silverman 2005).

Four clinical units within the hospital were chosen. This approach allowed me to explore the clinical teaching and learning that occurred between the preceptor and the student within different units within the one hospital. Hence the phenomenon was examined across different settings within one hospital, which enabled a holistic picture of clinical teaching and learning within preceptorship to emerge.

In line with the qualitative paradigm it was not my intention to suggest that the setting chosen was representative of other contexts but to understand and describe the phenomenon of clinical teaching and learning within a unique context. The aim was to engage in theoretical generalisation by linking the research to other studies that have similar theoretical perspectives (Burgess et al 2006). An analytic generalization approach as described by Silverman (2005) was used where theoretical perspectives were linked to the complex teaching and learning practices illuminated within this study. The methodology used was adaptive and flexible; using a reflective approach I was sensitive and responsive to contradictory evidence (Bryman 2004).

3.2.2. Strategies to enhance trustworthiness

The concepts of credibility, dependability and transferability are important when examining the rigour of my study and these terms fit with the epistemological standpoint of a qualitative constructivist inquiry.
Credibility refers to the believability of the data. To address the concerns of believability, as advised by Lincoln and Guba (2005), I exposed and interrogated my assumptions through the use of a reflexive approach. How I was influenced or influenced participants was described and interpreted. These reflections were recorded in a journal after each interview (see Appendix V for an example of a field note containing my reflections and assumptions). Throughout the study I self-appraised and self-critiqued my data collection methods, analysis and underpinning assumptions and also recorded these deliberations in my reflective journal. These reflections led me on paths where I had to re-listen to recordings, and re-examine findings from an alternate viewpoint.

Writers warn against the premature verification of previously held assumptions when collecting and analysing qualitative data (Silverman 2005; Denzin & Lincoln 2003b). Koch and Harrington (1998) suggested that all research is based on assumptions and a certain standing within the literature. However, they argued that, within the qualitative paradigm, the researcher has the opportunity to be a part of the hermeneutic cycle of interpretation. They describe this as a circular process where the interpreter gains access to a shared understanding of the phenomenon under study. A reflective approach is required at each stage of the study to illuminate shared and new understandings. Through this process of interpretation I gained new understandings by fully participating in conversations and dialogue where I challenged my pre-existing assumptions (see Appendix VI outlining pre assumptions recorded prior to undertaking the study). The type of questions I asked and how I asked these questions allowed meaning to be negotiated mutually between the participants and myself (Schwandt 2003). Hence, as Creswell (2007) suggested, new learning emerged. An example of such learning was where I held preconceived notions that students would express
discontent when they were not exposed to good teaching strategies or when they did not receive adequate supervision. I challenged this assumption through the interviews and during analysis of the data. It became evident that students were content when they were appreciated or could contribute to the workload as part of the team and their learning was of secondary importance to them.

The strategy of 'member checking' is often advocated to ensure credibility. This is where an analysis of the text is returned to participants to clarify misconceptions and negotiate meanings (Denzin & Lincoln 2003b). Bryman (2004) highlighted two problems with this form of external 'validation'. There is first the problem of deciding what part of the analysis participants need to 'validate'. Secondly, there is the consideration that whilst participants may have expressed a view at the time, and this was faithfully recorded, the strategy of asking the participant to look again at the sense made of their talk may simply generate a second account rather than 'validate' the first. For these reasons, 'member checking' post analysis was not used. However, throughout and at the end of the interviews I used the techniques of paraphrasing, reflective and summary questions to give the participants opportunities to expand upon what they had said and to check out my understanding of it. External checks for credibility also included peer briefing (Merriam 1998).

My research supervisor was consulted throughout the analysis process to critique my interpretations. This was an important part of that process. While the final judgement was mine, I discussed and deliberated each step of the research process with my supervisor. She reviewed and critiqued my methodology and I had the opportunity to discuss with her issues of trustworthiness in relation to my interview guide, the interview process and
my initial analytic framework. My supervisor reviewed participants' transcripts, the data that reflected my initial coding and classification, and read initial drafts of my subsequent findings. She often challenged and asked me to explore further the validity of my conclusions and theoretical perspectives. I found this very useful as I became more rigorous and insightful during this analytical process. In the feedback given from initial drafts she encouraged me to examine the significance of the findings. This re-examination enabled me to move from a descriptive account of the phenomena to the interpretative narrative presented within this thesis. The research supervisory relationship was part of the learning journey that enhanced the credibility of this study.

Dependability can be facilitated when there is a clear "decision trail" concerning the study from the outset to reporting the findings (Koch 1994). Koch (1994) described an audit trail or decision trail as a recording of decisions, choices and insights during the study. An audit trail was maintained which involved recording and filing research generated data consistently and conscientiously. The decision making matrices, with examples of the application of the analytic framework used for my study, are presented in appendices VII, VIII, IX, X and discussed in Section 3.3. However, while I have presented these data and have provided examples of how decisions were made, it is accepted that interpretative analysis relies on an intuitive creative approach. Therefore it is not always possible to illustrate the analytical decisions as linear processes (Cutcliffe & Mc Kenna 2004).

Sandelowski' (1993) suggested that no two researchers will arrive at the exact same findings as qualitative research accepts the premise that multiple realities and meanings exist. I have immersed myself in the data from a particular theoretical and philosophical understanding. Whilst it is unlikely that another researcher would use exactly the same methods and reach
precisely the same conclusions, to ensure trustworthiness and to allow the reader to consider the dependability of the findings, all aspects of the methodology, design and methods have been presented transparently and the data are displayed in such a way that others can judge their authenticity.

Transferability relates to the extent the data are relevant to contexts outside the study (Guba & Lincoln 2005). Avis (2008) suggested that thick descriptions in the narrative allow evaluations to be made with regard to contextual similarities. Thus, my ‘Findings’ chapter attempts to provide such richness of data. Silverman (2005) also claimed that matching evidence-based theoretical perspectives to the patterns that were found from the analysis of the data enhances the transferability of the study to other contexts. The theory used to support the findings is presented in the discussion chapter.

3.2.3. Ethics

The study was undertaken in an acute care hospital in the Republic of Ireland. An application was made formally to the hospital’s Research Ethics Committee and approval was granted in September 2009.

Formal permission to conduct the study and to gain access to the participants was sought from the Director of Nursing in the health services (See Appendix XI), and the Head of the Nursing Department in the third level institution. I personally met with both directors to discuss the study. Access to the clinical sites and to the participants was granted. I then met with and gained the support from the Clinical Nurse Managers (CNM) of the clinical units. They gave their consent to display information posters to advertise the research and to hold information sessions inviting potential participants to take part. At these sessions I clarified the study aims and explained the nature and purpose of the study. At these information meetings preceptors and students who met
the criteria for inclusion and who expressed an interest in partaking in the study were invited to participate. Subsequently, written information with the details of the nature and aim of the research were provided to all potential participants (See Appendix XII; XIII). Hence participants had to opt in to take part. This ensured informed consent (Christians 2003). Interviews were arranged with preceptors and students in consultation with the CNM for a time when they could be released from their clinical commitments. I did not expect preceptors to take part in the study outside their working hours. Hence cultivating relations with gatekeepers i.e. the CNMs was an important factor in gaining access to the informants in this study (Bryman 2004).

Ethical considerations within research are of paramount importance, as methods that involve humans must be examined in order to protect their rights (Christians 2003). The ethical principles of beneficence (to do good), non-maleficence (to do no harm), autonomy (self-determination) and justice (fairness) were upheld in this study (Normand et al 2003). The participants' right to self-determination was maintained by ensuring the on-going and voluntary nature of the consent process (Christians 2003). Participants were given a consent form to be completed on commencement of their interviews (See Appendix XIV; XV). Participants were informed that they were free to leave the study at any time and without explanation. I was aware of the risks of participant exposure or embarrassment resulting in potential self-doubt, loss of self-esteem or employment standing. Hence issues of reportage and ensuring anonymity were discussed and agreed in advance. All participants were aware that it was my intention to disseminate anonymised results to potential policy makers.

Anonymity and confidentiality of the participants was upheld by the rules set down by the Data Protection Act (2007). All collected data were separated
from personal identity and codes were assigned to identify individual cases. All names, addresses and telephone numbers have been kept secure and separate from the database. All data collected were stored in a locked cabinet or a password protected file. Following analysis, digital recordings were deleted. Anonymity of the research setting will also be preserved throughout the reporting of this study as it may be possible to identify the setting and the individuals, especially given the small population of Ireland.

3.2.4. Initial study

A pilot study took place in November 2009. This was a preliminary investigation which tested the feasibility and appropriateness of the planned research design and methods. It was conducted in one clinical area i.e. Unit A where students were on placement at the time. Two preceptors and two third year students were recruited, semi-structured interviews were held and assessment documentation was examined. The initial study helped to refine plans in regards to sampling and data collection. In addition, the pilot allowed me to practise my skills as an inquirer; both questioning skills and reflective skills were developed (Denzin & Lincoln 2003b). The data collected in this Initial study were re-analysed when a more focused analytic framework was developed. Hence these data contributed to the findings of this study.

3.3. Population and sample selection

Participants were selected on the basis of their ability to contribute to the understanding of the role of the preceptor. Consideration was given to where the process i.e. preceptorship was most likely to occur as this was the key factor in choosing firstly the settings and then the participants for this study (Denzin & Lincoln 2003a). For this reason purposive criterion sampling was used.
Sampling decisions regarding the selection of units to recruit the participants for this study were based on those settings where the greatest experience of the preceptorship model existed. Two surgical and two medical clinical placements were chosen. Students spend the longest period of time on these areas and a greater number of students are allocated to these settings. Furthermore, students are more likely to develop many of their core skills in these areas. Hence, the typical manifestations of the phenomenon being studied i.e. teaching and assessment practices of the preceptor were available in these clinical sites (Richie et al. 2003).

Inclusion criteria for preceptors were as follows:

- Worked in one of the four selected clinical areas
- Allocated to teach a student on a day-to-day basis
- Been the named preceptor for at least 2 students
- Completed the preceptorship preparation course

Findings from the initial study informed this criterion sampling. My original intention was to find preceptor-student pairs who worked together on a continuous basis. However, from the initial study it became obvious that preceptors assigned to students did not always work with them. Whilst I endeavoured to access allocated preceptor-student pairs where these existed, I accepted preceptors who were assigned to the students in the study on a day to day basis. Although I was interested in selecting preceptors with diversity of experience and educational background, this could not be established in advance without elaborate questioning and screening. Therefore, I did not control for this. Demographics (Appendix XVI) were collected and diversity did naturally occur and is reported in the findings chapter.
When it came to selecting students, a stratified purposive sampling strategy was employed. Therefore a selection of 1st, 3rd and 4th year students was chosen from each setting to facilitate comparison between these student subgroups. Students in the 4th year spend time as both supernumerary and internship students. Hence two were selected from each of these groups. Students are not allocated to the acute hospital during their second year and therefore this subgroup did not form part of the sample. Mature students make up from 15% to 35% of the cohort on all nursing programmes in Ireland as these places are reserved for them (ABA 2013). Hence three mature students (>28 years old) were included to incorporate a cross section of the population under study (Ritchie et al 2003).

In keeping with a qualitative tradition the sample size was kept reasonably small, yet it had to be adequate to allow for both an in-depth and holistic examination of the issues (Richie et al 2003). It was considered that this would be achieved by interviewing approximately three preceptors and three students (one from 1st, 3rd and 4th year) from each of the four clinical sites. This was followed by an in-depth analysis of these students' competencies portfolios and other documentation pertaining to the preceptorship model. A total of 13 preceptors and 13 students were recruited. This sample generated 26 interview transcripts, each approximately 45 minute in length, 13 competency portfolio documents and nine policy/guidelines documents for analysis. In keeping with the qualitative paradigm if new factors had arisen that needed exploration or data saturation was not achieved then sampling would have continued (Silverman 2006).

3.3.1. Data collection

The main method of data collection was semi-structured interviews which have allowed rich, descriptive data to be gained (Bryman 2004). Initially it was
my intention to observe one of the key events in the teaching assessing process i.e. the assessment interviews. However, after many attempts and numerous cancellations, I did manage to observe one final interview which lasted ten minutes and did not yield any new insights. As the study progressed it became clear that the assessment interviews were organised in an ad hoc manner and did not take place at a planned time. This made it impossible for me to continue with this method of enquiry. As observation of day-to-day practice was not a feasible option in my employed position as a lecturer a decision was made to concentrate on other methods of data collection.

In addition to interviewing both preceptors and students I examined documentation used to guide and assess the teaching and learning process. This included the curriculum document, the preceptorship policy, written guidelines on the assessment process provided by the university and the students’ completed competency assessment portfolios. The initial study helped to identify other significant artefacts that guided clinical teaching and learning. Therefore the following two types of documentation were also collected: the guidelines on the competency assessment process and reflective practice provided by the Clinical Placement Co-ordinator (CPC) when preparing the students for clinical practice; the student learning guidelines for each individual unit that were posted on a moodle site by the allocated CPC. These documents illuminated some of the educational, professional and occupational knowledge and values used by the preceptor when teaching and assessing the student. They also identified contradictions between written standards and actual practice.
3.3.1.1. Interview guide

The interview guide identified the key issues to be explored, rather than posed specific closed questions. It was based on the research questions derived from the extensive review of the literature and fine-tuned following findings from the initial study. The original guides used in the initial interviews focused broadly on participants' experiences of teaching, assessment, resources and support for the role. These areas of exploration allowed participants to give a full and coherent account of their experiences of clinical teaching. Initial findings described teaching and assessment strategies that had some foundation in the teaching methods proposed in the Cognitive apprentice model (Collins et al 1989). Therefore a decision was made to probe the use of these strategies in subsequent interviews. What was taught in practice was addressed in the initial guide; however, this issue needed to be separately addressed within the guide and probed to ascertain the type of knowledge, skills and values that were taught in practice. Finally the initial guide focused on resources and support for the role. While this was one facet of the learning context, other concepts such as organisational issues, relationship and attitude to the role emerged as central to the experience of clinical learning within the preceptorship model. Hence the final section explored the individual's personal experiences of preceptorship, their views and attitudes, relationship and supports for the role. Thus the development of the interview guide followed an inductive flexible process in keeping with an exploratory qualitative design (Streubert & Carpenter 2011). The data collected in the initial study still contributed to the research findings as the emphasis within the interview guide only changed slightly.

The interview guides were adapted and the issues explored were: the teaching and assessment practices of the preceptor; what was taught in practice and the personal experience of preceptorship for the participant (See interview
guides Appendix XVII; XVIII). These issues were addressed with each participant, ensuring some uniformity and consistency. There was a degree of backward and forward movement between these issues as new meanings began to unfold, and meanings were mutually negotiated between me and the participant (Silverman 2006). Within the key sections subtopics were identified. These subtopics or follow-up questions and probes were vital to ensure full exploration of the topic. The items were worded briefly and questions were phrased as I deemed appropriate to the interaction with the participant at the time. This was based on the discussion that had gone before and the participants' understanding of the issue. For example, I asked the broad question of how do you teach or how are you taught? I probed these experiences to explore the existence and extent of the teaching methods of modelling, coaching, scaffolding, articulation, reflection and exploration. There was scope for participants to move on to these areas spontaneously and I was open to unanticipated issues that participants shared. This flexible approach allowed for extensive probing (Fontana & Frey 2003).

3.3.1.2. Interview process

Semi-structured one-to-one in depth tape recorded interviews were conducted. Both what the interviewee was saying and how they were saying it was recorded (Silverman 2006). Field notes were used when subtle changes in the participants' verbal and nonverbal behaviour were observed and the context within which they occurred. Observations such as body language, hesitations and pacing of speech, volume, pitch and quality of voice were noted. The field notes also included pre and post tape conversations and my reflective reactions and observations about the interview itself. These notes were recorded in a reflective journal and helped to capture insights about the data collection process and the nature of the clinical teaching–learning experience (Denzin & Lincoln 2003a).
When I met with the interviewees I attempted to put them at ease by asking them how their day had been or discussing some current affairs such as the Queen's visit to Ireland. Following this icebreaking exercise, reiteration of the research process and the process of the interview was given to make sure the participant had an opportunity to reconsider consent. I actively engaged with and listened to what the participants were saying. I endeavoured to use effective communication techniques such as open body language i.e. leaning forward, eye contact, adopting a relaxed posture and using affirmative gestures such as mm, ya, I understand or nodding (Silverman 2006). Strategies such as the use of silence, gentle probing or changing the subject and coming back to it later in a different context were employed to facilitate the participant in telling their story (Fontana & Frey 2003). Reflection and clarification statements were used to show that I had heard and understood what the participant was saying or feeling. Examples of experiences were requested during the interview to capture the teaching and learning processes that occur (Hermanowicz 2002). Examples of these types of approaches can be seen in an interview extract with a student (see Appendix XIX). I aimed to show genuine interest, to be warm, sensitive and empathetic and to avoid a teaching and counselling role (Fontana & Frey 2003).

The opening topic on the interview guide was how do you teach (for preceptors) or how are you taught (for students)? These questions enabled them to talk generally about their teaching or learning experience. Prior to moving to more specific and sometimes more sensitive areas such as, what is taught and the assessment process. Participants' attitudes, motivation, and feelings towards preceptorship were left to the last. Arthur and Nazroo (2003) suggested it is easier for participants to discuss experience about things they have done rather than motivation and attitudes. A sensitive issue that emerged for preceptors was students who were performing below standard.
Negative feedback and high expectations seemed to cause students to become embarrassed or they began to stop answering. When I got answers that were "yes" or "no" to my questions I probed by rephrasing or asking them to give an example. This allowed me to gain a deeper understanding. Simple language was used to facilitate clear communication and understanding; the words I used were often borrowed from a phrase the participant had already shared (Hermanowicz 2002) (see Appendix XIX).

I tried to finish on a positive note to ensure that participants had time to move away from any negative feelings (Arthur & Nazroo 2003). I also tried to include questions that provided a summary of the participants' attitudes and experience. This helped to ensure that there was nothing left unsaid and a complete picture of the participants' views on the key topics was voiced. One of these summary questions was: "Tell me of your best experience working with a preceptor?" or "In ten years' time if preceptorship was working well how would you like it to be?" The questions I asked at the end depended on the conversation that occurred previously. I always finished by asking was there anything else they would like to tell me about their teaching and learning experience.

I became less dependent on the topic guide as the study proceeded, using it more as an occasional prompt or summary to ensure I had addressed issues comprehensively. This helped me to actively listen and to respond in an analytical way (Arthur & Nazroo 2003). The interview was brought to an end when the key issues were discussed and I sensed that the participants had exhausted their descriptions (Silverman 2006). These interviews took place over an eight month period from October 2010 to June 2011. The data collection period allowed time to reflect on each interview, enabling me to
remain focused on each particular interview so that one did not merge into another.

3.3.2. Data analysis

Data analysis consistent with the qualitative research paradigm started at the very beginning of the process when the researchable problem was identified. The interpretative approach was my preferred method of data analysis. It is based in the social constructivism paradigm where the object of analysis is not just what is said but the context in which this conversation occurs. It examines how respondents are using their current situation and context to construct their stories (Guba & Lincoln 2005). The nature of interpretative analysis is holistic in that data are not deconstructed in the same way as in content analysis (Gubrium & Holstein 2003).

Recurrent patterns of meanings, understandings, values or attitudes were identified throughout the entire interview texts (Gill 2005). The overall structure of each interview text was maintained; extracted elements were interpreted with reference to the whole structure of the text. The objective was to interpret the data rather than describe it. I deliberated on how things were expressed and what power relationships were endorsed and created through language.

A critical hermeneutic analysis process as described by Bryman (2004) was considered the most appropriate approach to use to analyse the students' completed competency assessment portfolios: the curriculum document; the preceptorship policy; written guidelines on the assessment process provided by the university; the guidelines on the competency assessment process and reflective practice provided by the CPC and the student learning guidelines for each individual unit. This analytical approach involved an initial examination
of documents followed by the identification of themes with reference to the knowledge I had learned from the interviews regarding participants' experiences of teaching and learning and the context that this phenomenon occurred (Bryman 2004).

Therefore a hermeneutic interpretative approach was used in this study to analyse the data gleaned from both interviews and documentation. The process was not linear, but iterative. Steps were applied that provided me with some direction, discipline and a system in which I could immerse myself and stay close to the data. It was influenced by the ideas of hermeneutic researchers, in particular the seven stage analytical process preferred by Diekelmann et al (1992). It also drew on the work of Silverman (2005), who offered a pragmatic approach, the processes suggested by Denzin and Lincoln (2003b), and it was related to Bryman's (2004) notion of using a priori concepts to guide the analytical codes.

The following table outlines the procedural steps employed to analyse the entire data set.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Process</th>
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<tbody>
<tr>
<td>1.Getting started</td>
<td>A selection of interviews was chosen to &quot;kick start&quot; this process (Silverman 2005). All the transcribed interviews that had been carried out within one clinical setting were analysed first. The relevant students' competencies documents, the curriculum documents, the preceptorship policy and students guidelines pertaining to this area were then interrogated (Bryman 2004).</td>
</tr>
<tr>
<td>2.Familiarization</td>
<td>Familiarising myself with the data involved immersion in the data by reading and re-reading through the transcribed transcripts, field notes and listening to the tapes (Silverman 2005, 2006). Interpretative summaries were written of each interview (Diekelmann et al 1992). In keeping with the hermeneutic cycle data analysis commenced during data collection. Both these processes were interlinked (Denzin &amp; Lincoln 2003b). During this stage key ideas and repeated themes, analytic intuitions were noted in my reflective diary. This process gave me a good grasp of the whole data.</td>
</tr>
</tbody>
</table>
3. Identifying an analytic framework; Inductive codes or key concepts were discovered in the respondents' narratives. Deductive codes/concepts were drawn from prior issues influenced by the theoretical perspectives and conceptual framework (Bryman 2004) (see Appendix VII).

4. Coding These analytical codes were applied to the data in their textual form (individual transcripts and documentation). During this process new codes and meanings were inductively gleaned from the data. These codes and references were recorded on the margins of each transcript or document.

5. Charting Codes were collapsed and others became refined. Four classifications were developed: the organisation of the preceptorship model; what is taught in practice; teaching methods and the learning environment (see Appendix VIII for classification chart). Codes, relevant quotations and data that gave meaning to these classifications and sub-classifications were arranged under each heading. The application of codes and development of classifications demanded a reflexive approach where I constantly asked the question, 'what does this mean to me as the researcher, what does this mean to her as the participant?' This is known as co-constitution interpretation (Koch 1994; 1996). Participants' transcripts and relevant documentation within each clinical setting were analysed separately using this charting process. This created 4 charts with relevant raw data taken from participants' transcripts or documentation.

Following analysis of the full data as described above, I made some further interpretative notes based on underlying suppositions, noteworthy absences in the data, connections with the wider contact, comparisons between one clinical setting and another and the existence of common descriptions or expressions (Gubrium & Holstein 2003). A substantiated typology of types of attitudes to students, nursing knowledge and teaching and learning surfaced (see Appendix IX for development of themes). This process gave rise to the themes presented in the findings chapter. An exemplar of how the stages of analysis were applied to a participant's quotations is offered in Appendix X.
3.4 Reflexive account of the role as an insider researcher

As I belong to the discipline of nursing and education these traditions govern my interpretations. Furthermore I have an in-depth knowledge and am familiar with the organisational setting and the members of the communities that I studied. I have provided details of my personal interest in the research and my professional status in the introduction chapter. I have also set out my pre study assumptions (see Appendix VI). Hence as described by Hellawell (2006), I am an insider within the study's setting. I recognised this level of intimacy with the participants and processes under study could lead me to validate previously held assumptions and values. As discussed earlier the reflexive approach was utilised to address this concern. On the other hand Holloway (2005) proposed that the subjectivity and expert knowledge of the insider researcher can be a resource in terms of awareness of who to ask the questions and which questions to ask. I found I was able to collect meaningful data as I had easy access to all the participants. Furthermore prior familiarisation with participants and processes provided me with a good understanding of a wide range of participants' perspectives. Hence I was able to frame my questioning in an empathic way (Hellawell 2006).

The potential conflict of the dual role as researcher and nurse lecturer is recognised. I have a link lecturer role on some of the clinical areas in the hospital. This role entails visiting and supporting the students and the staff in my allocated units. The link lecturer also becomes involved as an adjudicator in the assessment process if the student is not performing to standard and requires an action plan. However, I was not a link lecturer on the areas I chose for my study. Furthermore I teach some of the students that were participants in the study. Therefore I was conscious that the participants, particularly students, may feel obliged to engage in this study as a result of my nurse lecturer's role. I made it clear to the respondents that they were in no way
obligated to take part. Potential participants were assured that I would not treat them any differently, in any professional dealings they may have with me, if they did not wish to get involved. I allowed them the opportunity to withdraw from the study at any time by simply texting or emailing me to avoid embarrassment. However, this did not occur.

I considered that participants may feel there was an expectation to answer my questions 'correctly'. Denzin and Lincoln (2003b) suggested that interviews place implicit demands on the respondent to offer the preferred social response. There was a risk that this would occur due to the researcher's professional status as a nurse lecturer. To overcome this potential barrier I endeavoured to build trust and rapport with the participants. I demonstrated to them that I was interested in their own experiences and there was no right or wrong answer (Hermanowicz 2002). I was also aware that participants may have been fearful of sharing less than ideal practices. Hence disclosures of below standard teaching and assessment practices that did not risk patient safety were kept confidential. Students were assured of this during the interviews when they spoke of practices not consistent with what they were taught, or when they experienced inadequate supervision. Throughout the interviews with all participants I tried to convey that I was there as an inquisitive researcher and not as a nurse lecturer.

3.5. Conclusion

The methodological process implemented is presented. Rationale for the study's approach and strategies to ensure trustworthiness and ethics were discussed. Key concerns were addressed such as how the sample frame was identified and the final sample selected. The refining of the research questions and the interview guide were discussed along with how the interviews were
conducted. Application of the chosen analytical processes and the decision trail that led to the findings was presented.
Chapter Four: Findings

Introduction
This chapter begins with the demographical details of participants and a brief description of the clinical settings. Analysis of the data resulted in the emergence of three themes with each comprising four subthemes. These themes are presented in the following sections: teaching clinical practice in Section 2; learning practice knowledge and skills in Section 3; becoming a member of the team in Section 4. A diagrammatic representation of these themes and subthemes is offered in Appendix XXI

4.1 Demographics and clinical settings
Participants were selected from four clinical settings; a 15-bedded medical specialist ward (Unit A); a 30-bedded general surgical ward (Unit B); a 28-bedded surgical specialist ward (Unit C); a 28-bedded general medical ward (Unit D). Participants were given codes to protect their anonymity. Codes were assigned as follows: P for preceptor; S for student; a number 1 to 4 and the unit (a; b; c; d) the participants were working or learning on.

All 13 preceptors were female, aged between 26 and 49 years old. They had been employed as a nurse between four and 21 years, with three preceptors having been qualified for less than five years. Participants had spent between one and twelve years in their current clinical setting. All the preceptors had completed the preceptorship preparation course, though none had attended updates. They had performed the role of preceptor for between two to ten years. Twelve preceptors held academic qualifications in nursing; three held a diploma in nursing, nine had a degree in nursing. Three preceptors had also completed a postgraduate diploma in specialist practice. Three more were
currently studying at postgraduate level and one preceptor was currently undertaking a specialist master's course. One preceptor held a certificate in general nursing and midwifery. All 13 students were female. Ten were aged between 19–21 and three between 30–49 years old.

When comparing the demographics of each unit, preceptors interviewed on Unit B had less academic qualifications and were practicing nursing for a longer period of time. More preceptors on unit A held a specialist qualification relevant to that unit.

4.2. Teaching clinical practice

Four subthemes constitute this theme. They are: working together on a consistent basis; talking through and doing practice; assessing and advancing students' level of performance and preceptors' questioning methods (See Figure 4.1.)

Figure 4.1.
4.2.1. Working together on a consistent basis

The student was officially assigned one or two preceptors. Nevertheless, the amount of time preceptors worked with the students they were assigned to varied greatly. This appeared to be due to unaligned shift patterns and lack of management commitment to the concept of preceptorship. The preceptorship policy recommended that assigned preceptors and students worked together for at least two shifts a week. The Clinical Nurse Manager (CNM) is responsible for rostering the student over the seven day period to work with the allocated preceptor. In the absence of the preceptor the CNM should identify a named staff nurse to work with the student.

The interviews revealed that only three student-preceptor pairs in this research worked together on a consistent basis. Nevertheless, all staff nurses on the ward recognised that teaching students was part of their role. They were allocated to students on a day-to-day basis and were considered "acting preceptors". In some cases students reported that they were allocated to work alongside their named preceptor when they were both present in the clinical area. However, many students and preceptors explained that students were allocated to an area and the staff nurse working in that area acted as a preceptor for them for the day. The amount of continuity with an acting preceptor or a named preceptor largely depended on how the CNM managed the duty rosters and the student-preceptor allocation. Hence the students were often taught and assessed by a team of preceptors during the course of their clinical placement. Preceptors and "acting preceptors" reported more of an interest in teaching students and monitoring their progress when they worked with the student on a consistent basis.

Preceptors were resigned to the fact that it was not possible to work alongside their assigned student due to several factors. These included differences in
shift patterns or when students and preceptors were allocated to work in a
different area on the unit even when they were both on the same shift. Being
allocated a student a few weeks after they started their placement was another
factor. Preceptors worked alongside their student more often when the
student requested to align their shifts with the preceptor or when the
preceptor took a personal interest and asked for the student to work with her.

Both preceptors and students recounted good experiences when they worked
alongside their allocated preceptor or one “acting preceptor” for the majority
of their placement time. This occurred more frequently on Unit A. This
consistency enabled the student to build a relationship where the student was
comfortable asking questions. The time spent together enabled the preceptor
to assess the student’s cognitive and performance level. This is illustrated in
the following comment from a preceptor:

“Time constraints is just such a problem here and different off duty and
night duty... when working alongside on a continual basis you can see
the potential in them. If there had been a problem you could have
identified it, .... But definitively a close working relationship is the best
way to go.” P1d

Students reported that they received appropriate direction when they worked
on a consistent basis with one preceptor. On the other hand, when they
worked with several preceptors, spending a minimal amount of time with any
one, two issues often occurred for them. They experienced either having been
over supervised, where they did not get an opportunity to expand their
learning because of the relatively tight 'monitoring', or they received very little
guidance and supervision. In the latter situation, which they believed occurred
more frequently, some students reported “feeling lost”, “standing around” or
feeling a “nuisance”. Other students reported how they would “busy
themselves”, carrying out the observations and other tasks within the routine.
However, often they were not aware of the holistic plan of care of the patient
when they received minimal supervision as a result of inconsistency in the preceptor–student relationship.

Preceptors discussed how working on a consistent basis with students helped preceptors to identify areas that needed improvement and, by encouraging and guiding them, their confidence and practice would improve. Many preceptors articulated the need to spend time working alongside the student who was performing below standard. In the follow extract, a preceptor verbalises her concern regarding the inability, due to work commitments, to follow through on her teaching strategies with a "weaker student":

"If you're with that student regularly [a student not performing to standard] they usually do pick up and do improve, they go with someone else the next day ...... it's somebody else's problem tomorrow because you're busy enough. P1c

Clinical placements guidelines set out a three stage interview process between the preceptor and student to be held at the commencement, at a midway point and in the final week of placement. The purposes of these interviews were as follows: to identify the student's level of practice, clarify mutual expectations and set learning goals at the initial interview. At the midpoint interview, the aim was to identify if any difficulties were encountered by either party and to initiate an action plan for extra support if required. At the final interview it was to ensure the students had fulfilled their 100% attendance requirement and that all their competencies had been achieved. It was recommended within the preceptorship policy that the assigned preceptor would conduct formal interviews with the student. However, both preceptors and students reported that in reality when the assigned preceptor did not work with the student, one of the "acting preceptors" or the CNM would carry out the interview. It was evident from the competency documents and the participants' narratives that the same preceptor did not do each interview. Individualised learning goals were rarely set. These interviews were described
by all participants as unplanned, rushed, not given priority and a paper filling exercise, carried out when an opportunity arose. Attention to the interview process was given only when a difficulty arose with a student’s level of performance. A fourth year internship student illustrates this as follows:

"Those interviews are always done in a hurry. You could plan them but [there are] time constraints at work; they never have them when they're planned"S4a

Preceptors elucidated how it was difficult for the preceptor to assess the student’s competence when they did not spend enough time with each other. Both assigned preceptors and “acting preceptors” could sign off students’ competencies and a member of the nursing team could contribute to the assessment process by providing feedback on the students’ performance. The preceptor often collaborated with the CNM and the acting preceptors when it came to assessing the competency of the student. The analysis of both students’ and preceptors’ interviews revealed that the amount of collaboration and feedback the preceptor received from the acting preceptors differed from unit to unit and indeed from preceptor to preceptor. Two preceptors discussed how they sought feedback from the nurses when they had not worked with their student. Others would generally ask the entire team just before they did the final interview. The focus of this appraisal was on how well the student got on with the team and had any difficulties arose. This type of ad hoc team assessment is exemplified in the following comment made by a preceptor:

“Sometimes it can be hard at the interviews to figure out, from working with them so little, exactly...what they're competent in or not. ... We do chat amongst ourselves 'how do you find that person got on? I'm going to do their interview now with them, I haven't really worked with them much, have you... what do you think?" P3b

Preceptors or acting preceptors who directly observed students carrying out practical skills would sign this element of the competency document. However, when it came to the more holistic competencies many “acting preceptors” were not comfortable deeming the student competent unless they
had worked on a continuous basis with them. Hence competencies' assessment was seen as the responsibility of the assigned preceptor. Students reported difficulty getting their competences signed off when they were not working with their assigned preceptor. This can be seen in the following third year student's comment:

"I find it hard to get someone to [sign my competency documents] I go 'would you mind?' especially if you haven't worked with them that much ..... You're working with so many different people and you don't know who you should be [asking]..... I feel like I'm annoying the nurses."S2c

4.2.2. Watching, talking through and doing practice together

All the students described how they started to learn by watching their preceptor or "acting-preceptor" perform. Both preceptors and students expressed how important it was that preceptors explained or "talked through" their practice. Students needed to ask questions and start to participate or "get stuck in".

Preceptors on all units were anxious to teach students psychomotor skills. It was evident from the accounts in both the preceptors' and students' interviews that preceptors employed a structured approach to teaching these skills. They invited the student to watch while they demonstrated the skill. They explained exactly what they were doing and why in a step by step fashion. The student was often directed or prompted to take part in a subsection of the skill. The preceptor invited the students into a dialogue where they encouraged them to ask questions of clarification during or after the skill was performed. When the student felt "confident" they carried out the skill themselves. Preceptors reiterated the procedural steps or got the student to verbalise them prior to commencing the skill. The student would then perform the skill under the guidance of the preceptor. Preceptors would ask the students to self-assess their performance in terms of confidence. This
strategy of observation, performance and dialogue is explained by a first year student:

"...after a few times of watching they give you the opportunity to do it yourself with their supervision. ...They talk you through exactly what you're going to do, [which] makes you so much more comfortable. Throughout they'll be standing there beside you ....you can just turn around and say... 'I'm not sure about this....' [They ask you] afterwards 'how did you feel' ...was there anything that you weren't comfortable doing?" S3a

Correcting omissions or procedural mistakes, giving prompts and using simplified language were considered to be the significant aspects of teaching psychomotor skills. The need to verbalise this type of teaching in a constructive way, while maintaining the student self-esteem, was seen as important. Participants spoke in terms of "prompting" versus "correcting" or "being nice" instead of "scolding." A preceptor talked about prompting a student:

"I would say 'Anne, we'll do the spray next.' It's not nice either to [say] 'you forgot the spray' because you won't learn if you're being given out to." P3a

Students who were corrected in a condescending way either felt inadequate, stupid or angry. A third year student discussed this type of interaction in relation to an incident where she asked a preceptor to help her because a patient had vomited. The student's intention was to change the sheets and give the patient a drink:

"And she just looked at me like I was thick and she [said] 'no! You give them a full bed bath!'...I just felt stupid........ It's the way she said it rather than what she said.... she said 'do they not teach you this kind of stuff in college?'" S2b

Sometimes students were fearful to do the skill on their own and needed to be gently encouraged to participate in skills. They learned sub-skills until they gained confidence to complete the full skill under supervision:

"There's some that wouldn't be confident at all, they would say oh no... I don't really want to do it... I just say you can come in with me, you can help me and if we get another one you can do it." P3d
Students were encouraged to get involved and participate in practice. How the student did this depended on the organisation of the ward. In some clinical areas, the patient's plan of care was discussed and the student was given guidance of how they could take part in the delivery of that care. Students reported very good experiences of learning on Unit A where they took part in most elements of care alongside the preceptor. However, in other units students watched the routine and eventually picked up where they could participate. Many preceptors spoke about not having time to explain and the need for students to "get stuck in" and see what needed to be done. A first year student explained how she learned what to do by watching:

"Then the next morning [I know] when I come in I have to get the basins for the washes... I would be watching them and then I would know what to do." S1d

However, some students discussed how lost they felt when the plan of care was not explained to them. Conversely when preceptors planned their care out loud, students were able to identify what part of that care they could participate in. A fourth year internship student discussed a good experience on one unit in terms of "being guided" or been "given direction" with regards to what nursing practice she could get involved in:

"They're very vocal. If you're working with them they describe what they're doing as they go along. [My preceptor] plans with me. She'll work with me and she plans out what we're going to do over the next hour. ......I find that good because it gives you direction..., as opposed to wandering around after her and wondering what she's doing." S4a

Participants spoke about the strategies of prompting and guidance in relation to teaching or learning psychomotor skills, documentation and carrying out the tasks in the routine. These teaching strategies were rarely discussed in relation to learning how to manage patient-care or communication skills. All participants believed that students learned practice knowledge from asking questions and listening to general discussions on the ward. This type of
information sharing often occurred at break time, during nurses' and doctors' reports and at multi-disciplinary meetings.

Preceptors sometimes explained the rationale for nursing interventions and the patho-physiology and clinical manifestations of patients' conditions. On most units the students gave examples of how the Clinical Placement Coordinator (CPC) explained the theory of practice in more detail. This is illustrated in the following comment made by a third year student:

"...the nurses are really busy and you don't get to ask them. [Preceptors] explain stuff to you but it wouldn't be in detail so then when the CPC came up you got a chance to ask her and she'd go into it in detail." S2d

4.2.3. Assessing and advancing students' level of performance

Participants gave accounts of how they would work together as part of the team. The student was encouraged to do as much as they could on their own. All participants gave examples of how students' level of performance was assessed and hence how much guidance they required. However, students and preceptors believed that the responsibility lay with the students to come and ask for help or guidance. Preceptors assumed that students would know what their knowledge and skills deficits were. A fourth year student describes how the preceptor asks questions to ascertain her perceived competency in practice:

"They ask you 'have you seen this before?' or 'have you done this before?' or 'can you do this for me? You [the student] figure out whether or not you're able to [or] ...if you feel competent enough [to do it]." S3d

Preceptors assessed students' communication skills and ability to carry out skills by directly observing them. A first year student shared how she began to practise on her own after she had been observed:

"I was giving one patient a shower; [my preceptor] watched me and said 'you can clearly do this on your own; I can leave you to it'." S1c
Students' ability to manage the day-to-day nursing care of the patients was assessed by how confident they were, the amount of nursing practice they could achieve on their own and by the information that they reported back to preceptors regarding the patients' care. This is illustrated in the following comment made by a preceptor:

"You know when they're not following you around, when they're just off doing their own thing and they're not coming up asking you 'what do I do now'. [When they report that a patient] has pain or has a temperature, [when you don't have] to ask how was his obs[observations] there today." P1b

The level of direction the preceptor gave to the students varied. Student believed that they received appropriate supervision when they worked on a consistent basis with one preceptor. However, maintaining patient safety was an important issue for all the preceptors in this study. Preceptors would closely supervise students in respects of some skills such as vital signs, drug rounds and wound care until the preceptor trusted that the student was competent. This is illustrated in the following comment:

"I have had examples where temperatures of 38 have been taken and it wasn't passed on to anyone. [Students] are left to do them an awful lot. I get them to go through [the vital signs] with me, then I can tell if they understand them." P2c

Students described good teachers as ones who challenged them to advance their competencies by allowing them to manage a patient's care while monitoring their progress. They preferred a continuous, supportive teaching relationship where they could take part in managing a patient's care rather than being allocated tasks. Many students commented that the younger nurse was more interested in supervising the student:

"[Good teachers] make you do things. They're the ones that would assign you a patient and [tell you what to do] they would be watching you if you have any problems. It seems to be... the older nurses... wouldn't really pass much heed of you [ignore you]..." S2c

Students' perceptions in this respect were validated by the preceptors' narrations of their teaching and supervisory strategies. Preceptors within the younger age group of 26-34 recounted how they would prompt, guide and
explain practice to students. On the other hand preceptors between 34 and 46 expected the student to be self-directed in their learning, ask questions and participate in practice by watching.

Preceptors illustrated support in terms of encouragement and confidence building. The capability of the student to move to the next level of practice was described in terms of psychological readiness and confidence. Preceptors asked students whether they were "comfortable" or "happy" to do things on their own. A preceptor describes how she encourages students to achieve mastery and gradually withdraws support:

"From working with them you'd find [how competent they are] ..... You'd delegate a certain amount of stuff to them and just see if they're able to do it... just ease them into the other roles that they're not familiar with and that gives them the confidence ....A lot of them are able to do it but they're just reluctant ... so you have to take a step back yourself and let them see how far they'll go themselves." P4a

First year students received close supervision and mostly worked alongside the nurse. The third and fourth year students explained that they were expected to work mostly on their own. However, sometimes they were not aware what they needed to do and they believed that some preceptors had high expectations of them. This is illustrated in the following third year student's comment:

"They expect way more of you! In 1st year you just follow them and they bring you everywhere, whereas now you're more left on your own to do stuff. It's okay if you know what you're doing, if you know what they expect of you. But sometimes... you don't." S2c

General feedback regarding the students' performance was given after doing practical skills and in the final interview. Many students gave accounts of how they would benefit from more specific feedback and guidance on all elements of nursing practice. They were often unaware of their performance strengths and deficits. Written feedback in the competencies documents was mostly positive and focused on communication, initiative, work ethic and organisational skills. Broad statements such as "good team worker" were
recorded. Preceptors explained how they often asked CPCs or CNMs to give feedback to the student regarding their performance deficits. A third year student was told by the preceptor that she needed to improve her communication skills at the final assessment interview. This student explained how she would have liked more exact examples and to have been told earlier. She made this comment:

"I was encouraged to ask questions. If there was anything I didn't understand, to ask questions. But... in terms of what I was doing right or wrong, I only got that feedback at the end." S1a

All participants recounted how the student would be praised if they did well. However, they elucidated how daily feedback on students' specific strengths and weaknesses was not given even though daily feedback was recommended in the preceptorship guidelines policy document and clinical placement guidelines. This is exemplified in a response made by a preceptor regarding the frequency of feedback:

"At interview time I [give feedback]..., not really on a daily basis... only if something major happened." P3d

Students who did not perform to standard were described by preceptors as needing constant guidance or they "were standing around". They explained how these students often had poor communication skills. Preceptors believed that some of these students were unwilling to learn. They appeared disinterested and did not ask questions which is illustrated in the following comment made by a preceptor:

"Yeah, there have been [students who perform below standard], just no interest. They stand around... They have to be directed on everything." P1b

Preceptors expressed how they did not feel confident in teaching or assessing these students. Two reasons were given for this. They did not feel confident in giving negative feedback and they did not know these students well enough. In these cases the CNM would take over the responsibility by giving the student feedback, doing the final interview or allocating the student to
another or several staff nurses to supervise her practice. Hence in these instances a hierarchical approach to assessment took place. This strategy was in line with preceptorship guidelines which stated:

"The CMN is responsible to oversee the preceptorship model and manage issues that may arise when students are not achieving their competencies."

4.2.4. Preceptors' questioning methods

The students' and preceptors' narratives indicated that preceptors would occasionally ask students questions about nursing practice. The type of questions asked included the following: their rationales for care; their knowledge of how to go about a task or procedure; the routines that were practised on the ward and the indications for and side effects of drugs. These questions were prefaced with either "what" or "why" and related to the care the student was involved in. Some preceptors asked students to articulate what they intended to do and then encouraged them to do it. Preceptors felt this type of questioning kept the student interested. It helped them apply knowledge that they already knew and gave them the confidence to then carry out the practice. Students felt nervous when asked on the spot questions. A fourth year internship student shared an example of procedural questions:

".. A nurse said to me 'so a patient is being discharged, what do you do?'... I was so nervous I was thinking oh God I don't know. But then I [answered] and she's like 'well done, you know how to do it. Just go and do that now'." S3c

Participants perceived the importance of questioning the students in an informal interactive style where they did not feel "interrogated" or "were not afraid to get it wrong." Both students and preceptors believed that asking questions in a "nice way" was helpful to students' learning and addressed knowledge deficits. A preceptor describes how she maintains the students' self-esteem using this type of approach:
"I could ask them 'why are we doing their mouth care'... You try and ask them in a nice way ... They come on better I think if you're not... hopping questions [intense questioning], it's just kind of chatting." P3a

A fourth year student reiterates the usefulness of an informal interactive style of questioning in helping the students think about practice:

"[Questioning] is still good for you because it makes you think,... then if they give you the answer, I find that afterwards I'm so going to remember it. [I prefer] interactive rather than 'do you know this?' [where] you feel like 'I don't' and they're like 'oh, you should know this'." S3d

All three preceptors on one unit gave examples of how they used a problem solving approach when questioning. One explained how she would ask students to identify a plan for the shift to ascertain if they had applied significant details they heard in report. Two other preceptors set scenarios for the students to solve which is illustrated in the following quotation:

"Sometimes you give them scenarios 'what if....?' 'Okay, the obs[vital signs] are all fine but what if, what would you do, what would be your first[action]....?' P4a

However, many participants interviewed did not consider the use of questioning to be an essential teaching method necessary to learn the art of clinical practice. The type of questions that challenged the students' ability to apply evidence to practice and to think critically were mostly asked by CPCs. This occurred when the CPC and students discussed case studies on the unit which is illustrated in the following comment by a third year student:

"[The CPC] would take our ward report and she'd just pick out different things, 'why does this fella at this young age have this?' And I wouldn't have even thought of that. I'd just think it was normal. And she'd explain it." S2b

None of the participants recounted experiences where students were asked to verbalise and identify their own strengths and weakness in practice. Students were expected to reflect on their own performance and to identify their own cognitive and performance deficit. This was not initiated by the preceptor. An examination of students' competency documents revealed descriptive accounts of how students cared for the patients. An analysis of how this care
could be improved, or discussion on what the students had learned in relation to their own strengths and weaknesses, was not found in these documents. A third year student illustrates this absence of reflection and facilitated self-assessment in her comment:

"With the preceptor, I didn't really feel that there was reflective practice. We talked through... the care that was provided for the patient but not in terms of what I, personally, would have done right or wrong as a student." S1a

Preceptors and students believed that there was no time for reflective practice. Yet within the curriculum and clinical guidance documents time was allocated for the students to reflect with the preceptor in and on practice. Preceptors assumed that reflection on practice was something the students carried out themselves, with the college lecturers or the CPCs. When preceptors were asked about reflection they spoke about supporting students from an emotional perspective if a "major event" occurred in practice such as a death, a medical emergency, a cardiac arrest. This type of debriefing is seen in the following comment made by a preceptor:

"I had one student and she had never experienced someone dying....she was upset, I had time during night duty to talk with her and say how do you feel about that?...... There's no reflection done on the ward...you couldn't do it on the ward... it's not possible to do it." P3d.

4.2.5. Summary: Teaching in clinical practice

Preceptors reported that they were able to teach and assess the student more effectively when they worked on a consistent basis with their assigned student. Inconsistency in preceptor-student contact affected the quality of the assessment process. Students reported learning by participating in practice and through interactive dialogue with their preceptor. Preceptors were committed to and used many teaching strategies to teach practical skills. Teaching strategies such as prompting, explaining and guidance were rarely described in relation to learning how to manage patient-care or communication skills. Participants believed it was important to communicate
with the students in an encouraging manner where students felt comfortable to ask questions. Many participants believed condescending comments made by preceptors had a negative effective on the students' learning and self-esteem.

Preceptors described how they assessed the student's level of performance by observation, asking the student what they were competent in and by monitoring what they could do independently. The level of supervision the student received varied from unit to unit. Many preceptors expected students to self-assess their learning needs and seek guidance when required, whereas some preceptors explained plans of care and gave direct guidance as appropriate. However, both students and preceptors recounted how students were not facilitated to self-evaluate, that is, asked to identify their strengths and weaknesses and they were only given broad feedback at the final interview. Some preceptors described how they were not confident in teaching students who were performing below standard. Good learning experiences in terms of advancing the student's performance were when students were given the opportunity to assist in the management of a patient case load with appropriate guidance and when there was consistency in the preceptor-student's relationship. The type of questioning illuminated in this study varied among preceptors; many preceptors gave students information rather than using a questioning approach. Some preceptors engaged in higher order questioning that encouraged the student to think critically and apply theory to practice. However, it was mostly CPCs who asked these types of questions. The use of reflection as a teaching strategy, that is asking the students to recount and analyse and evaluate their interventions and thoughts, was not found in this study.
4.3. Learning practice knowledge and skills

The four subthemes presented are: learning to organise, deliver and prioritise care within the unit's routine; rationale for care; professional communication and caring attributes; and practical skills. See Figure 4.2.

4.3.1. Learning to organise, deliver and prioritise care within the unit's routine

Each ward had certain tasks that were done routinely and in order. All the preceptors and students articulated that students needed to learn the order of the routine and initiate and complete these tasks without prompting. Some preceptors thought it was important that "the routine" was explained. Others assumed these organisational skills could be learned by watching.

All participants specified that it was important for the students to learn when not to follow this order if a more important patient-care issue arose. Students
needed to recognised changes in the patient’s health status and take appropriate action when a patient’s condition deteriorated. The preceptors on one unit helped students to develop these competencies by giving them rules of thumb on the order to do things, how to recognise deviations from the normal, as well as when and to whom to report changes in the patient’s condition. In the following extract a preceptor discusses how she gives hints on the way to organise care:

... "I always say, when you’re doing the obs[vital signs] get into the habit of doing the oral chart, the bowel chart, do all your documentation when you’re at the end of the bed and if there’s anything abnormal act upon it." P2a

The way the ward was organised had an impact on what the students learned. When students were allocated to care for a specific group of patients and worked under the supervision of one preceptor, they spoke about learning to plan, prioritise and deliver individualised care. Students reported this type of approach as having been a good learning experience. This method was only cited occasionally; as a team nursing approach was illustrated in both the interviews and competencies documents where students were allocated a set of tasks depending on their year in the programme and skill acquisition.

In the main preceptors used cultural phrases such as "clued in," "commonsense" or "cop on" and "on the ball" when discussing a student’s ability to organise care, prioritise care, problem solve and take appropriate action. They did not discuss this kind of practice in terms of requiring a high level of critical, analytical thinking and professional know-how. Their belief was that this kind of knowledge was common-sense rather than professional knowledge. Many of the preceptors considered it easy to learn; it did not require teaching in the form of explanations or feedback. They believed that students learned these thinking skills by watching, asking questions and
getting involved. The following preceptor discussed how easy she considered it was to learn the practice of nursing:

"I do think you don't have to be a rocket scientist to be a nurse. I just think if you have [common sense]..., just safety, cop on, ask to find out if you don't know." P2a

The ability to carry out nursing care in a timely and effective manner was seen as a desired outcome of learning. Speed was perceived as a valuable skill to learn by both students and preceptors. Students commented on the need to work faster and admired nurses who had good time management skills.

Preceptors expressed the need for students to deliver care in a timely fashion. A preceptor made the following comment:

"It's fine being able to know how to do everything or do an admission but if it takes them 2 hours to do it then what's happening on the rest of the ward?" P4a

Third and fourth year students commented that the general medical and surgical wards were where they learned organisational and time management skills. There was a greater amount of patients to manage and many different doctors to communicate with than on the speciality units. Nevertheless, they found these management skills difficult to learn. This is illustrated in the following comment made by a fourth year student:

"I found it so hard [to manage]...there are so many doctors, there are medical patients, surgical patients, I didn't know who to call..." S3c

4.2.2. The rationale for care

Preceptors stressed that students needed to understand the rationale for both nursing and medical interventions that were carried out on the patient.

Theoretical sources used to support practice were hospital policies, patient education booklets and information on medical conditions and treatments sourced on the internet search engine Google. Students referred to these sources when providing rationale for care within their competency documents. A few preceptors recounted how they tried when they had time to impart some
of this type of knowledge. A small number of preceptors and students explained that when they came across a new condition, drug or medical treatment they would “look it up together”. Other students explained how they sourced this kind of information themselves. Many preceptors did not see it as their role to teach or explain any nursing theoretical concepts as they felt this was the role of the college lecturers. Students reported how the CPC would help link theory to practice on their weekly visits. However, the preceptor explained how they did not know what was covered at these teaching sessions. Many preceptors did not value this theoretical input.

Many students and preceptors spoke about the importance of learning by doing when in practice. Preceptors felt there was no time to teach theory and they believed this type of knowledge was already taught in college. On the other hand students found it hard to relate the theory they learned in college to practice. However, it was evident from the interviews held with participants on one unit that students were exposed to a greater link to theoretical knowledge than on other units. The nurses on this unit held a specialist qualification. Some preceptors within this unit articulated underpinning rationales for care and taught the students their problem solving strategies. This is illustrated in the following extract where one of these preceptors described how she teaches the student to prioritise care:

“I ask them which patient are they going to [take care of] first and why are they going to that patient first? What do they see as a priority?”P4a

The students’ written evidence within the competency portfolios provided some preceptors with an opportunity to see if the students understood the rationales for the care. Reviewing these documents allowed them an opportunity to clarify the students’ misconceptions. However, they did not ask further exploratory questions in relation to the evidence presented to them. In some instances mutual learning occurred where the preceptor gained new
theoretical knowledge from what the students had written. Preceptors explained how they did not assess students on this written evidence. Often they signed off the competence and the students filled in the evidence later. The preceptors assessed the students' ability to perform in practice and how they got on with the rest of the team. A preceptor explained how she does not understand or see the value of written evidence in the competency documents:

"I find it a bit off putting, it's all evidence based or research based... I suppose in my training... you had your facts down, it's not the way I learned how to do things." P2b

A small selection of the evidence written by the students in the competencies documents did show a link between current nursing theory and practice. However, in the main, students recounted carrying out practical tasks or accounts of assisting with medical interventions with very little rationale for the care provided and no link to the theories of contemporary nursing practice.

4.3.3. Professional communication and demonstrating caring attributes

All the preceptors and students perceived good communication skills as an essential prerequisite to forming a relationship with the patient and implementing caring interventions. Preceptors emphasised the need for students to develop conversational skills. Students and preceptors explained how "chatting to" or "talking to" patients helped to build a rapport where students could learn if the patient had any concerns. They encouraged them to communicate with the patient frequently throughout the day in particular when they were washing the patient or carrying out practical skills. This is illustrated in the following comment made by a preceptor:

"I'd get them to try to chat to the patients, to get to know the patients ....even if it's just a five minute chat with your patient in the morning or when you're going round doing their blood pressure. They might find out [patient concerns] like that." P1a
Students gave examples of how they learned these conversational skills by watching the preceptors and by practicing over time. Many preceptors voiced the perception that communicating with patients in a caring manner was an inherent skill that individuals should already have prior to commencing the course. They expected students to be able to interview patients about their complaints and motivate them to take part in self-care. They considered this kind of communication to be a cultural norm that an individual either possessed or did not possess. This attitude was explored further in the interviews with preceptors. Many preceptors did not view this skill as professional communication or that it needed to be taught during the training programme. They believed communication came naturally to students when interacting with patients. This is illustrated in the following comments made by preceptors:

"Communication, it's just basic common-sense." P1b

"Good students ...they just have a natural approach... You know some people are either good with people or they're not." P3d

Students on the other hand believed that communicating, as a nurse with patients, was a skill that they needed to learn. They found it difficult to know what to say to comfort patients or how to explain medical and nursing interventions to them. A third year student spoke about her difficulty in learning the art of professional communication but how she perceived this type of communication came naturally to the preceptors on the unit:

"Their communication with the patient and the family was really good. The patient was told about everything, all the procedures and all the care that was given..., they were allowed make their own decisions. It was just done with such ease and it was just natural to them, whereas I would have to put a lot of effort into what I was going to say." S2d

Preceptors elucidated how students needed to have satisfactory communication skills before they would deem them competent. During the interviews some preceptors explained how the student they were precepting needed to develop their communication skills. Students explained how they
received broad statements with regard to their communication deficits. They felt they would have benefitted from been given some specific examples of when these poor communication practices occurred.

Preceptors and students believed it was important to form a caring relationship with the patient. A preceptor explains how she teaches a first year student to spend time with the patient and how to practise being accountable, reliable and trustworthy:

"[Patients are] very frightened here and worried. ... [Students need to] to sit down and talk to them and not just skim through and move on to the next person. ... The student needs to get used to being here and people relying on them. ... [Patients] are so vulnerable. [I say to them] 'If they ask you for a drink or something you don't get side tracked and forget to come back with it, because they remember'."P3a

Students recorded in their competency documents that they built trust with the patients by spending time, listening to their concerns or conversing with them, answering the patients' questions or finding out answers to their questions. Some students listed communication techniques that they used such as eye-contact, summarising, paraphrasing and validating patients' emotions. However, no specific examples from practice or reflection on outcomes of interactions were given in these accounts.

Most students explained how they had witnessed and learned from caring, compassionate, non-judgemental interactions where preceptors listened to patients. They viewed these nurses as ideal role models. Students discussed how they admired and aspired to be like nurses who demonstrated caring and compassionate attributes and communicated in a therapeutic way with both patients and themselves. They perceived caring nurses as those who were conscientious, delivered patient centred care and ensured that all the patients psychological and physical needs were meet. These nurses listened to the patients and gave the patient time to voice their concerns or their upset. The
students described these nurses as "nice", "kind", "happy" and that they liked their job. A first year student described a nurse who demonstrated these caring attributes:

"just nice really, she was very considerate and she made sure...all the little basic kind of needs were met, like [having] the place clean, [asking] them how they were,[she] just made sure the patients felt comfortable. ...you knew she loved her job, she just cared for everyone." S3b

Students described how some nurses did not communicate in a professional way. They depicted these interactions as being "rude", "rushed", "sharp", "cold", "condescending", "judgemental, "pretending not to hear requests" and "talking over patients." Students were uncomfortable when they witnessed these types of uncaring interactions. When poor practices in relation to communication were witnessed, students felt powerless and took no further action. They spoke of experiences where nurses were more interested in getting the tasks done rather than meeting patients' individual needs. A first year student describes how one nurse connected with the patients while others were more interested in the getting the physical tasks done:

"She interacted with them she wasn't cold like some of the nurses who would be kind of just in and out... and do your job." S1d

Gaps in exposure to certain communication skills were voiced by students. Experiences of preceptors teaching students how to educate patients were not exemplified in any of the preceptors' or students' narratives. The students shared that they did not observe preceptors teach patients about their medications, maintaining or improving their health or adherence to their treatment regimes. One student recounted how she witnessed the Clinical Nurse Specialist educating patients. Students did not record any examples of patient education in their competencies' documents.

All the fourth year students felt that they needed more exposure to some of the complex communication skills such as communicating with families
regarding the patient's condition and breaking bad news. They shared that they were not "comfortable" and were "nervous" about performing these types of interactions as they were frightened of giving the wrong information. Some preceptors explained how they did not feel it was appropriate for students to be involved in sensitive situations where patients and families had received bad news. In these instances if they felt the student had not already had the skills to be empathetic they would not allow the students to participate. This is illustrated in the following comment made by a preceptor:

"You'll have a general feel for a student, whether they're capable of going in and being sensitive to the patient and their partner's needs. Sometimes you will ask them not to go in." P2c

Giving reports to nurses, doctors and the multidisciplinary team was a communication skill that students were required to learn. They also were expected to learn to report the patients' health status or concerns accurately. They were required to be able to advocate and articulate patients' needs to the multidisciplinary team. This was illuminated in both preceptors' and students' interviews and competency documents. Some preceptors explained how they gave students opportunities to conduct the change of shift report to other nurses under supervision. Students gave examples of reporting and giving information regarding the patients' condition to other nurses, physiotherapists, occupational therapist and dieticians. A preceptor discusses how she encourages the third and fourth years to do the doctors rounds and communicate the patients concerns:

"[I expect them to learn how to] communicate to the doctors and that they're able to be an advocate for the patient, because a lot of our patients, they're just lying in bed and half of them don't talk..." P1d

Communication with the doctors on some units was the responsibility of the CMN; in these cases students reported not having been exposed to this skill until the end of fourth year. Students considered communicating with doctors as a task with a high degree of responsibility.
4.3.4. Practical skills

Both students and preceptors used the term "practical skills" when referring to psychomotor or technical skills. The acquisition of practical skills was given great importance by both students and staff. Practical skills were referred to in terms of "the basic nursing skills", assessment and monitoring skills and the higher order technical skills. Skills' acquisition was considered hierarchical in nature. First years were required to gain competency in "basic skills", third and fourth years moved on to the more complex technical skills and the pinnacle of the pyramid was the drug rounds.

The basic nursing skills included vital signs, monitoring patients' intake and outputs and assistance with the activities of daily living. Both preceptors and students described how first years needed to be able to perform these basics skills at a mechanistic level. Third and fourth years students were expected to assess when these skills were required, adapt the skill according to the patient's condition or the context in which it occurred and interpret assessment findings or outcomes. Preceptors explained how third and fourth year students were expected to be able to carry out the more complex technical skills such as wound dressings, stoma care, drain, suture, clip, cannula removal, catheterisation, injections etc. Both preceptors and students discussed the need for students to develop speed, fluency and safe practice when carrying out practical skills. All participants believed that becoming competent in practical skills helped to build students' confidence.

Throughout all the narratives, participants described how it was important for students to learn assessment and monitoring skills. The focus was on physical assessments. On some units these were confined to vital signs, skin assessment, nutritional status and fluid balance. Students were also required to assess the level of assistance the patient required in carrying out the
activities of daily living such as hygiene, feeding and mobility. However, in one unit a more thorough individualised “head to toe” physical assessment of the patient was described which involved pain, oral and bowel function assessment and bloods result monitoring. Respiratory, cardiovascular and abdominal examinations were not witnessed by students in practice even though they were taught in the clinical laboratory.

Some preceptors believed that psychomotor skills or practical skills were intertwined with higher order cognitive skills, such as been able to identify deviations from the normal and interpret findings which may influence subsequent nursing interventions. Preceptors and students described learning practical skills in two distinct ways. Some spoke of learning skills so that students could be delegated tasks that could help with the workload. Other participants believed students needed to be both competent in carrying out skills while also knowing when to use these skills so that they could deliver individualised holistic patient-care. A preceptor comment illustrates the need to carry out practical skills according to the patients' individual needs:

"I suppose I want a student that will come into a report and listen and go out there and actually go in and do the washes, the obs[vital sign] if needed." P2a

All students believed the skills they learned in the clinical laboratory provided them with a foundation for the practical skills in practice. It facilitated them in remembering procedural steps. This learning gave the students the confidence and a willingness to take part in, perform and adapt these skills in practice under supervision. They reported that having this foundation reduced their fear in performing skills in the real situation. However, students explained how carrying out the skills in the context of the live situation with changing circumstances was more difficult and that they needed supervision, guidance and practice in order to become competent. This is illustrated in a fourth year's comment:
"I do remember suctioning [in the clinical laboratory] and I did remember some things. But when it’s a live patient and they are coughing and coughing and you’re monitoring their sats (Oxygen saturations) and there is so much going on, it is so much more nerve wrecking with a real patient." S3c

Many students emphasised that they witnessed practices below the standard they were taught in the clinical laboratory, namely in relation to aseptic technique, breaking bad news and moving and handling. They recounted how they did not highlight these gaps to the staff nurse for fear of retribution. A fourth year student on the surgical unit talked about witnessing a theory-practice gap in the skill of asepsis:

"And when you see [preceptors] that don't adhere to the aseptic technique you're cringing because you know the right way to do it...we did in the [clinical] lab..." S1b

4.3.5. Summary: learning practice knowledge and skills

Students were expected to learn the skills of organisation, time management, prioritisation and being responsive to changes in patients' conditions. Whilst a few preceptors taught students these skills, in the main preceptors perceived these skills as being "common-sense", easy to learn and did not require direct teaching. The rationale and theoretical basis for practice was mostly provided by the CPC or the student sourced it themselves. Preceptors rarely taught or assessed this cognitive element of the students' practice.

Students' communication ability was a key assessment criterion. The caring skills that were considered important to learn were being sensitive, nice, building trust with patients, being reliable, conscientious, providing holistic care and patient advocacy. Students learned these skills by observing ideal role models. Preceptors who were more interested in getting the tasks done were viewed as poor role models. Some preceptors gave students guidance on how to communicate. However, many preceptors felt that communication was
a skill that an individual had a natural tendency for and possessed prior to becoming a nurse.

Learning practical skills was considered a central element of nursing practice. A hierarchical approach to skills teaching existed. Skills such as documentation, doctors' rounds and drug rounds were considered to be of greatest importance. Learning practical skills was often linked to the cognitive domain of having the ability to organise, prioritise and deliver appropriate individualised care. Students reported that the skills they learned in the clinical laboratory provided a foundation for learning these skills in clinical practice. However, they discussed a theory-practice gap in this regard.

4.4. Becoming a member of the team
This theme comprises of three subthemes. They are: building a relationship based on mutual benefit and trust; showing confidence and initiative; helping to get the work done. See Figure 4.3. on the next page.
4.4.1. Building a relationship based on mutual benefit and trust

Both preceptors and students considered it was necessary to build a relationship in order to teach, learn and work together. Examples were given of how they got to know each other over a period of time on a social and personal level. The student and preceptor would have informal chats about work or social issues at break time in the staff room. Many preceptors related to the experience of being a student. They empathised with the fact that students could be "afraid," "intimated" or "scared" of learning in the clinical work environment. They spoke about having similar fears when they were students. They also felt that degree students had a tougher time as they had to work off peak hours in the clinical area and were not paid. This is illustrated in a comment made by a preceptor:

"I enjoy it [being a preceptor], I've been there myself and I know what it's like, it's a scary place being a student. But it's tough on students to be coming in and trying their best to learn... they're working weekends and they're not even getting paid for it." P1d
Students and preceptors recounted how spending time working with one preceptor on a consistent basis helped to build a trusting relationship. This time enabled the student and preceptor to get to know each other both personally and professionally. Hence the preceptor knew the student’s level of competency, trusted her to practise safety and allowed her to practise more independently. A fourth year student illustrated this in the following extract:

“You’d work with [a preceptor] a lot and they’d have trust in you then. ... They wouldn’t be standing over you the whole time but they would always be showing you new things... When you’ve so many different ones [preceptors] you don’t build that relationship...” 53c

Both preceptors and students believed that developing a trusting relationship between them was one of shared benefit. The advantage to the students was receiving the appropriate amount of encouragement and supervision to gain competence and confidence. On the other hand preceptors enjoyed teaching and working with students who were enthusiastic, eager to learn and who contributed to the overall work load. They were motivated by the fact that they had taught something to the students and it helped to keep their knowledge up to date.

All students and some preceptors believed that preceptors needed to be approachable, encouraging and friendly to build a trusting preceptor–student relationship. Preceptors needed to be interested in teaching and to include and involve the student as “part of the team” in all aspects of patient-care. When these type of relationships occurred the student voiced feeling “comfortable to ask questions”, “trusted” and “under their wing.” Students recalled how some preceptors were not approachable. They were afraid to ask questions of these preceptors for fear of disapproval. Some preceptors and all students expressed the need for the student to be invited “to follow” and watch the preceptor performing nursing care. When this did not occur they described how they felt ignored, excluded and isolated. Many of them
explained when they were not invited to follow the nurse they would ask what
to do next but that they often had to resort to "standing around" or "walking
around." A fourth year student described a good relationship with her current
preceptor. She compares it with other experiences where the preceptor
avoided her or made her feel inadequate when she asked questions:

"[My preceptor] doesn't make you feel bad because you don't know [a
small detail]. Sometimes you can be made feel inadequate because you
ask something silly. ...Every time she was doing something she said 'come
with me' instead of saying 'will I follow her this time or will I wait here.' I
have had that [over the years]... 'You know well [when a preceptor is]
avoiding you... She's gone missing. She doesn't want you." S4a

Preceptors expressed difficulty in being a preceptor for students who were
performing below standard. They explained how this affected the relationship
they had with the student and many emotions such as anger, disinterest,
feeling sorry for the student and fear came into play. Some preceptors did not
want to work with these students. Preceptors reported not "feeling
comfortable" giving negative feedback as they were fearful of emotional
reactions. Others felt that the caring relationship affected their ability to
assess the student accurately.

4.4.2. Showing confidence and initiative

All participants interviewed believed that students needed to develop
confidence and show initiative to be able to learn and practise when on clinical
placement. Initiative was described as working hard, helping out, initiating
practice without direction, seeking out new learning opportunities and
requesting to be taught when needed. This meaning was exemplified in both
participants' narratives and the written evidence in competencies' documents.
Within these documents preceptors wrote positive comments in this regard
such as "This student shows good initiative in caring for patients."
The need for students to have the confidence to initiate nursing interventions and act independently according to their competence was expressed by all participants. Students were required to record written evidence of both showing initiative and having been aware of their scope of practice. Preceptors expressed how important it was that students were not overly confident which was sometimes described as "cocky". These students were described as those who did not ask questions or seek guidance from preceptors and sometimes operated out of their scope. This is illustrated in the following comment made by a preceptor:

"[A good student] is confident enough to go and start into the work but not overly confident that they won't ask you questions as well, [and] go outside of their scope... [A good student uses] their own initiative, [one who is] not waiting for people to tell them to do things... P2d"

CPCs set out the expectation in their guidelines that students should not be afraid to ask questions when in practice. This is evident from the following extract from one such guideline:

"Throughout the placement, you will be encouraged and expected to: Ask questions, not be afraid to say 'I don't know' or 'I haven't done that before'." Unit B

Students explained how they were not afraid to ask theoretical questions. However, they were sometimes afraid to ask questions about what to do in practice in case they looked stupid. This occurred when they felt that the preceptor expected them to know this information. Students described how it took courage to say they did not understand or ask to be shown something.

A first year student commented on this dilemma:

"[You need to] be brave, to edge yourself to do things. If there's something going on say; 'I'd love to see that' and it's about speaking up ... being able to say 'I didn't understand that' because it takes a lot to just speak up and say that" S3a

Developing confidence was often referred to by preceptors as not being afraid to participate in care. Students discussed how they needed to have a belief in their own capabilities, to take risks and to get involved in patients' care.
Students used terms such as "throw myself in" or "jump in" when they spoke about initiating and completing nursing interventions independently. This involved conquering their fear and demonstrating confidence. Preceptors described confident students as those who were self-motivated, proactive in getting involved in practice, required minimal guidance and asked appropriate questions. This type of learner was advocated for within all the documents guiding clinical learning within this research. Preceptors enjoyed teaching this kind of learner.

Preceptors believed that students needed to be confident enough to follow them. However, they were frustrated with students who they had to look for or who went missing. Many preceptors considered these students as not being interested in learning. Conversely some students discussed how they needed to overcome their fear to follow the preceptors. They often felt they were annoying them by following them around and asking them to show them things. Preceptors and student gave examples of how confidence was built by working alongside one preceptor in a relationship of mutual respect and trust.

A few preceptors understood that students may be quieter or shyer and needed to be encouraged to ask questions. They needed supervision and support to build their confidence. Conversely other preceptors became frustrated and did not make an effort with students who did not demonstrate confidence as described earlier. A preceptor explained how she does not like working with students who stand back and do not ask questions. She made the following comment:

"Sometimes it just annoys me because they're like not interested.....If they're not bothered then I'm not." P1b

Both students and preceptors believed it was important that students were assertive and proactive in regards to their learning; they perceived that
confident students had more access to learning opportunities. This is illustrated in the following comment made by a preceptor:

"...if you have a student that’s really keen [who] gets involved or shows more initiative you can say ‘oh yeah, come with me.’ ..Somebody else who’s quieter might get left behind." P4a

Developing mastery over psychomotor skills, being encouraged by the preceptor, receiving positive feedback and being appreciated were considered confidence builders by both preceptors and students. This is illustrated in the following comments made by a preceptor and first year student:

"Encourage them in what they’re doing right. Don’t put them down... And just explain to them that we all had to learn different skills and build them up." P1c

"[It is] nice, to be able to say ‘I’m actually able to do that’. Encouragement is a great thing. It’s great to be told when you’ve done something right because you kind of feel, they’re proud of me. It’s nice to just be appreciated" S3a

4.4.3. Helping to get the work done

Throughout all the narratives the priority of patient-care and the need to get the work done was evident. Preceptors explained that while they enjoyed teaching, when the units were busy there was no time to teach students. They believed they had time to teach when it was “quiet” and they were adequately staffed. However, they did not feel this happened enough. Many preceptors expected students to follow them and to ask questions. However, a paradox emerged as students reported how they were afraid to ask questions when the preceptor appeared busy. Some preceptors preferred if students tried to see how they could be useful and did not ask too many questions when it was busy. This is illustrated in the following comment made by a preceptor:

"And if [students] are following you and keep asking you stuff, that’s just like oh no!... whereas if you have someone just getting on with it, it’s a great help” P1b.

Some preceptors described how they did not have enough time to explain what they were doing and why they were doing it, to give daily feedback or to
reflect with the students. They often delegated students' tasks when they were busy as they did not have time to explain the plan of care to them. Preceptors stressed how getting the work done was their priority and sometimes they forgot about the students. It was accepted by all participants that students could feel lost when the ward was busy as they often did not get adequate guidance or instruction. They expressed how this was an unjust situation and understood that the students were on the ward to learn. Preceptors complained that they were not able to adequately assess the students' understanding of nursing care due to these time constraints. Some preceptors expressed concern that they did not have time to invest in teaching the weaker student. They expressed worry regarding students passing through without having been competent. However, they believed the situation was beyond their control, voicing that the workload was too great; their primary responsibility was to the patient; they were short staffed and that they did not get an opportunity to work with the student on a consistent basis. A preceptor discusses these issues in the following extract:

"[I don't have] time it's just so short staffed... we're running around like headless chickens and they are lost in the middle of it. So, reflecting [and feedback] with students doesn't happen... You're just worried you're not teaching them enough... and they'll slip through the gaps, P3b

Many of the preceptors and students described their nursing practice on the general medical and surgical units "as running and racing," "getting the work done," "hectic" and "so busy". Both preceptors and students discussed how the busyness of the ward affected the ability of preceptors to be able carry out the assessment interviews and to sign off when the student was competent. Students used words such as "trying not to annoy" or "pester" when trying to arrange their interviews or asking preceptors to sign of their competency documents. Students accepted that their learning was not a priority. They felt the preceptors tried their best to teach them but they were short-staffed,
rushed and the workload was heavy. A third year student discusses how she would like to receive daily feedback but this was not possible due to the preceptors’ patient-care commitments on the unit:

"[Preceptors should be giving] feedback on a daily basis, not just carrying out the physical skills and getting the work done. It's not the fault of the [preceptors]...I don't think that the time is really allocated; the patients are the priority. S1a"

Students explained how on busy medical and surgical wards there was no time to access and read relevant information, or write up their evidence for their competency assessment. Some preceptors considered it inappropriate for students to be reading, writing or spending time with the CPC when the ward was busy. CPCs' written guidelines advised students not to take their protected reflective practice time when the ward was busy. Students reported that they often did not get this protected time on the busy medical and surgical wards.

All the preceptors expressed how students were a "help" in getting the work done; they admired students who they considered to be hardworking. Students also believed they needed to work hard and be useful. They valued having been part of the team and contributing to getting the work done. Students wrote evidence in their competency document and gave examples in their interviews of how they helped out when the ward was busy. Chores they listed included tasks such as stocking up the drug press and sluice or shredding paperwork. They recounted how they would answer phones, call bells and do observations so they could free up their preceptors to deal with more complex tasks such as reporting to doctors, drug administration or documentation. They enjoyed relieving nurses for their breaks. The students recounted how they received praise and were appreciated when they helped out in this way. Students explained that been thanked for "helping out" enhanced their sense
the value of helping out with the workload is illustrated in the following comments made by a fourth year student and a preceptor:

“...they could be answering bells that are going off while you're handing over [the nurses' report]....., they are a help, definitely!” P1b

Students believed that some preceptors took short cuts due to the amount of work to be done. They perceived that preceptors became impatient when students were trying to perform skills accurately and at a slower pace.

Students reported conforming at times to less than ideal practices. A fourth year student discussed how she experienced this:

“Sometimes you can be made feel slightly intimidated for trying to do things exactly right by staff that want to do shortcuts.” S4a

Students perceived the need to look busy and to find something to do in case they annoyed their preceptors. Preceptors expressed annoyance and frustration with students who stood back and did not take part in delivering care. Preceptors believed that the unit was busy and therefore there was always something to be done. This is illustrated in the following comment made by a preceptor:

“A good student, they're always going, never walking about as if there's nothing going on, there's always something to be done. [Good students] keep busy.” P3c

A first year student recalled how she was advised to look busy and how difficult that was for her to achieve on her own without supervision or direction:

“One nurse said to us ‘always try and look busy, always find something to do.’ but there was times you couldn't...the nurses they'd all be doing paperwork or something else like that. You were kind of just left there” S3b

Students in third and fourth year were allocated to patient areas and shifts according to the workload needs of the unit. This allocation was not dictated by when and where their preceptor was working or the student’s individual
learning objectives. This is illustrated in the following comment made by a preceptor:

"[On this unit] they'll move the student down to an area that's busy... And the preceptor might be in another area that's lighter, but they'll move the student down because it's busier." P3d

The term "work" was often used in CPC's student guidelines; for example students were advised in one such document that "students will work weekends in some areas." Hence much of the learning that took place was ad hoc and service driven rather than educationally led. This was contrary to the supernumerary guidelines in the curriculum document which stated that "clinical placement allows for purposeful/ focused learning where the students apply theoretical knowledge to health care practice." However, preceptors believed that students learned from experience and helping with getting the work done. This is illustrated in the following extract:

"I think because we're so short staffed on the ward at the moment that we're very dependent on them for actually just getting the work done. So sometimes... that probably takes precedence, me getting the work done rather than their learning experience. But they are learning by experience" P2c

4.4.4. Summary: becoming a member of the team

Students and preceptors needed to build a trusting relationship by spending time together so that teaching and learning could occur. Within this relationship preceptors needed to be approachable, friendly, caring and interested in teaching so that students felt safe to ask questions. Students needed to be eager to learn and hardworking. Preceptors discussed good students as being confident, interested and showing initiative. These students initiated patient-care independently, asked questions when they were unsure and found tasks to be done when it was busy. Students were expected to have the confidence to be proactive in their learning, to set their own learning goals and to ask for supervision when necessary. Students expressed how they were often fearful to ask questions and to engage in practice. Students and some
Preceptors discussed how confidence was built by gaining mastery in technical skills, receiving praise, encouragement and positive feedback from preceptors.

Preceptors and students discussed how managing the patients' care and getting the work done was the preceptor's priority. Preceptors were concerned that they often did not have time to teach students. However, they expected the student to contribute to getting the work done on the unit. Students were careful not to annoy preceptors with their learning needs when it was busy. While many variations existed from unit to unit and among preceptors students' learning was often ad hoc and dictated by service needs.
Chapter 5: Discussion

Introduction
This chapter elaborates upon the findings and compares and contrasts them with the literature, as well as discussing this in relation to the theoretical framework as presented in Chapter 2. It is structured in terms of three key concepts: situated learning in communities of learning; situated teaching techniques; and the clinical curriculum. Finally a best practice model of clinical teaching and learning is offered.

5.1. Situated learning within communities of learning
The way preceptors and students engaged in teaching and learning had many parallels with the situated learning theories of Lave and Wenger (1991). The student participating in practice became a valued member of the team and contributed to the purpose of the community which was taking care of the patients in an active and useful way. Whether the students advanced their participation in practice under the appropriate guidance and supervision of the preceptor depended on several factors. These will be discussed under the following headings: organisational commitment to nurse education; nurse educators in clinical practice; recognition of students as learners; reciprocal student–preceptor learning relationship.

5.1.1. Organisational commitment to nurse education
Two main factors affected the preceptor’s ability to provide the appropriate level of supervision to the student. They were consistency of contact with the preceptor and having adequate time to teach. Both these issues required a commitment to nurse education in terms of the nurse manager ensuring that
students were allocated to a preceptor whose shifts aligned with their placement times and that the student worked alongside this preceptor when on duty. While there were some cases of good practice, many preceptors and students believed that preceptorship was not organised in a way that facilitated consistency and allowed time between preceptor and student.

Students reported that they received more support and structured supervision the greater the time spent with one preceptor. Both preceptors and students recounted experiences where consistency in the relationship facilitated an in-depth assessment of students' competency level, an individualised approach to advancing the student's learning and the development of a trusting supportive relationship. Other studies on clinical learning have reported similar findings (e.g. Cope et al 2000; Kimberly 2007; van Eps et al 2006; Stalmeijer et al 2009; Ehrenberg & Häggbloom 2007; Myall et al 2008; Levett-Jones et al 2009d). When the preceptor did not work regularly with the student they had concerns that borderline students were not adequately supported to learn. There was also the possibility that underperforming students may pass through the placement unnoticed as insufficient contact time hampered their ability to assess the students' competencies in any depth. Similar evidence in recent studies carried out in Ireland has raised a question over the validity and reliability of the competencies assessment process (O Connor et al 2009; McCarthy & Murphy 2010; Butler et al 2011).

Students in this study were more frequently exposed to multiple preceptors and spent minimal time with their allocated preceptor. Hence the educational model most often portrayed was similar to Mayer's (2004) description of discovery learning, where students observed multiple role models and imitated their practice with minimal guidance. They constructed their own knowledge by asking questions when they felt comfortable to do so. Mayer
(2004) warns against overly depending on the student’s construction of knowledge without sufficient guidance. This may result in students missing the key underlying principles of practice. Educational research has shown the advantage of guidance is that it can be withdrawn when the student has a sufficient knowledge base to provide their own internal guidance (Kirschner et al 2006). The negative effect of discovery learning with minimal supervision was reported in this study where some students were unsure what they needed to do or felt they were annoying their preceptor by following them, yet they knew they needed to show initiative and to keep busy. Similar feelings of disempowerment were reported by Levett-Jones et al (2009a;b) when students received ad hoc supervision from different preceptors (see also Myall et al 2008).

Students were often allocated to patient caseloads or tasks according to work needs rather than ensuring consistency with their allocated preceptor. Many participants reported that the allocated preceptors’ shift patterns did not align to the student clinical placement times, hence preceptors did not get to work on a consistent basis with their students. Many studies found that organisational factors such as scheduling difficulties hampered preceptors’ ability to teach and assess (Duffy 2003; Henderson et al 2006; Lillibridge 2007; Kimberly 2007; Luhanga et al 2008; O Connor et al 2009; Luhanga et al 2010). The CNMs in this study selected the preceptors for each student and organised the preceptors’ roster and students’ clinical placement schedule. Hence they had the sole responsibility in the overall management of the supervision of students. The Clinical Placement Co-ordinators (CPC) held a responsibility for monitoring the learning environment yet they had no authority over preceptor–student allocation or the students’ rosters. This study found that consistency and adequate contact time with the named preceptor was an essential prerequisite for effective teaching and learning in
clinical practice. Expansion of the CPCs role to include a responsibility in student–preceptor allocation could address the difficulties reported in this study and may help to ensure preceptor–student consistency on a day-to-day basis.

Preceptors were allocated no time to teach or assess students. They were frustrated that they were unable to afford any time to this activity due to their patient–care commitments. They described experiencing role overload and role conflict in relation to their dual role of nurse and teacher. The findings in this study support the key issue reported in Carlson et al's (2010) study where preceptors were considered to need dedicated, allocated time to adequately teach students. Carlson et al's (2010) study was also carried out in the acute care settings. This kind of environment has high patient case loads and a fast turnover of patients which impacts the preceptors' available time to teach. Competing work commitments were found to be a key inhibiting factor in carrying out both the teaching and assessment role of the preceptor in international studies (Henderson et al 2006; Duffy 2009; Baglin & Rugg 2010). Two recent quantitative studies investigating the assessment process in Ireland (Mc Carthy & Murphy 2010 and Butler et al 2011) found it was not given an adequate amount of time.

Many preceptors and students reported that there was insufficient time for the assessment process. This led to an ad hoc approach to competency assessment with limited opportunities to discuss students' individual learning needs. With the introduction of the degree programme the teaching and assessment role of the preceptor has expanded (ABA 2005). Cognisance needs to be taken of the time it takes to fulfil the expectation of this role. This study's findings would support existing evidence that suggests preceptor caseloads be reduced when teaching and assessing students (McCarthy &
Murphy 2010; Carlson et al 2010). This would require financial investment in the role. Hence a shift in thinking at policy level is required to support organisational commitment to the preceptor's role.

5.1.2. Professional education in practice: nurse educators' role

Findings in this study indicated that the goal of many preceptors when teaching students was to provide a nursing service rather than a professional education. In many instances, particularly when it was busy or short-staffed, students were being used to carry out labour tasks at the expense of experiencing other valuable learning opportunities. This issue has been found in other studies (e.g. Myall et al 2008; Webb & Shakespeare 2008 Levett-Jones and Lathlean 2009a). This continues to happen albeit students having supernumerary status. The main critique of practice learning is that it is often driven by day-to-day demands of the workplace. Learning opportunities and supervision of students tend not to be the priority (Stalmeijer et al 2009), as was found in my study. Lave and Wenger (1991) suggested that a limitation to situated learning in communities of practice is the desire for labour over learning. They concluded that when one group dominate or control the resources for learning this can negatively impact the participation of the learner.

Within my study the control of clinical education lay firmly in the hands of service. Students were motivated to learn the values of practice as that was what they were taught and assessed on. The service goals had a technical focus where work organisational skills, team work and clinical performance were highly valued. However, other educational goals in the curriculum that strive for a broad knowledge base, critical thinking skills and motivation for lifelong learning, for the most part were not addressed. These findings
resonate with issues reported in McCarthy's (2006) study. It is important that students gain an appreciation of these two sets of values when in practice.

CPCs or link lecturers in this study were considered to be a support for students but were not seen by students or preceptors as part of the community of practice. Collaboration between preceptors, the CNM, link lecturer and CPC mainly occurred when a student was underperforming. There was no evidence of a partnership approach to teaching the student or shared learning between service and education. This is not a new phenomenon as clinical educators are often considered “guests” in the clinical practice arena (McSharry et al 2010).

Findings indicated the powerful influence the CNM had on how and what the students learned in practice. In this study participants did not believe that nurse educators had an active role in terms of ensuring the consistency in the preceptor-student relationship, the quality of the teaching and learning within the preceptor-student relationship or indeed the quality of the assessment process. The CNM was considered to have the overall responsibility to manage and ensure the quality of the students' learning when in clinical practice. That said, CPCs and link lecturers were called on mostly by the CNM when students were not performing to standard to oversee the assessment process. Many preceptors believed that the CPC's role was a support solely for students

Many participants recounted experiences where learning was often driven by service needs and focused on tasks. Variations existed in the type of knowledge that was taught by the preceptors in this study. Some preceptors, particularly those with higher academic qualifications, used a problem solving approach to their explanations and questions. However, many participants recounted experiences where attention was not given to developing the
students' professional knowledge, clinical reasoning and problem solving
skills. Furthermore many students and preceptors did not value this type of
learning in clinical practice. CPCs, who were employed by the hospital,
understood the priority of work over student learning. The word “work” rather
than learning was frequently used in CPC's guidance documents and in
participants' narratives. CPCs advised students not to take reflection time
when the ward was busy. This disparity in values needs to be addressed to
ensure students receive a quality clinical education that meets the demands of
a professional degree programme. Holland and Lauder (2011) argue that while
clinical placement sites can be considered communities of practice, educators
responsible for students' placement need to ensure they are truly
communities of professional learning. Hence it is essential that they become
part of and develop communities of learning in clinical practice to ensure
quality clinical placements.

The essence of this concept is described by Collins (2006) where each
member i.e. preceptor, student, CPC, CNM, link lecturer within this community
has distinct expertise. Their contribution is valued and they are supported to
progress in their role. The collective goal is to develop the knowledge and
practices of the community. There is emphasis on learning and a structure
where members can share that learning. Studies have shown students' learning improves when educators and preceptors work in partnership
models, using strategies such as structured meetings facilitated by educators
to support preceptors develop their teaching strategies, tripartite assessment
and collaborative case conferences led by nurse educators to help students
integrate theory into practice (Ehrenberg & Häggbloom 2007; Forneris &
Peden-McAlpine 2007; 2009). The imbalance of power between service and
education values elucidated in this study highlights the necessity to ensure
students' experiences in practice are focused on professional learning. Nurse
educators with defined roles in clinical practice who actively manage students' learning experiences and contribute to the students' day-to-day learning could help overcome the dominance of service requirements.

5.1.3. Students' learning styles and preceptors' expectations

Students, particularly students in third and fourth year, were expected to be proactive and responsible for their own learning. This involved being enthusiastic, confident and showing initiative by delivering care without being asked. Honey and Mumford (2006) categorised this type of learning style as "activist" or "pragmatist". However, students also needed to have the capabilities to evaluate their performance and to identify their learning deficits. This second requirement fits well with Honey and Mumford's (2006) description of the "reflector" or "theorist" learning styles. The activist learning style was preferred and fostered by the teaching techniques used by preceptors whereas the reflective learner was not. Elcock and Sharples (2011) suggested that each student has their preferred learning style. However, in nursing practice the activist style is more appropriate in emergency situations while a theorist or reflector's approach is more suitable when choosing the most appropriate nursing actions gleaned from a patient's assessment. Hence showing initiative and learning by participation is a useful learning strategy.

Nevertheless, if this is not matched with mechanisms that challenge the students' assumptions and foster critical clinical thinking, the learner may not acquire clinical reasoning skills necessary for expert practice (Benner 2004). The mismatch of teaching techniques that promote thinking and doing was illuminated in this study. Many of the students reported how interested they were in learning to perform the duties and practical skills expected of them; however, they did not see the significance of questioning or analysing the different approaches to practice that they took part in. The findings signify the
importance of implementing individualised approaches to teaching to ensure students develop all the aforementioned learning styles so that they can attain the competencies necessary for professional practice.

Preceptors held certain expectations of the students' performance. Students needed to have or to develop confidence in their capabilities and be willing to participate and learn from any setbacks. This requirement is similar to Bandura's (1994) concept of self-efficacy. Self-efficacy is the belief that one has in their abilities to perform certain behaviours or actions necessary to manage situations. Bandura's (1994) work revealed that individuals with high self-efficacy set themselves challenging goals and had the ability to perform in stressful situations. These types of attributes are particularly relevant for the nursing context (Spouse 2003). Many preceptors believed students should already have a high level of self-efficacy and enthusiasm and were intolerant of students who did not have the confidence to participate and ask questions. Similar expectations of students were reported in Webb and Shakespeare's (2008) study. Some preceptors used teaching approaches that enhanced the students' self-efficacy which will be discussed later.

One of the factors that decreased students' confidence and self-efficacy was when the preceptor had too high expectations of them in their ability to practise. This was particularly the case for third and fourth year students. When students experienced too high expectations and inadequate supervision it affected their confidence and subsequent competency attainment, a finding also supported in other studies (Levett-Jones & Lathlean 2009a;b; Chesser-Smyth & Long 2012). Many preceptors in this study were not able to accurately articulate their expectations of students in terms of levels of performance according to formal assessment guidelines. Other studies have found that preceptors did not understand the theoretical frameworks underpinning
assessment (Moseley & Davies 2008; Luhanga 2008d; McCarthy & Murphy 2008). The findings indicated the importance of preceptors having a realistic expectation of how students should perform based on educational outcomes. They can then tailor their level of supervision and teaching strategies accordingly, thus enhancing student's self-efficacy and achievement of competency (Levett-Jones & Lathlean 2009a).

5.1.4. Reciprocal student–preceptor learning relationship

Some preceptors and students illustrated experiences where collaborative shared learning occurred within relationships of mutual respect. Preceptors in these instances were encouraging, approachable and friendly and students felt comfortable asking questions. These interpersonal qualities were considered to be the most important preceptors’ attributes in Heffernan et al’s (2009) study. A mutually respectful relationship occurred in this study when the preceptors appreciated the student’s role as learner and invited them to participate in all aspects of their work. Students needed to be interested in learning. In keeping with the findings of Levett–Jones et al (2009b), this type of mutually beneficial interpersonal preceptor–student relationship enhanced the student's ability and motivation to learn. When students experienced continuous structured supervision they had the opportunity to build a mutually respectful relationship. This has been reported as a contributing factor to effective learning in many other studies (e.g. Spouse 2003; Levett–Jones 2009d; Raines 2009).

The converse of these attitudes was having been spoken to in a condescending or judgemental way, been ignored or avoided. In these circumstances students did not ask questions and felt excluded. Levett–Jones et al (2009b) explored this concern in depth and found that when students feel isolated or a 'nuisance' it negatively impacted their learning. This has also
been noted in other studies (Cope et al 2000; Spouse 2003; Higgins & McCarthy 2005; Edgecombe & Bowden 2009).

Myrick et al (2006) carried out a collective case study, exploring conflict in professional practice education. They reported on the findings of four nurse participants and suggested that this type of covert aggression within the preceptorship relationship has the potential to silence and disempower students. They claimed an educational system that perpetuates this form of oppression forces students to conform and negatively affects the development of a professional identity. Benner et al (2010) refers to these types of hostile preceptor behaviours as horizontal violence. They suggested that those responsible to oversee education need to have a zero tolerance approach to this kind of behaviour. Webb and Shakespeare (2008) suggested more rigour needed to be applied when selecting mentors to ensure students are not exposed to negative attitudes. On-going support to develop preceptors' teaching approaches could also challenge preceptors' inappropriate beliefs. The literature supports the notion that some of these dominating behaviours are ingrained in the culture of nursing (Webb & Shakespeare 2008). Findings from my study have shown that students are exposed to interpersonal conflicts in practice; hence they need to be prepared to deal with these conflicts when they occur. Nurse educators could explore these issues with students while on placement and empower and support them to resolve interpersonal conflict.

Unequal power relationships between the preceptor and the student were found to exist among many of the preceptor–student pairs. These preceptors did not adhere to the educational standards required to meet the students' learning needs. While students valued their role as learners they recognised the priority of patient-care and felt sympathy for the overwhelming workload
of the preceptor. They expressed powerlessness to challenge the status quo in regards to getting their educational needs met. Preceptors believed that students were responsible for their own learning yet many preceptors were not aware of their responsibility to teach.

Spouse (2003) suggested this type of asymmetrical relationship has a negative effect on students' professional learning. Students in my study were interested in pleasing the preceptor and believed that they were a help in getting the work done. They often resorted to carrying out menial tasks rather than learning professional practice. They held an overriding desire to belong within the team and hence were fearful of challenging practices not consistent with their knowledge and values. This was also found to be the case by Levett-Jones and Lathlean (2009c). Students for the most part were passive, unquestioning recipients of information. Forneris and Peden-McAlpine (2007) discovered a similar imbalance of power within the student-preceptor relationship which impacted the students' ability to critically analyse. This one way socialisation process was reported by Melia's (1983) early seminal study on working and learning in the apprentice style of nurse education. It continues to be reported in studies investigating learning on diploma and degree programmes (e.g. Pearcey & Elliot 2004; Webb & Shakespeare 2008).

Lave and Wenger (1991) proposed that contradictions between the teacher and learner naturally exist, and can be negotiated by reciprocal learning which has the potential to lead to the transformation of practice. However, the evidence in this study suggested that in many instances an unequal power relationship, where students' survival in practice was more important than learning, was at play. Hence the transformation of practice and construction of new knowledge was not possible. Reciprocal learning between preceptors and students and among all disciplines of staff was described more often in one
unit were preceptors had both academic and specialist qualifications. This type of learning was also reported in some preceptor–student pairs in other units, and the preceptors in these cases had post graduate academic and specialist qualifications. Professional growth for both parties was reported in these instances as the relationship was equal and students felt comfortable to ask questions. Professional development has been cited as a benefit of the preceptor–student relationship in other studies (Lillibridge 2007; Myall et al 2008; Carlson et al 2010). Collectively these findings suggest that efforts are made to ensure preceptors have both the professional knowledge and are equipped with appropriate educational strategies to teach students in order to promote an effective preceptor–student relationship based on reciprocal learning. This type of relationship and teaching approach could facilitate students to contribute to an evolving and transformed professional practice.

5.1.5. Summary

The evidence would suggest that effective preceptorship requires organisational commitment in terms of assigning the preceptor protected time to teach and ensuring the consistency in contact time between the student and allocated preceptor. Findings indicated that many students were exposed to service goals, sometimes at the expense of educational goals. Inaccurate expectations and a lack of appreciation of different learning styles had the potential to impede students' learning in terms of thinking and performance. Individualised approaches to teaching students, where the preceptor tailored her teaching according to the students' learning needs, were found to be the most effective approach. Findings emphasised the need for a mutually respectful relationship between the student and preceptor, where reciprocal learning took place. This type of learning was reported when the preceptor had a specialist and higher academic qualification.
The evidence presented indicates a need for financial investment into clinical education, which would allow for adequate resources in terms of time and on-going support for preceptors in their teaching role to facilitate effective clinical teaching and learning within the clinical setting. However, McKenna and Wellard (2004) highlighted the controversy at policy level of cost effectiveness versus providing educational sound clinical education. Consideration needs to be given to these political constraints and their negative impact on students' learning. On the other hand, the advantage of investing in clinical education, where student's individual learning needs are addressed and reciprocal learning is fostered, is that nursing practice has the opportunity to evolve and to be transformed, thus ultimately improving care to patients.

5.2 Situated teaching: pedagogical competencies

Many of the teaching techniques that preceptors used in this study were comparable to the teaching techniques defined within the cognitive apprenticeship model (Collins et al 1991) and the instructional methods that underpin Vygotsky's (1978) social constructivist learning theory. Key pedagogical competencies of situated teaching are identified and discussed under the following headings: teaching and assessment methods to promote performance and understanding; teaching and assessment strategies to promote thinking and learning.

5.2.1. Teaching and assessment methods to promote performance and understanding

Preceptors used the following teaching techniques to foster students' performance and understanding in practice. They included dialoguing practice when demonstrating and coaching the student in practice; continuous
assessment while scaffolding the student to the next level of participation and building the students' confidence. Each of these methods is discussed in turn.

5.2.1.1. Dialoguing practice when demonstrating and coaching

Preceptors' teaching approaches described most frequently in this study were similar to the first two teaching strategies of "modelling" and "coaching" within the cognitive apprenticeship model (Collins et al 1991). Role modelling contributed to the students' learning. Participants believed that it enabled the students to conceptualise the holistic processes involved in carrying out the care of the patient. Collins et al (1991) claimed a similar learning outcome when using this approach. Participants reported that students gained the motivation and the confidence to learn by watching other nurses' practice. Students were more inclined to learn from preceptors who practised in an altruistic manner and they had an affinity to younger nurses. This aligns with Bandura's (1994) concept of social modelling where learners are motivated to learn from individuals they can identify with.

Preceptors coached students by providing direct instructions, explanations, hints and prompts which facilitated the students to participate in practice or practise independently. They also corrected omissions in procedural knowledge. These instructional methods were reported in other studies (Carlson et al 2009; Luganda et al 2008a; Stalmeijer et al 2009). Interactive dialogue was found to be the main component of effective teaching and learning within modelling and coaching. Some preceptors explained the "how" and the "why" of practice as they worked together. The students then asked questions to address deficits in their knowledge, hence constructing their own knowledge. When this type of dialogue did not take place students felt lost and had to figure out how to contribute to the care of the patient by carrying out tasks they were already competent in.
The merits of learning through shared practice and discourse have been advocated by the social constructivists and situated learning theorists (Moll 1990; Lave & Wenger 1991). Vygotsky's (1978) work focused on the need to create meaning and significance within learning activities. He advocated for the use of speech as a tool to mediate both thinking and meaning. The dialogues and interactive teaching found in this study gave the student access to scientific knowledge and knowledge of how to practise for the future. Moll (1990) claimed that this type of verbalisation enables students to internalise knowledge which can provide the guidance for further activities. This notion of preceptors thinking aloud where the students were free to ask questions was found to be an effective teaching strategy in many nursing studies (Spouse 1998b; Cope et al 2000; Å-hrling & Hallberg 2001; Lillibridge 2007; Carlson et al 2009). Heffernan et al (2009) claimed it is essential that preceptors have good communication skills as they are required to explain practice to students. However, some preceptors in this study did not see it as their role to verbalise their practice in terms of their rationale for care. Spouse (2003) previously raised this concern in the findings of her study. In these instances students reported that they found it difficult to develop their practice knowledge.

Explaining and dialoguing practice was least used when the priorities of practice needed to be attended to. When this occurred students asked CPCs to explain specific patient-care issues that they were unclear about. The CPC role is described in the literature in terms of support and liaison as opposed to clinical teaching (Drennan 2002; ABA 2005; McNamara 2007). This study has shown that CPCs contributed to students' understanding of clinical practice. They are well placed within the situated context to support the cognitive component of the coaching process.
Benner et al (2010) carried out an ethnographic evaluative study to identify the pedagogies that enable students to achieve the required outcomes of a professional education. The study compared and evaluated nine schools of nursing. Paradigm cases that represented best practice in this regard were reported. Findings within this study validate the usefulness of taking time at the end of each day to dialogue practice within the situated context. This structured approach facilitated by a clinical teacher enhanced students' cognitive understanding of practice. These post-clinical conferences encouraged students to take nursing action in line with professional based knowledge and skills. Students in my study reported similar benefits from the interactive weekly sessions they had with some CPCs.

It is relevant to note that CPCs, because they were employees of the hospital, were not involved in the teaching or assessment of any part of the theoretical or clinical skill modules taught at the university. Preceptors in this study were not aware of the content of CPCs' teaching sessions. Hence a fragmented approach to teaching professional knowledge was found in this study. Benner et al (2010) found that a fragmented approach left gaps in the students' learning. Nonetheless the value of the CPCs' sessions was evident. The role of The CPC was not explored in this study. However, the findings suggest that CPCs facilitated the application of theory to practice within the situated context. While it would be useful to explore the CPCs teaching and assessment role further, some of the findings and theoretical underpinnings of this study indicate that an expansion of the CPC role to include a more frequent collaborative approach to these teaching sessions has the potential to further support the students' construction of knowledge while in clinical practice.
5.2.1.2. Scaffolding the students to the next level of participation by continuous assessment

Students' learned how to practise by proceeding along a continuum from observation to the management of a patient case load. Lave and Wenger's (1991) theory of legitimate peripheral participation (LLP) describes how students learned and how some preceptors engaged in teaching in this study. Learning occurred when the students took part in the day-to-day practices. Therefore it was largely unplanned rather than intentionally set out. However, in many instances students' learning was sequenced where they initially observed the preceptors' practice and then they took part in sub-skills and tasks within the routines until eventually they could manage patient care on that unit. Sequencing learning is advocated in the cognitive apprenticeship model (Collins 2006). It allows the students to gain a conceptual map of the global skills prior to learning sub-sections of the task.

Some preceptors accessed the students' level of performance competency on an on-going basis. Their methods of assessment were, for the most part, observation. Some preceptors asked students the key actions that they were going to implement or had already implemented. Collins (2006) suggests this allows the learner to reflect on the task so that they can form a conceptual basis for their subsequent actions. These exploratory conversations have the potential to develop the student's comprehension skills and help the student take control of their learning (Moll 1990). The theoretical concepts of both ZPD and instructional scaffolding (Moll 1990) were reflected in the teaching techniques applied by some preceptors to support students to reach their next level of learning. Some preceptors allocated students tasks and adjusted their level of support to advance the students' level of performance and understanding. When deficits, incomplete actions or misconceptions were
identified, the preceptors would provide the individualised tailored teaching techniques of role-modelling, coaching and dialoguing as previously described. Diaz's (1990) writings based on Vygotsky's concepts validated the use of individualised approaches where teacher support is adjusted according to the students' mastery and potential for mastery. This kind of instructional scaffolding has also been reported in other studies investigating clinical practice education (Spouse 1998b; 2003; Cope et al 2000; Stalmeijer et al 2009).

As the students developed competencies and began to practise more independently some preceptors moved from a central participatory role to a more supportive role. These preceptors gradually withdrew direct supervision and shifted their focus from direct guidance to allowing the students to practise more independently whilst providing necessary coaching or assistance if required. This shift from preceptor initiated learning to student initiated learning was also reported by Spouse (2003). Fading is the term used to describe this teaching approach in the cognitive apprenticeship model (Collins et al 1991). The notion of the preceptor providing a continuum of support is supported by the findings of other studies reporting on preceptors' teaching practices (Cope et al 2000; Ährling & Hallberg 2001).

A finding gleaned in this study, also supported by Spouse (2003), is that scaffolding the students' learning as previously described was only possible when students participated in the planning and delivery of holistic patient care within the confines of a consistent student–preceptor relationship. It was reported that preceptors who worked with students on a consistent basis were aware of their performance and understanding. This allowed them to apply the appropriate level of direction and support. These findings highlight the issue that effective teaching in clinical practice was intertwined with continuous
assessment of the students understanding and performance. A preceptor who scaffolded the student's learning throughout their time in placement was more prepared to assess the student's competency attainment. Writers in the educational domain claim the value of on-going or formative assessment is realised when the emphasis is on learning (Black & William 1998; Broadfoot & Black 2004). Theories of situated cognition support the principle that assessment is part of the learning continuum (Moll 1990; Collins 2006). Therefore it can be argued that teaching and assessment are inseparable concepts.

While some cases of good practice existed as previously described, very little evidence of on-going holistic assessment was found in this study. In fact the assessment process was mostly given attention when students were performing below standard. The responsibility for managing these students' assessment was devolved to the CNM. In these instances students were assigned to several preceptors to assess their performance. Participants considered the focus to be on judging the students' performance rather than developing their competence through the aforementioned scaffolding techniques. Many preceptors expressed a lack of pedagogical confidence and competence in teaching students who required this type of intensive coaching and scaffolding. This discrepancy in teaching and assessing student nurses needs to be addressed. The interim report of the recent review of undergraduate nursing programmes in Ireland has yet again drawn attention to the failure to fail issue (DoH 2012). While failure to fail students is a concern, evidence from this study illuminates a failure to teach students who require extra support. Students who are performing below standard need extensive feedback, direction, coaching and scaffolding (Luhanga et al 2008a). This kind of intensive teaching requires both time and teaching expertise. Evidence in this study suggests that preceptors have difficulty in fulfilling on
both these requirements due to competing work commitments and a lack of confidence in their teaching ability. Findings indicate preceptors could benefit from more support to enable them to apply appropriate teaching strategies and to provide adequate student feedback in these complex and challenging situations.

5.2.1.3. Confidence building strategies
The positive effect of verbal persuasion, encouragement and praise was frequently voiced as a confidence building strategy in this study. Diaz et al (1990) suggested that supportive teacher behaviours underpin the concept of scaffolding. Many participants believed that preceptors enhanced students' psychological wellbeing by understanding that they were nervous. They recounted how they ensured a psychological readiness before asking students to proceed yet encouraging them to try. Students experienced nervousness but felt a sense of accomplishment when the preceptor pushed their boundaries of practice in this way. These types of behaviours were reported to have progressed students' competence and confidence in practice. This was also seen by Levett-Jones et al (2009b).

The belief found in my study that skills acquisition is a key factor in developing the students' confidence in practice is supported by the findings of other studies (Ä-hrling & Hallberg 2001; van Eps et al 2006; Bray & Nettleton 2007; Myall et al 2008; Baglin & Rugg 2010). When students gained mastery in practical skills it was reported to have increased their confidence and their belief in their capacity to practise. A recent study by Chesser-Smyth and Long (2012) also supports the concept that confidence building is a key component of learning and developing competence within a practice discipline. It validates the confidence building approaches found in this study. The study used a sequential, mixed method three phase design. The sample was gleaned from
three university sites across Ireland. Data collection involved scoring students' confidence levels before and after placement (n=145), a review of curriculum and focus groups (n=20 students).

The abovementioned confidence building strategies are supported by the approaches advocated by Bandura's (1994) theories of self-efficacy. He described the sources of self-efficacy as successful performance, verbal persuasion and emotional arousal. The type of emotional arousal expressed in this study had both negative and positive effects. When students' nervousness was recognised and coaching was adapted accordingly, participants reported how this developed students' confidence. Conversely, when it was ignored, students reported being fearful. Participants in this study suggested that the opposite of encouragement was "correcting" or asking questions where the students felt interrogated. In these instances they "were afraid to get it wrong". This type of negative feedback and judgemental approach was reported to decrease students' confidence. Bandura (1994) suggested that this type of interaction instils self-doubt and decreases the students' motivation and capacity to learn.

Chesser-Smyth and Long (2012) reported similar inhibiting factors to confidence building. A major constraining factor to students' belief in their capacity to learn was inadequate supervision and guidance. Students described been "lost" when this occurred. Other studies have shown that these sorts of feelings can affect students' self-efficacy levels (Levett-Jones & Lathlean 2009a; Chesser-Smyth & Long 2012). It is of interest to note that findings in my study elucidated that all preceptors believed students need to be confident to practise. Yet whilst some preceptors believed it was within their role to foster the students' confidence through supportive supervision and encouraging mastery, others did not.
5.2.2. Teaching and assessment strategies to promote thinking and learning.

Whilst some preceptors used teaching strategies that promoted students' ability to think about practice situations and to problem solve, this was reported infrequently. Indeed, the use by preceptors of strategies that allowed students to take control of their own learning, such as giving constructive situational feedback, encouraging students to self-assess and reflection were rarely found in this study.

5.2.2.1. Articulation: contextual questioning

Preceptors suggested that they generally asked students procedural questions in order to address the lower order learning that is, knowledge and comprehension (Krathwohl 2002). Some preceptors elucidated teaching strategies that involved problem solving questions. Many students' recounted incidents where CPCs used questions to challenge the students' ability to problem solve. The type of questions in these instances were prefaced by "how", "why" or "what if" and were asked in relation to patient care that the students were involved. These preceptors and students believed that this type of questioning helped students to verbalise and hence refine their knowledge. It encouraged them to identify procedural knowledge, scientific knowledge and rationale for care by applying it to the presenting patient's context. Some preceptors believed that asking students "what if" questions helped them to think about what they might do in other situations. Spouse (2003) found that reflective questioning and encouraging the student to think aloud were useful strategies in developing the students' metacognition skills, that is, their ability to understand their own thinking processes and to identify the gaps in their knowledge or practice (Collins 2006). The usefulness of critical questioning in developing students' clinical reasoning skills in the context of clinical practice is supported in the findings of other studies (Forneris & Peden-McAlpine
2009; Benner et al 2010). Collins et al (1991) claimed this teaching method, which he identified as articulation, has the potential to promote students' problem solving ability and knowledge transfer.

Clinical judgement and reasoning is an important learning outcome in the learning practicum (Benner 2004). Cognitive apprenticeship theory (Collins 2006) suggests that articulation has the potential to foster this type of learning. Findings from this study indicated that preceptors who had both a specialised qualification and were educated to masters' level used this strategy. However, many preceptors and students recounted only the use of lower order questions that focused on procedural knowledge. This type of questioning is linked to the teaching strategies of coaching and scaffolding. These findings suggest that critical questioning may be a teaching skill that requires expert knowledge and teaching expertise. The issue of who has the necessary professional knowledge and pedagogical competence to teach students the cognitive element of nursing practice when in the clinical area needs further exploration.

5.2.2.1. Constructive situational feedback and student self-assessment
The competency assessment process was set up by ABA (2005) to assess students' performance, attitudes, values and knowledge. It is set out to be a student-centred approach where there are opportunities for student self-assessment and feedback. The three stage interview process was established to support this notion by providing time to formally identify the student's individual learning gaps and to make expected outcomes explicit. However, a disparity between the rhetoric and the reality was evident in the findings of this study. While some broad learning opportunities were identified at the initial interview many students recounted how they were not given the opportunity to discuss their individual goals or learning needs. Furthermore it
was elucidated that in many cases students did not receive on going structured, detailed, individualised feedback. These issues were raised in three recent Irish studies (O Connor et al 2009; McCarthy & Murphy 2010; Butler et al 2011). Feedback given to students was mostly in the form of positive broad evaluative statements such as 'shows initiative', 'good team worker', which was given at the end of the placement. Students did not believe this feedback to be helpful to learning in terms of identifying their individualised strengths or weaknesses. However, they suggested it did improve their self-worth. Lipnevich and Smith (2009) suggested that specific praise related to achievement in tasks is more beneficial as it increases motivation and self-efficacy. Students expressed a desire for regular, constructive, specific, situational, individualised feedback in relation to their overall practice to enable them to identify areas of improvement. A recent grounded theory study carried out by Yonge et al (2011) supported this finding. This study evaluated students' (n= 22) perceptions of assessment and discovered that formal assessment did not improve students' ability to practise. In contrast they greatly benefited from on-going informal feedback and informal self-reflection facilitated by the preceptor. Many other nursing studies have found that timely on-going constructive feedback is a major contributor to students' learning and competency attainment in clinical practice (Donalson & Carter 2005; Grealish & Ranse 2009; Myall et al 2008; Lauder et al 2008).

Writers within the domain of education claim on-going feedback can identify learning deficits, clarify misconceptions and encourage the students to self-assess their own performance and learning (Brown & Hirschfield 2008; Halverson 2010). Preceptors in this study often asked students how "comfortable" they felt after carrying out procedures, However, they did not ask them specifically to reflect on their strength or weaknesses in relation to
their performance. Other studies investigating the use of the cognitive apprenticeship teaching techniques within clinical practice found a shortfall in the use of the teaching approach known as reflection which facilitates the students' ability to self-assess (Stalmeijer 2009; Page & Ross 2004). Collins (2006) claimed that students improve their performance if they can think what they need to do, try to do what they planned and then self-assess their performance and the outcome. These thinking strategies can be facilitated by feedback and a mechanism that allows students to verbalise their self-evaluation. Benner et al (2010) found that when students received feedback on their practice and when they were given opportunities to articulate their thinking and reflect on their actions, cognitive learning occurred. The benefits of facilitating students' self-evaluation in improving students' learning have has also been found in other nursing studies (e.g. Kimberly 2007; Luhanga et al 2008a).

It was evident from examining the documentation within this research that student nurses were expected to self-regulate their learning by showing initiative and asking questions. The ability to be self-directional in learning demands high cognition and metacognition skills (Collins 2006). However, the infrequent use of individualised goal setting, on-going situational specific feedback and self-assessment strategies by the preceptors in this study may not have promoted these sorts of skills in the clinical practice setting. In many cases a contradiction existed where some preceptors expected certain student behaviours in terms of learning yet they did not articulate a need to foster these in terms of teaching or in their assessment strategy.

The constraints preceptors cited to giving feedback in practice and during the assessment interview were insufficient time, lack of confidence and not knowing the students well enough. Other studies reported that preceptors
had difficulty with the cognitive element of the role such as giving feedback which impacted on their ability to assess (Duffy 2003; Moseley & Davies 2008; Luganda et al 2008c). However, many preceptors in this study did not consider these cognitive teaching strategies of giving feedback and facilitating the student’s self-reflection as critical to their ability to teach or assess. This suggests that these preceptors may not have adequate pedagogical education in this respect. Findings suggest that many preceptors lacked an appreciation of the contribution these approaches could make to students’ learning.

Preceptor preparation programmes are provided to ensure that preceptors are equipped with the necessary pedagogical competencies to facilitate effective learning (GOI 2000). The current programme offered to the preceptors in this study is only one day in length and preceptors’ teaching abilities are not assessed (see Appendix I for outline of preparation programme). The presumption that qualified nurses need only one day to learn the educational principles, strategies and practices of clinical teaching is unrealistic. Indeed, the findings of this study showed that further education and on-going support for the preceptors’ teaching role was required. Increasing educationalists’ involvement in clinical education could help prepare, support and assist preceptors to teach students the cognitive elements of practice.

Moseley and Davies (2008) found that even following completion of a mentor preparation programme the intellectual component of teaching remained a challenge to mentors. Some preceptorship models have implemented mechanisms such as group supervision for on-going preceptor support. Improvements in preceptors’ teaching ability particularly in respect of the cognitive and interpersonal aspects of their role were
reported following implementation of these initiatives (Danielsson et al 2009; Smedley et al 2010). Within these preceptorship models the teaching team is often made up of preceptors, a head preceptor, a clinical teacher and university lecturer. Standards around qualifications for each role, defined functions and dedicated teaching times are set out (Hallin & Danielson 2009). The implementation of these types of models in the Irish context require exploration as they have the potential to increase preceptors' preparedness, confidence and support for the role (Hallin & Danielson 2009).

5.2.2.2. Reflective practice

Evidence from this study suggests preceptors did not engage in facilitated reflective practice with students. Preceptors believed reflective practice was the role of university lecturers or CPCs. They did not see it as their role nor did they see the significance in challenging the students to think about practice. Two other Irish studies reported similar findings (McCarthy & Murphy 2008; Duffy 2009).

Using reflection as a learning tool is a requirement written into every undergraduate nursing curriculum in Ireland (GOI 2000). The nursing board has set standards that students are to be allocated no less than four hours a week protected reflective time when in clinical practice (ABA 2005). These could take the form of reflecting with the college lecturer, with the CPC or with the preceptor (GOI 2000). Participants reported that students in this study only received structured facilitated reflective practice in the college and occasionally by the CPC when they were in practice. Students were released to attend the college for one day every three weeks when in clinical practice. During this time they received structured facilitated reflective practice based on incidents that would have occurred in practice. Participants reported that
the other protected reflective hours that were to be used when the students were on the clinical area were mainly used for students' own study purposes.

Three reflective practice theorists have studied the value of using this strategy when teaching students within practice disciplines. Johns and Freshwater (2005) claimed that stimulating the students to think about practice can promote their ability to self-monitor in terms of ethics and professional values. It encourages the student to become mindful within their day to day practice and within their interactions with patients. They suggested reflective practice moves the students beyond application of theory to practice where they can construct new knowledge and develop practical wisdom. Schon (1987) claimed that reflection can nurture expertise; without it he warned that practice can become repetitive and task focused.

Mezirow (1996) proposed that reflection encourages the students to question why things are done in a certain way. This helps students to expand their thinking and develop into transformational learners. The nursing board stipulates that student nurses be equipped with these analytical and lifelong learning skills to ensure they have the ability to expand and adjust their practice on an on-going basis (ABA 2003; 2006). Current policy makers are demanding that undergraduate students on award of their degree have the skills to embrace current reform within health care and focus on delivery of care within the community (DoH 2012). Hence it is imperative students develop reflective skills that enable them to become autonomous, thinking, expert practitioners.

Findings gleaned from the interviews indicated students' ability to think or reflect was not often assessed. There was no evidence of higher order thinking or reflection in the students' written evidence. This was also seen in two other
Irish studies (O Connor et al 2009; Timmins & Dunne 2009). Concern regarding the lack of reflection within the current undergraduate programmes was raised in the recent review of undergraduate nurse education. Suggestions were made for a more structured approach in providing reflective practice for students when in clinical practice (DoH 2012). Johns and Freshwater (2005) claimed that reflection needs guidance so students can frame their learning. Evidence in this study has indicated that the constraints of the busy environment and the dual role of the preceptor impeded preceptors' ability to teach while delivering care. Therefore it may not be reasonable to expect preceptors to take this time out from their direct patient–care to provide facilitated reflection. Some students reported the usefulness of reflecting with the CPCs. Hence a sensible approach to implementing the protected time set aside for reflection in the practice arena is for CPCs and link lecturers to fulfil this role. Educators could reflect with students within the milieu and complexity of practice on a more consistent basis. Preceptors on the other hand could be prepared and supported to implement the teaching techniques of coaching, dialoguing practice, contextual questioning and student self-assessment as previously described.

This study illuminated how preceptors who work with students on a consistent basis were more aware of their cognitive and performance level. However, it may be inappropriate to expect preceptors to be solely responsible for the development of the students' cognitive ability when learning in the clinical area and to assess the students' capability in this regard particularly in respect of the written evidence in their competency documents. Within this study's setting lecturers reviewed the students' practice assessment documents at the end of each year and ensured all the critical elements and competencies were signed off. However, the preceptor had the ultimate responsibility to deem the students competent in the knowledge, affective and cognitive domain in each
critical element and competency domain. The role of the lecturer in clinical
practice was not explored in this study. However, findings illuminated specific
support that both students and preceptors could benefit from which could
further develop the students' cognitive competency when in practice. As
mentioned earlier a partnership approach between nurse educators and
preceptors to teaching and assessing could address the pedagogical gap
identified in this study.

5.2.3. Summary
Preceptors' teaching techniques that enhanced the students' learning in terms
of performance and integrating the knowledge required for practice were
elucidated in this study. These teaching methods aligned well to the
theoretical principles of the ZPD, LPP and the first three teaching methods of
the cognitive apprenticeship model. The confidence building teaching
strategies gleaned in the findings of this study had some foundation in the
theoretical concept of self-efficacy which participants believed promoted the
students' confidence and capacity to learn. Students performing below
standard required intensive coaching and scaffolding. However, findings
showed that preceptors had insufficient time with the student and in some
cases, a lack of desire or confidence in their teaching ability to implement this
form of teaching.

Evidence in this study highlighted a concern that many preceptors did not
implement and were not aware of the need to implement cognitive teaching
strategies. Furthermore findings suggest students' thinking and reflective
ability was rarely assessed. The presumption could be made that when the
majority of the preceptors, as was the situation in this study, held both
academic and professional qualifications that they would have the necessary
professional and pedagogical competencies to teach students in clinical
practice. While some preceptors educated to a post-graduate level used performance and cognitive teaching strategies, many preceptors who were educated to degree level and had attended the one day preparation programme did not use teaching methods that fostered students' thinking ability. The gaps that were reported in this study in relation to preceptors' pedagogical practice suggest a need for more extensive educational preparation and support for the preceptor role. Findings also support an argument that teaching and learning within the clinical area could benefit from integrated partnership model between preceptors and nurse educators.

5.3. Clinical practice curriculum
The following section discusses the key elements of the taught clinical practice curriculum which was illuminated within this study’s findings. What was taught and assessed and what students learned will be discussed. How this matches current understandings of professional practice and the formal written curriculum will be examined. The three main areas of practice learning are discussed: professional skills acquisition; clinical reasoning and judgement; formation of a professional identity.

5.3.1 Professional skills acquisition
Students were expected to perform both technical and communication skills at a proficient level within this study. These professional behavioural skills were reported to be the key criteria that preceptors used to judge students' competencies in practice.

Practical skills were considered to be the corner stone of nursing practice. It was by acquiring and performing these skills that students had access to learning more holistic competencies. The Irish undergraduate review (DoH
2012) and other studies (van Eps et al 2006; Baglin & Rugg 2010) continue to report the value of student nurses acquiring psychomotor skills when in clinical practice. Cowan et al (2005) suggested that employers value the acquisition of these performance competencies as the students can contribute to the care given to the client. This was found to be the case in this study, indicating the mutual benefit of practical skills acquisition for both the organisation and the student. As students progressed through the programme they were able to adapt and integrate the skills into the patients' overall plan of care.

This progression was reported by Spouse (2003) and it compared well to Simpson's (1972) taxonomy of levels of learning in the psychomotor domain. Practical skills were considered the foundation of all professional practice. Findings suggest that preceptors applied the previously discussed teaching techniques to this domain of nursing practice over any other. Preceptors assessed students' performance and competency on students' fluency, speed and ability to integrate these skills in practice. Judgements were made on this element of practice rather than written evidence in the competencies documents. Contradictory evidence was found in a recent two phased mixed method descriptive study evaluating the clinical competency assessment process in one geographical area in Ireland (Butler et al 2011). Competency assessment was found to be predominantly a theoretical exercise in Butler et al (2011) study whereas clinical skills were not given the same attention within the assessment process. Data were collected by focus groups (13 students and 16 preceptors) and a survey of preceptors (n=255). While all competency documents across the Republic of Ireland are based on the nursing board's national framework, each university applies these competencies to their own contexts. A skills acquisition list is incorporated in the competencies assessment tool used in my study setting. This could explain the conflicting
evidence. Nevertheless collectively this evidence indicates that many preceptors have difficulty in applying a holistic approach to assessing students' competency in practice. Butler et al (2011) proposes the implementation of a clinical teacher role to support and validate the assessment process.

The educational value of the clinical laboratory in terms of providing the foundation to learning psychomotor skills in practice was elucidated within the findings of this study. Students were able to recognise theory-practice gaps and be clear on their own standards of skills performance. However, some skills that were taught in the laboratory such as in-depth physical examination were found not to be taught in practice. Participants considered these skills to be the remit of doctors in the clinical practice arena. Therefore preceptors were unable to teach or assess these skills in practice as they were not part of their skills' set at the time of this study. Students did not attempt to apply these skills in practice. The DoH (2012) review reported the need to include physical examination skills within the curriculum. New models of clinical teaching where the teacher moves from the simulated clinical laboratory into practice could address the aforementioned deficit found in my study. The introduction of a clinical teacher with this remit could ensure that students would gain technical skills not currently being practised by preceptors. This type of initiative may have the potential to advance practice while providing an opportunity for reciprocal learning for the preceptor.

Students were assessed on their ability to communicate effectively with both patients and all health care professionals. Students felt learning how to communicate in a professional way was a challenge. Conversely many preceptors held the view that these skills were innate to a personality type and did not believe this element of practice could be taught. Findings suggest that
some preceptors undervalued their own professional interpersonal communication skills and those that are required to practise as a professional nurse (Mallik et al 2009). Some students recounted how they had not got adequate exposure to the complex skills of breaking bad news or reporting outcomes and deterioration in patient’s condition to doctors. These skills were taught in the clinical laboratory in the theoretical portion of the curriculum. Students also reported a practice-theory gap in relation to how these interactions were conducted in practice. Lauder et al (2008) recommended that communication skills need to be taught in nursing programmes to ensure graduates are fit to practise when qualified.

Another gap in practice learning illuminated in this study was patient education and health promotion. The DoH (2012) review recommended that a philosophy of patient empowerment and population health should underpin the undergraduate curriculum. While these concepts are set down in the curriculum to be taught and assessed in the theoretical component of the programme there was no evidence found in the participants’ narratives and the students competency documents where students learned the application of these concepts in practice. These findings would support the suggestion that the implementation of practice development projects could help some preceptors to advance their nursing practice to incorporate contemporary patient empowering concepts such as health education and promotion. However, it could be the case that many preceptors need support to be able to articulate their current practices that reflect contemporary nursing practice to students, hence making them visible for students to learn. Educators need to ensure that students are exposed to these professional nursing interventions when auditing the quality of clinical placements.
The nursing board stipulates that students spend a minimum of thirty six weeks in medical and surgical areas (ABA 2005). Findings from my study have raised a potential concern that these placements may not be able to provide students with all the competencies required to meet the requirements of future health care provision. Hence the aforementioned stipulated amount of time could be deemed excessive, considering the future direction of health care delivery in Ireland where increasingly clients will be nursed in the community setting (DoH 2012). Current standards (ABA 2005) may need revision and the time allocated to settings such as primary care or nurse specialist clinics could be increased to address these issues.

5.3.2. Clinical reasoning and judgement

Students were expected to develop practical knowledge to be able to practise. The essential components of practical knowledge were reported to include students' ability to internalise and process information and to appropriately prioritise, organise and deliver care in a timely fashion within the constraints of a busy environment. Students needed to be able to alter their plan of care if necessary and take appropriate action if the patient's condition deteriorated. This interpretation of practical knowledge is in keeping with Spouse's (2003) term of "craft knowledge", and "practical wisdom" as described by Benner (2004) and Myrick et al (2010). Within cognitive apprenticeship this type of knowledge is referred to as strategic knowledge (Collins 2006). Benner et al (2010) found that one of the key ingredients of tacit knowledge was the ability to recognise salience which demands clinical reasoning or judgement. Some preceptors reported using questioning strategies to develop this type of reasoning for students which will be discussed in the next paragraph. However, a strong assumption gleaned from the data was that this professional "know-how" was in the domain of common-sense. Many participants believed it was learned by participating in practice and was not
taught. The perception was that good students had an innate ability to
develop this style of intellectual reasoning. Benner (2004) contradicted the
assumption that professional judgement and subsequent expertise can be
acquired by experience alone. She claimed this knowledge is grounded in
scientific knowledge, intellectual reasoning and reflection. Students are taught
it through participation and coaching within the context of practice (Benner et
al 2010).

As was previously referred to, some preceptors facilitated the acquisition of
clinical reasoning by interactive dialogue while they worked together.
Participants reported students having access to this form of practical wisdom
when they worked on a continuous basis with some preceptors. This type of
learning was found when participants recounted experiences where students
were included in the delivery of holistic patient-centred care. The type of
experiences where clinical reasoning was taught and learnt involved
preceptors who were able to articulate their practice and invite dialogue in a
critical way. The interactive dialoguing and questioning techniques that were
found, albeit infrequently, in this study were reported to be the most effective
way of facilitating the integration of theoretical knowledge. It allowed the
student to develop awareness followed by an understanding of what the
priorities and important patient issues were within in each clinical situation.
This finding is supported in other studies (Spouse 2003; Benner et al 2010).

However, findings indicated that many preceptors did not value the
complexity of professional thinking and subsequent action. They often took it
for granted that students could automatically apply the procedural and
medical knowledge they learned in practice or the theoretical principles they
learned in college. From the students' perspective this was an inaccurate
assumption as they found the skills of prioritisation and time management
difficult to learn. They found it helpful when preceptors articulated their plans and rationales for care. Collins et al (1991) claimed that in order to teach the expert needs a strong foundation in the knowledge or theory of practice; this enables them to assist the students in analysing problems to be solved. Findings identified that many preceptors did not articulate or share a strong foundation in theoretical principles with students while some preceptors did. The reasons for this may be two fold; it may have been that preceptors were unable to articulate the theoretical knowledge or, on the other hand, that they did not in fact have a strong foundation in the theory of practice. This issue needs to be explored further as the scope of the study did not fully investigate this matter. Preceptors’ difficulty in verbalising the theoretical underpinning and rationale for practice was also reported in Spouse's (2003) findings.

Findings suggest that students were exposed to a greater link to theory and cognitive teaching techniques in the unit where all preceptors interviewed held a specialist qualification. On some units CPCs helped students to integrate theoretical knowledge into practice. Benner et al (2010) found that teaching and coaching was more effective and theoretically integrated when students were taught by university based clinical teachers rather than preceptors. The cognitive element of linking theory to practice was not actively taught or assessed by many of the preceptors in this study. The findings of this study indicate that integrated models that include both clinical teachers and preceptors could enhance students’ ability to gain the theoretical knowledge and clinical reasoning skills necessary for expert practice.

Many participants reported that students learned the foundations of practical wisdom when preceptors made them aware of rules of thumb to identify problems or mechanisms to avoid problems occurring. Cognitive apprenticeship theory suggests that these heuristic strategies are helpful in
giving the students' direction on how to practise but they are not always successful. Learners need to be open to testing out and analysing these “rules of thumb” to see if they work in each situation in order to choose the best mode of action in each unique scenario (Collins 2006). Findings indicated that this form of reflective analysis did not often occur within the preceptor–students learning relationship. Facilitated reflective practice where students analyse nursing practice soon after it occurs has the potential to give the students access to this tacit knowledge (Cassidy 2009).

Students learned how to recognise priorities and make judgements on the care they needed to implement from listening to professional discussions that took place on the unit. Preceptors occasionally discussed patient issues and actual or potential problems that caused them concern. In these instances students asked questions which participants believed enhanced their understanding. Benner (2004) and Ironside (2003) reported how this style of narration of real life patient–care situations increases the students' cognitive understanding of the complexity of nursing practice. It would be useful to develop these kinds of learning opportunities further in a formal setting where the students could be encouraged to link theory to evolving patient situations. Ehrenberg and Häggblom (2007) reported similar benefits to student learning following the introduction of problem–based seminars in clinical practice.

Some preceptors highlighted the importance of students acquiring in–depth assessment skills to be able to recognise and act upon changes in patients' conditions. Benner et al (2010) used the term “clinical reasoning in transition” to describe this concept. It involves getting the students to recognise the subtle changes in the patient's physical, psychological and social condition. Many students in this study reported that when they did not receive explanations on how to set priorities or when changes in patient conditions
were not emphasised for them, they found it difficult to identify what was important in each patient's situation. The need to teach students this skill of being able to "think on their feet" and recognise the salience in each situation is reported in other studies (Spouse 2003; Benner et al 2010). Students in this study reported that they learned time-management and prioritisation skills when they managed a patient case load under the appropriate supervision of a preceptor. On the other hand when students were allocated to a team who managed a large group of patients' care and they carried out tasks that they were competent in, they learned the organisational and time-management skills that were necessary to get the tasks completed. However, in these cases they reported that they may not know the holistic plan of care of each patient and findings indicated that this type of learning did not foster the students' clinical reasoning and judgement required for professional practice (ABA 2005). However, students reported how it did improve their confidence in performing many nursing interventions and practical skills.

Benner et al (2010) suggested that simulated clinical laboratories could be used to teach and assess students' ability to recognise salience, prioritise, provide rationales for their care and take appropriate action. The advantage of this structured clinical environment is the ability to control the unfolding scenarios. Appropriate questions can be posed and clinical dilemmas can be created. This type of control is not possible in the complex unpredictable environment of clinical practice. Collins (2006) claimed that when learning is set in the workplace issues that need to be resolved and duties that need to be carried out occur as a result of the demands of the work environment. Some of these may not be significant to what the student needs to learn and be taught. He suggested that authentic environments can be created where learning situations can be sequenced and increased in complexity, to ensure
the student can practise and articulate the common principles applied to practice.

The realities of the practice environment illuminated in this study highlighted the difficulties preceptors experience in carrying out their teaching and assessing role. Concerns such as insufficient time to teach and assess, the priority of patient-care and the infrequent use of preceptors’ teaching methods that promote students’ thinking were elucidated within the findings. Students in Ireland spend over half of their programme (over 76 weeks) learning within these kinds of environments (ABA 2005). These findings suggest that clinical practice placements may not be meeting all the standards required for students’ professional clinical education. Findings have shown some indication that increasing the use of the simulated clinical laboratories in the undergraduate curriculum may be beneficial. Highly simulated environments with the use of actors and advanced technology have the potential to create a controlled authentic environment, where students can learn and be taught clinical reasoning skills based on the principles of practice at a controlled pace (Collins 2006). UK universities are allowed to use up to 20% of the required clinical placement time in simulated laboratories (Lauder et al 2008). The Irish nursing board’s standards in relation to clinical instruction currently do not allow for this (ABA 2005).

The role of the professional nurse is changing. The advent of the regulated health care assistants (HCA) role (DoH 2001; 2004) will require nurses to manage greater caseloads of patients with the assistance of HCAs. These changes imply that graduate nurses will have to rely strongly on their clinical reasoning, judgement and organisational skills. Hence it is timely to provide structures that support both preceptors and educators to teach and assess these skills in practice.
5.3.3. Formation of a professional identity

Students develop their professional identities through a process of socialisation where they are cultured into the values, attitudes and purposes of the profession. These beliefs are conveyed through skills, knowledge and behaviours that students are taught and learn in clinical practice (Cruess et al 2006). The professional identity of both preceptors and students espoused in this study included: technical competence; working hard; speed; time-management; good interpersonal, organisational and prioritisation skills; and the demonstration of caring behaviours towards the client. Some of the findings showed a distinct devaluing of the underpinning professional nursing knowledge and critical thinking that is required for practice. Theoretical perspectives such as those that underpin psycho-social nursing interventions were considered to be common-sense and many students and preceptors reported that these concepts were not explained in practice.

Medical knowledge on the other hand was given great significance. Nurses' inability or indeed reluctance to articulate specialised nursing knowledge is not a new phenomenon. McNamara (2008) suggested the reason for this is that specialised nursing knowledge is a relatively new concept. However, he proposes a cultural influencing factor is also at play which is an Irish societal belief that nursing knowledge is mundane, ordinary and common place. This perception of nursing knowledge was echoed in this study.

The competency assessment process was set up by the nursing board (ABA 2005) to assess performance, attitudes, values and knowledge. Within this study knowledge and thinking ability were assessed by some preceptors, yet many preceptors did not believe it was important to assess this domain of practice. Findings indicated that the main focus of the competencies appraisal was on the students' performance and attitudes. Benner et al (2010)
suggested that what is assessed, either overtly or covertly, gives a strong message to students as to what is important in practice. McAllister (2005) claimed that the kind of socialisation process reported by many participants in my study denies the student access to developing a critical awareness of professional practice. When students do not develop these skills ritualized practice and the maintenance of traditional views endure without challenge.

The official curriculum within the research’s setting espoused the concept of holistic patient centred care. Some preceptors and students recounted experiences of teaching and assessing this type of professional practice. However, findings indicated that many students were exposed to a contradictory hidden curriculum of learning. Students reported experiences of learning a routinized, task orientated approach to patient-care that centred on physical care with much emphasis on getting the work done. These findings are evident in older studies that examined traditional apprenticeship nurse education (Melia 1983; Treacy 1987) and a more recent Irish study investigating undergraduate nurse education (McCarthy 2006). Teaching and learning the practice of nursing was often described both by preceptors and students in terms of medical treatments and physical care. The review of the undergraduate degree programme in nursing (DoH 2012) found that the biomedical model continued to be the focus of nursing practice in Ireland. Data collected in this review included 225 submissions, 18 focus groups (n=390) and 22 stakeholder meetings held across the country. Service-users, students and nurses who participated in this review reported a difference in what students are taught in terms of the evidence base and what they learn and practise. Findings in my study also indicate that many students are exposed to a theory–practice gap during their clinical placement.
Brown et al (2008) found that students' learning was inhibited when they experienced a task orientation to care where they were not exposed to current nursing values. This had the potential to lead to deprofessionalisation. Mackintosh (2006) indicated that student nurses became disillusioned when they were espoused to a task management approach that did not allow them to practise in line with their professional ideals. However, a worrying finding within this study was that students did not express this disillusionment when they reported how they learned systems of work which were task focused and where physical care was prioritised. They adapted to the culture on the unit and its inherent practices and values. Many students believed care needed to be organised in this way particularly in medical and surgical units. Students expressed a strong desire to become part of the team and the narratives elucidated how many students became socialised into the teams' attitudes without question.

O'Connor (2007) suggested that the clinical base of the profession is the ultimate source of legitimacy. The clinical environment is where student nurses integrate professional knowledge and values. Social constructivist theories assert that cultural practices and beliefs contribute to what is communicated and hence learned (Moll 1990). It can be argued from the findings of this study that when preceptors cannot or do not articulate what is uniquely nursing knowledge and do not role model patient centred holistic care; students will not develop a professional identity consistent with present-day notions of professionalism. Brown et al (2008) found that clinical practice had a greater influence on professional identity development than the theoretical component of the programme. Some students in this study did not believe that they had an opportunity to examine or challenge existing practices. Furthermore some findings indicated that students held a subservient position within clinical practice communities in terms of getting
their learning needs meet. These findings highlight the need to address this perceived imbalance of power to ensure students learn how to practise in line with professional standards. Hence there is a need to expose and discuss disparities between theory and practice with students when they are within the milieu of practice. Nurse educators could apply the teaching strategy of reflection and coaching to support and empower both preceptors and students to realise their professional vision of nursing within the constraints of a busy and unpredictable environment.

Participants in one clinical area within this study's setting described experiences that reflected a culture where students were valued as learners and learning was central to preceptors' own professional practice. Preceptors on this unit verbalised a strong professional identity when describing the type of care they taught and encouraged the student to participate in. Some preceptors within this setting reported teaching strategies which have the potential to promote thinking and performance. Experiences of an interdisciplinary shared culture of learning were reported by participants. Students on this unit discussed good learning experiences and were aware of the clients' plan of care. These factors are considered to be the elements of an effective learning environment where students can learn professional practice and therein develop a professional identity (ABA 2003; Spouse 2003). Hence it is essential that students' placements are selected according to the quality of the learning environment. Evidence from this study suggests a quality versus quantity approach may need to be considered when allocating students to medical and surgical clinical placements.

The caring attributes that students learned centred on the concept of altruism, treating the patient as an individual and responsibility. These standards match with current understandings of some of the features of a professional identity
and Benner et al (2010) found a similar set of caring practices within their study. The concept of caring was not fully explored in this study. However, evidence gleaned from both the participants' narratives and the students' competencies indicated that the type of care articulated and written was paternalistic in nature rather than the contemporary patient-centred empowering approach which is currently being promoted within nursing texts (e.g. Mallik et al 2009). Altruistic behaviours such as being conscientious, nice, reliable, empathic and sometimes advocating on behalf of the patient were voiced. Students reported that they learned these skills by observing caring and compassionate nurses who delivered patient-centred care. However, students recounted how they had also witnessed unprofessional, uncaring communication where nurses were focused on getting the tasks done. While findings from this and other studies (e.g. Pearcey & Elliott 2004; Grealish & Ranse 2009) suggest that students can learn how not to practise from these negative role models, it is argued that exposure to less than ideal practices in terms of caring, patient education and patient empowerment could be detrimental to the development of students' professional identities. Some students, unless it is highlighted to them, may not be aware of practices that do not fit with professional standards and hence may not be able to challenge them (McNamara 2008). McAllister (2005) suggested that critical thinking and reflective practice has the potential to identify practice-theory gaps particularly in relation to patient oppression and organisational influences on practice. However, as was mentioned previously, students in this study rarely experienced this form of teaching.

Occupational values, such as being hard working, useful and keeping busy were believed to be central to the role of the nurse and hence participants voiced the need for students to demonstrate them. These values were not explicitly written in the programme's documentation yet participants
considered them essential to becoming part of the team. Findings suggested that the focus of practice was often on speed and getting the tasks done. Many participants placed limited value on theoretical knowledge and thinking. Maben et al's (2006) naturalistic, longitudinal study identified similar covert rules that newly qualified staff nurses internalised. The prominence of occupational values and the lack of emphasis on professional values that was found at times in my study could lead to a nurse believing in the need to keep busy doing tasks, rather than planning and thinking about the care that she is required to deliver. Maben et al (2006) refers to these underlying attitudes as professional sabotage. It can be argued when students do not experience a theory-based model of practice that enables the student to learn the rationale and direction for nursing practice they may be exposed to deprofessionalization (Baxter 2007).

Benner et al (2010) advised against the use of the term professional socialization to describe the social influences that changes a person's thinking and behaviour from a lay person to a professional. Benner et al (2010) preferred the term "professional formation" which suggests an active intentional educational process. They found that both hidden and formal curricula naturally occur within educational programmes. Students' professional identities were formed by using teaching techniques such as reflective practice, coaching, and feedback. This kind of learning and attitudinal development prepared students to work in complex bureaucratic settings. They learned practical strategies regarding how to implement evidence based practice within the constraints and complexities of practice. Similar contradictions in terms of the formal and hidden curricula were reported in this study. Therefore an argument could be made that students will always be exposed to some theory–practice gaps and values not consistent with contemporary practice within health care settings. Strategies
such as increasing the amount of facilitated reflective practice students receive could address these issues and enable students to develop identities consistent with professional practice.

5.3.4 Summary

The clinical curriculum employed within this study setting had three key components. The first was professional skills which included both practical and communication skills. There was an emphasis on teaching practical skills; however, professional communication, while considered an essential foundation for all nursing practice, was reported to be taught infrequently as it was considered a personality trait. Findings indicated some gaps in terms of exposure to physical examination, health promotion, education and patient empowerment. The introduction of a clinical teacher's role in practice could ensure students learn these skills in practice.

Practical wisdom or scientific and situational based clinical reasoning was the second foundation of the clinical curriculum. The understanding of this concept within this study builds on the work of both Spouse (2003) and Benner et al (2010). Many variations existed in regard to the value placed on this level of professional "know how". Some preceptors reported teaching strategies to foster it, whereas, on the other hand, findings indicated many preceptors did not value this type of nursing knowledge and rarely taught it. The evidence presented suggests that preceptors need to be assisted and supported to teach students practical wisdom in practice. Expansion in the use of the simulated clinical laboratory could enhance students' learning in this cognitive domain, providing a foundation for the development of practical wisdom.
The professional identity elucidated in this study was based on teamwork, management, caring and technical skills. Findings indicated that many students adopted the culture and values of the community of practice. Some students voiced experiences of practices that were not consistent with contemporary nursing; some students were not even aware that these practices did not reflect notions of professional practice. Those that were aware of this did not feel comfortable questioning these practices. Facilitated reflective practice within the imperfect and unpredictable context of clinical practice could foster the formation of students' identities that align with professional nursing values and address the aforementioned issues found in this study. Furthermore while the role of the CPC or link-lecturer was not explored within this study, it could be suggested that a more structured support at the coal face of clinical practice could enhance preceptors' ability to articulate their professional knowledge and practice.

5.4. Conclusion

The findings of this study suggest that the underpinning theory of cognitive apprenticeship, the concepts of ZPD and LPP within communities of practice and Bandura's (1994) concept of self-efficacy provide an appropriate framework for effective clinical teaching and learning. Many examples of effective teaching and learning akin to the aforementioned theoretical principles were illuminated within this study's findings. When relationships of mutual respect were experienced reciprocal learning was voiced by students and preceptors.

However, a concern gleaned within some of these findings was the dominance of the service-driven ethos within clinical education. Evidence presented indicated that students often held a subservient role within the preceptor-student relationship where there was a focus on getting the work done and
many of their individual learning needs were not addressed. Participants believed that some key elements were necessary to ensure effective teaching and learning, which included consistency in the relationship and time to carry out the role. This was particularly in relation to the preceptor having time to talk about practice with the student and to carry out a thorough assessment. Organisational commitment in terms of providing adequate resources to ensure the key elements were in place was reported to be lacking in many cases. Evidence from other international studies has highlighted similar issues.

Wide variations in preceptors' teaching and assessing practices were found. Some preceptors, particularly those with both specialty and post graduate qualifications, reported the use of methods that had the potential to advance the students' cognitive and performance ability. On the other hand findings indicated that although students are now educated to degree level, as were many of the preceptors in this study, teaching and learning mostly focused on students' performance with very little attention given to developing the students' clinical decision making skills, critical thinking, reflective skills and knowledge for practice. These findings suggest that the traditional apprenticeship style of clinical teaching and learning which focused on performance has continued within many preceptor-student relationships.

The evidence presented supports the argument that students' cognitive processes also need to be actively engaged when learning in clinical practice. However, preceptors require further support and preparation to implement the type of teaching strategies found to be effective within this and other study findings. Preceptors in the Republic of Ireland have been given the responsibility to provide students with a professional education when in clinical practice. It could be suggested that the implementation of a structured
partnership clinical education model that would involve CMNS, CPCS, link lecturers and preceptors could address the needs of the preceptors and the students in relation to teaching and learning identified in this study. A best practice clinical teaching and learning model is offered in diagrammatic form, based on the evidence of this study (see Figure 5.1.)
Figure 5.1 Clinical Teaching and Learning Model

Situated Learning Within Communities of Learning: Student advances participation under appropriate guidance

Organisational commitment to nurse education; preceptors allocated time to teach/ consistency of contact time between student and allocated preceptor

Preceptor preparation and ongoing support / Partnership collaborative approach to teaching and assessing students in practice

Individualised approach to teaching: setting learning goals and developing learning styles

Reciprocal student/preceptor learning relationship based on equality and mutual respect

Dialoguing practice, scaffolding student to the next level of participation, continuous assessment, confidence building strategies

Contextual questioning, situational constructive feedback, student self-evaluation

Facilitated reflective practice

Clinical Teaching and Learning Model

Situated Teaching Techniques: Strategies that promote performance, understanding, critical thinking and learning

Professional Practice: Learning the holistic management of patient care

Professional skills acquisition: technical/communication

Practical wisdom: clinical reasoning and judgement

Formation of a professional identity based on altruism
Chapter 6 Conclusion

Introduction
The purpose of this chapter is to revisit the research questions and to consider the extent to which these questions have been addressed. In the second section there are reflections on the study and it concludes with recommendations for education, clinical practice, educational policy, the nursing board (ABA) and research.

6.1 Aim and research questions
The overall intention of this study was to explore the clinical teaching and learning within a preceptorship model in an acute care hospital in Ireland. In order to address this aim it was necessary to know how preceptors engaged in the clinical teaching and assessment of undergraduate BNSc (general) students, the pedagogical methods they employed, what nursing practices and knowledge they taught and what they deemed important for students to learn. It was important to identify if these matched current educational and professional understandings of best clinical teaching and learning practice. Finally in order to provide valuable evidence for the future clinical education of undergraduate students it was necessary to explore the situations when best practice occurred.

6.2 Theoretical underpinnings
A qualitative exploratory design underpinned by the philosophy of social constructivism was the approach used to explore the phenomenon of clinical teaching and learning within a preceptorship model. Three core educational theories provided a framework for this investigation. They were cognitive
apprenticeship (Collins 2006), the concepts of legitimate peripheral participation (LPP) within communities of practice (Lave & Wenger 1991), and the Zone of Proximal Development (ZPD) and its inherent instructional strategies (Moll 1990). A fourth theory was applied in the findings and discussion stage of the research process, that of Bandura's (1994) concept of self-efficacy.

6.3. Key research findings

This study set out to answer specific research questions, and this final chapter considers the extent to which the findings answered these questions.

1. How do preceptors engage in the clinical teaching and assessment of undergraduate BNSC (general) students?

Preceptors engaged in teaching and assessing students by allowing them participate in all the activities of the nursing team on the unit. The manner in which learning and participation occurred resonated with Lave and Wenger's (1991) concept of LPP. Two interacting and interrelated continuums of preceptor supervision and student participation occurred. The preceptor moved along a continuum from direct guidance to gradual removal of support; the students' continuum started with observation and ended when the student could effectively manage a patient case-load.

Several influences affected the appropriate enactment of these continuums. For example the consistency of contact time between the preceptor and the student was found to be an essential prerequisite to ensuring an effective preceptor–student teaching and learning relationship. Some preceptors believed they were unable to accurately assess the student's level of learning, particularly if the student was performing below standard, when they did not work alongside their allocated student on a consistent basis. Participants
reported that when there was constancy in the contact time between preceptor and student, preceptors provided appropriate teaching strategies and supervision. In many cases when contact time was minimal between preceptor and student, preceptors relied on the opinions of other nurses who worked with the student to assess their competency at the end of the placement. Findings indicated that when this happened, the validity of the assessment process was questionable as an accurate assessment of the students' overall competency attainment could not be made. These findings highlight the important issue that insufficient preceptor–student contact time can lead to two potential difficulties in clinical learning which is a failure to teach all students appropriately and a failure to identify students performing below standard. In contrast findings indicate that when there was consistency in preceptor–student contact time experiences of effective teaching assessment and learning were reported.

The second factor impacting students' participation was the amount of time preceptors had to teach the students. The priority of their patient-care commitments often left them with inadequate time to teach. CNM's managed preceptor allocation and how much time the student spent with their preceptors. Some experiences of good practice were illuminated where students were exposed to a holistic professional education. However, some findings indicated that students' learning and level of participation and the amount of time they spent with their preceptor was driven by service needs rather than the individual education needs of the students. While the role of Clinical placement coordinators and link lecturers in clinical practice was not the focus of this study, participants reported that these educators did not influence the day to day learning experiences students had at the coal face of clinical practice. They did not organise the allocation of preceptors nor did they influence how much time they spent with their preceptor. Participants
believed that the CPC was mainly a student support role. However, they reported that they could call them and the link lecturer when they were considering failing a student. Some of these findings suggest the control of students' clinical education lay mainly with clinical practitioners and in many cases a service agenda of getting the work done took precedence over students' education.

The third influence was preceptors' expectations of the students in terms of their capacity to learn and their ability to practise. Students were expected to take responsibility for their learning, to take initiative and get involved in practice. Some preceptors supported the student to increase their confidence and to take initiative by providing psychological encouragement and tailored supervision. However, many preceptors expected students to show initiative and be self-directed in their learning yet they did not believe it to be their responsibility to provide individualised tailored guidance or supervision.

The fourth factor that affected the participation-supervision continuum was the preceptor-student relationship. When a mutually respectful, interpersonal relationship occurred preceptors were interested in teaching and students were motivated to learn, furthermore there were opportunities for reciprocal learning. When students experienced the converse of this they became submissive and were afraid to ask questions and to challenge practice. Experiences of domination, disrespect or a lack of interest had a negative effect on students' learning. This type of relationship did not provide a platform for shared learning or the transformation of practice. Findings highlight the significance of developing a mutually respectful preceptor-student's relationship. The benefit of the introduction of a higher level of education in nursing was to improve and ensure the highest quality of patient care, hence transforming practice. If reciprocal or shared learning does not
take place between students these benefits may not be realised in nursing practice.

2. What are the pedagogical practices of the preceptor when teaching and assessing the undergraduate BNSc general students?

The pedagogical practices most frequently reported by participants were demonstration, coaching and scaffolding. Two components underpinned these strategies; they were encouraging interactive dialogue and building the students' confidence. These teaching strategies have foundations in Cognitive apprentice theory (Collins 2006); some of the instructional methods described in this study aligned with the concept of ZPD (Moll 1990) and Bandura's concept of self-efficacy. Students and preceptors reported that some of these teaching methods helped to improve students' performance, capacity to practise and facilitated their understanding. However, a wide variation in the use of these strategies was reported. Some preceptors did not explain or articulate their practice and they did not believe their role was to teach the theoretical principles applied to practice. A key issue was that many preceptors had concerns in regard to their ability to provide borderline students with the intensive teaching they required.

Preceptors with both post graduate qualifications and specialist qualifications reported the use of cognitive teaching methods such as contextual questioning. Providing situational feedback and encouraging student self-evaluation was only reported in relation to teaching practical skills. Findings indicated that in depth reflection was rarely practised by the preceptor. These teaching approaches have the potential to enhance the students' critical thinking skills and promote autonomous learners. However, a paradox was
apparent as many preceptors expected this type of learner but they did not report the use of teaching strategies that fostered these skills.

Preceptors in this study felt adequately prepared for their role yet many did not report the cognitive teaching techniques required for critical thinking and clinical reasoning. Findings suggested that some preceptors challenged and encouraged the students to develop clinical reasoning skills. However, participants reported that traditional apprenticeship style teaching strategies that focused on performance were the most prevalent in this study. The evidence presented indicates that many preceptors may not have advanced their teaching methods to accommodate the contemporary cognitive learning outcomes that are also required for professional practice.

3. What clinical learning processes are being utilised and what professional values, skills and knowledge underpin these processes in practice?

The key areas of learning that were gleaned from the data were clinical skills, such as technical and communication skills, as well as some elements of practical knowledge and wisdom, such as prioritising care within an ever-changing environment. It was clear from this study's findings that technical skills were held in high regard and preceptors were motivated and felt confident in teaching these skills. All preceptors valued the acquisition of appropriate communication skills and practical knowledge. However, many preceptors did not believe these skills needed to be taught in a structured way. Preceptors expected students to be able to communicate professionally and develop the cognitive processes and knowledge required to organise, prioritise and deliver appropriate care within the constraints of a fast,
unpredictable environment. However, teaching strategies that encouraged this advanced level of learning were reported infrequently.

Many preceptors believed that professional communication and the intellectual reasoning required for clinical judgement was in the domain of "common sense". They considered students' competency in these cognitive and communication skills to be largely dependent on previous socialisation, personality type and interest in learning and experience. A conclusion could be drawn that many preceptors in this study may not value the complexity of their own professional communication and the integrated scientific knowledge that they apply in their everyday practice. This proposition would provide an understanding as to why many preceptors have difficulty and may not be keen to teach communication skills and the cognitive element of practice.

Students were motivated to become a fully accepted member of the team. Hence the professional identity they formed depended on the attitudes, values and practices of the community of practice within each unit, findings which are supported by Lave and Wenger (1991). Students learned from some preceptors who possessed professional identities consistent with professional standards. In addition to this the occupational standards of a good work ethic and "keeping busy" were an essential element of what needed to be learned in practice. Altruistic caring behaviours were valued and learned by students. However, those described tended to be based on paternalistic rather than patient empowering philosophies. Physical examination skills, health promotion and health education were taught in the theoretical portion of the programme. However, no experiences of these types of nursing practices were reported in the participants' narratives or in the written evidence within the competency documents. Therefore students may not have learned these skills.
As found in many other studies, many students reported that they had been exposed to negative role models, uncaring practices and task oriented approaches to care. While some students reported being involved in some sub optimal practices they believed they had to conform, as they felt these practices were understandable due to the business of the clinical area. Other students who witnessed and partook in practices not consistent with those they were taught in college did not feel they could question the preceptor without negative consequences. Overall students reported being content in their learning environment when the preceptors appreciated them, were “nice” to them and they became part of the team. Hence their survival was paramount. This form of conformist and sometimes unthinking behaviour that was found is not in line with the outcomes of a degree level professional education (GOI 2000). It raises a concern that students may experience socialization processes that are inconsistent with contemporary nursing practice. If this type of socialization occurs and is unchecked by nurse educators or is not reflected upon by the students, it may have a negative effect on the development of the students' professional identity.

4. When does best practice based on current theoretical, professional and educational principles (in particular cognitive apprenticeship and situated learning), in relation to the clinical teaching and assessment of undergraduate BNSc (general) students occur?

Examples of best practice in relation to clinical teaching and learning were reported by participants in the findings of this study. These are as follows:

- Students espoused professional identities when they were exposed to preceptors who portrayed practices that reflected a strong altruistic nursing
identity and when they participated in professional practice within communities of practices

- When students worked alongside their preceptor on a regular basis they were exposed to more individualised approaches to teaching where their specific learning needs were met. This continuous relationship allowed the student to advance along the continuum of learning with appropriate guidance and a more accurate in-depth assessment occurred.

- An effective teaching–learning relationship was considered to be based on mutual respect, trust and reciprocal learning. Within these relationships the preceptor recognised the student as a learner. Preceptors in these instances were approachable, provided encouragement and used strategies that fostered the student's self-efficacy.

- When preceptors had the time to teach, and the knowledge and skill to be able to articulate their practice, participants believed students constructed their knowledge through the interactive dialogue that occurred.

- When preceptors challenged the student to think and problem solve some participants reported that students learned the critical reasoning skills necessary for practical wisdom. Strategies reported to teach tacit knowledge included: interactive contextual questioning, encouraging students to get involved in professional discussions, sharing practical rules of thumb and involving students in the holistic management of patient–care.

- Clinical Placement Co–ordinators (CPC) facilitated the linkage of theory to practice. Students reported that the most beneficial methods were when CPCs discussed the students' patient caseload and provided relevant journal articles to support students' understanding of best practice.

- The learning that students acquired in the clinical laboratory was reported to be beneficial as it provided a foundation for clinical skills' learning and it helped students to identify theory–practice gaps when they occurred in practice.
A diagrammatic representation of a best practice model presented in the discussion chapter (see Figure 5.1) includes the elements of best practice found in this study, educational approaches drawn from the research literature and gaps identified in this study. The findings indicated that the underpinning theory of cognitive apprenticeship, the concepts of ZPD and LPP within communities of practice and Bandura's (1994) concept of self-efficacy provide an appropriate framework for effective clinical teaching and learning, hence the model is supported by these theoretical perspectives. It includes three components: situated learning, situated teaching and the clinical curriculum.

6.4. Methodological limitations
A qualitative exploratory design was selected as the appropriate approach to address the research questions. This allows for an in-depth enquiry into clinical teaching and learning where the participants' experiences and understandings can be illuminated. Other designs such as a survey would have meant that larger numbers of preceptors could have been involved, which may have enhanced generalisability. However, this would not have provided the richness of data necessary. Theoretical generalisations were elicited regarding the nature of preceptorship which allows the reader to judge the transferability to other contexts.

The findings of this study were limited to one preceptorship model in Ireland and therefore the study was local and context specific. A multicentre design, exploring the phenomena of teaching and learning within preceptorship within different hospitals in Ireland may have yielded interesting comparisons across different contexts. Nevertheless, the resonance of the findings of this study with the literature indicates that a more extensive study would not necessarily have generated greater or different insights. Furthermore, the constraints of time and resources dictated an in-depth study within only one context.
Participants in this study were recruited by poster advertisement and information sessions held on the ward, and care was taken to ensure that participation was voluntary. As the sample of this study was purposive, it was not considered necessarily representative of the population of staff nurses who are preceptors. However, the majority of the preceptors and students in the chosen clinical areas were willing to take part in the study, Nevertheless, the rationale was not known for the two preceptors who did not wish to be involved and this may potentially have biased or limited findings.

The participants in this study included both students and preceptors. The main focus of the study was on what constituted effective teaching in relation to the practices of the preceptor. The teaching practices of the Clinical placement co-ordinator or the support role of the link lecturer were not a primary concern within this study. However, issues with regards to both these roles were illuminated in the findings. In hindsight including both these stakeholders in the study's design may have offered further insights into the phenomenon of clinical teaching and learning within a preceptorship model. Hence their exclusion may limit findings.

The qualitative exploratory design used in this study allowed me to select more than one source of data to examine clinical teaching and learning within a preceptorship model, such as in-depth interviews with preceptors and students and analysis of documentation relevant to the phenomenon. The qualitative approach enabled the identification of the preceptors' teaching and assessment practices. To this end, the intention at the outset of the study was to observe the preceptor–student assessment interviews. As the study progressed I found these interviews were occurring in an ad hoc manner. Similarly other preceptor–student activity was unplanned and serendipitous which made it impossible to observe in a meaningful way, unless I had had the
opportunity of immersing myself into the unit environment for the duration of each student's placement. This was not possible given my employment as a nurse lecturer. If I had been able to observe the teaching and assessment practices of the preceptor it may have expanded upon my data and strengthened the findings in this study. However, the fact that this proved impossible to achieve was a finding in itself.

A clinical teaching model is offered to provide the educational foundation for preceptorship (Figure 5.1). This model is based on the findings of best practice identified in this study and is supported by evidence from the literature. However, the model that emanated from this study is not finite, hence further research is required to explore both its usefulness and its inherent propositions. If in the future structured supervision were to be in place, following the implementation of some of the elements of this model, then observation could be a viable method of data collection.

Finally the fact that I was an insider researcher and had a professional relationship with the participants could have had implications in terms of encouraging particular responses from participants and may have led me, even inadvertently, to attempt to validate my previously held assumptions. These limitations could potentially impact on my ability to explore the emic perspective of teaching and learning with participants. This was recognised and the nature of the relationship I had with the participants and the strategies taken to overcome these potential limitations are detailed previously in Section 3.3.
6.5. Reflections on the research

The research evidence, key concepts and theoretical perspectives that I have examined during the course of this study have challenged and changed my perspective in relation to my professional practice as a nurse educator. In relation to my teaching practice, I began to integrate educational concepts gleaned from the study such as facilitating interactive dialogue and reciprocal learning within the classroom environment. I revisited the content of my skills modules taught in the clinical laboratory, where I applied the theories of situated learning and cognitive apprenticeship such as ensuring appropriate sequencing, introducing some heuristics and applying the teaching strategies. I actively applied the concepts of fostering students' self-efficacy and giving constructive situational feedback. Personally I became more aware to avoid negative tones and body language.

I have come to fully understand and appreciate the complex world and context the preceptor operates in. Preceptors have continuously to prioritise and deliver patient care while teaching students who are learning at different levels and with different styles of learning that may not be conducive to their own. Yet the preceptors in this study, while faced with these challenges, all claimed to enjoy precepting students and appeared to be genuinely interested in the students' psychological and professional development. I have learned how to improve my teaching from some of these preceptors and have adopted the cognitive and confidence building teaching strategies reported with this study. I now understand and appreciate some of the constraints that preceptors are faced with that may affect their ability to teach.

I have challenged my presumptions that preceptors need to assess the students more thoroughly and that this is where they need more support from the educationalist and I have come to learn that effective preceptorship is
when the teaching and assessment is a continuous developmental process. I now believe that preceptors need on-going support throughout the teaching and assessment process.

I became mindful of the context in which my professional practice takes place, which led me to examine the power that was transmitted through language particularly at our department meetings. I began to notice that, at meetings with service providers, Directors of Nursing still held the major decision making influence in relation to clinical nurse education. I also reflected on my own community of practice within the department and realised that while we espoused values such as fostering the students' inquiring minds this often did not translate into practice within the academic teaching and assessment practices we implemented.

Through analysing the data I learned that many preceptors undervalued their own nursing practice and the complexity involved in learning professional nursing practice. I am now cognisant of the potential disempowering use of the terms such as "easy", "simple" or "common-sense" to describe the complexity of nursing practice, and I avoid the use of the word "work" when describing students' learning in practice.

6.6. Recommendations

The expectation of nursing graduates is that they are competent in the knowledge and skills required for professional practice. Furthermore they are required to have critical thinking, analysis, problem solving and reflective skills (ABA 2005). Students are educated within the clinical setting for over 50% of their course content time. Findings have indicated that the way in which students are taught and what they are expected to learn in these settings can influence whether the aforementioned learning outcomes are
reached. This study goes some way to illuminate current clinical teaching practices and the nature of learning that occurs. While some suboptimal teaching and learning practices were identified, a best practice model emanated from the combined evidence of this study and theoretical perspectives. The following recommendations are made based on this model.

From the findings of my study it appears that the implementation of these recommendations requires a shift in culture in terms of valuing clinical education. Recommendations may be controversial in terms of the suggestions to invest more resources into clinical education. However, further exploration and expansion of the current preceptorship model is required to ensure students gain a professional education that equips them to meet the needs of patients within present-day and future health care environments.

### 6.6.1. Recommendations for education

Preceptors require preparation and support to teach the cognitive domain of practice. Hence it is recommended that partnership collaborative approaches in the provision of nurse education within clinical practice need to be explored further. Structured approaches to providing ongoing preceptor support should be implemented and evaluated.

- The preceptorship preparation programme should address the training needs of the preceptor identified within this study. The learning outcomes of these programmes should ensure that preceptors have the ability to articulate and initiate a dialogue about practice, carry out contextual questioning, encouraging students' self-evaluation, provide situational, context specific feedback and be aware of strategies that build the students' self-efficacy. Preceptors also need to be provided with an opportunity to understand
educational theories specifically in relation to learning styles and providing tailored individualised teaching and supervision.

- Preceptors require on-going, planned, structured support from nurse educators to help them develop their teaching practices particularly with regards to articulating their own practical wisdom and developing the students' clinical reasoning, problem solving and reflective skills.

- Students should have the opportunity to reflect on their care delivery in an analytical way within the milieu of practice, in order to identify how they can achieve best practice in line with current professional standards. Further consideration needs to be given as to the best use of the protected reflective practice students are currently allocated when in clinical practice. Nurse educators could possibly increase their role in this area.

6.6.2. Recommendations for clinical practice

A shift in culture is required in the way students are taught in clinical practice, from the apprenticeship style which focuses on performance, to a professional educational ethos which embraces both performance and clinical reasoning and thinking. Preceptors need to be supported to ensure they have the adequate time with their students to be able to carry out this type of teaching and assessment role. This involves organisational commitment to ensure the rudiments of effective preceptorship identified within this study are in place.

- Preceptors need to spend an adequate amount of contact time with their students in order to be able to tailor their teaching and supervision according to the learning needs of the student.

- Preceptors need to be allocated protected time to teach the psychomotor, affective and cognitive domains of professional practice and to carry out the assessment process as set out by An Bord Altranais.
6.6.4. Recommendations for the Irish Nursing Board (ABA)

The board should expand their standards in regards to the teaching and assessment of students in clinical practice.

- A national standard relating to preceptor preparation should be set to ensure preceptor training needs as identified in the study are addressed. Specific situational teaching strategies need to be included within the content of these programmes and preceptors' learning needs should be evaluated and supported when in practice as part of this preparation process.

- The board should set national standards regarding the consistency of contact time between the allocated preceptor and the student.

6.5.5. Recommendations for research

The findings of this study identified a suitable clinical teaching and learning model which provides an educational foundation for preceptorship. Further research is required to explore its usefulness. Some of these concepts could be examined within the following three areas of research:

- The development and evaluation of a preceptor educational and support programme based on the findings of this study using an action learning design.

- A comparative study of different preceptorship models to explore the propositions inherent in the Clinical teaching and learning model (Appendix XXII) and their effect on students' learning in clinical practice.

- Findings suggest that the use of the clinical laboratory was beneficial to students' learning. Hence a laboratory based study investigating the effectiveness of using the teaching strategies identified in this study within the simulated environment needs to be explored.
References


An Bord Altranais (ABA) (2013). Pre-registration Honours Degree Programmes 2013: Nursing/ Midwifery A Career For You. Dublin: Nursing Careers Centre An Bord Altranais


Appendix I Preceptorship preparation course that was delivered during the time of the study

Philosophy of the Course

The Forum recommends that Health Service Providers in partnership with the relevant Third Level Institutes, should ensure that nurses who support students have attended a teaching and assessing course. It is recommended that all such nurses will have completed this course within a five year time frame (Government of Ireland 2000). All qualified staff have a responsibility to pass on their knowledge and their expertise to less experienced staff (An Bord Altranais 2000).

Health Care Service educators in collaboration with .......... , will provide a Preceptorship Course which will equip qualified staff with both Teaching, Assessing and Supporting skills. This will develop a support system in the creation of an optimum clinical learning environment. This will enable qualified staff to fulfil the aforementioned requirements of the Code of Professional Conduct by advancing the professionalism of nursing hence enhancing the quality of care.

Nursing practice is a professional activity underpinned by the value of respect for all persons and aims to provide quality care which, takes into account the uniqueness of each individual receiving care. It follows therefore that the curriculum necessary to fulfil this aim should itself be based on a value system of mutual respect. The educational approach to enhance the development of preceptor skills will be based on the principles of adult learning. (Knowles, 1980). A variety of teaching and learning techniques are employed to fulfil this aim. Strategies to develop the integration of theory to practice are particularly emphasised.

A Preceptorship Policy will operationalise this programme.
(Appendix I – Preceptorship Policy)

Aim of Course

* To consolidate and build on participants existing knowledge base of teaching and assessing, role modelling, supervision, and counselling Skills.
• To facilitate the participants in the development of skills which will enable them to develop an effective relationship based on mutual trust and respect aimed at maximising the students' integration into practice settings and developing their clinical competencies.

Learning Outcomes

The participant will:

- Describe the philosophical role and function of the preceptor.
- Demonstrate sufficient knowledge of the student's programme to identify students learning needs.
- Demonstrates an understanding of the Reflective Practice Concept.
- Demonstrates the ability to facilitate Reflective Practice with students using a reflective practice model.
- Describe the conditions necessary, to ensure the clinical environment is conducive to learning.
- Demonstrates the ability to provide on-going and constructive support for students.
- Demonstrates the ability to develop effective communication with preceptees.
- Demonstrates teaching strategies, which will assist with the integration of theory with practice.
- Demonstrates the ability to implement approved assessment procedure.
- Demonstrates a good understanding of assessment and the use of the Domains of Competency Assessment Tool.
- Utilise Quality Assurance Methods and Clinical Audit Tools.

Course Leaders

- Education Centres – Teaching Staff
- 3rd Level College/University

Course Personnel

- Education Centres – Teaching Staff
- 3rd Level College/University – Nurse lecturers
- Clinical Placement Co-ordinators
- Guest Lecturers
- Clinical Nursing Staff

Duration

2 days

Venue
Structure and Methodology

Lecture
Group Work
Role Play
Discussions
Workshops
Clinical Placement
Reflection
Self-directed Strategies

Theoretical Input
• Course Introduction
• Curriculum overview
• Defining the Role of the Preceptor
• Preceptorship - Exploring the Issues
• Reflection in action
• Competency based assessment, the issues and challenges

Assessment

The course will be assessed as follows:

Formative – Role Play

Summative – This will be based on full attendance over the 2 days.
A Certificate of Attendance will be awarded for full attendance.
(Appendix III – Certificate of Attendance)

Evaluation

Evaluation will be both qualitative and quantitative i.e. questionnaire / verbal feedback.
(Appendix IV – Evaluation Form)

Course Fee

The course will be funded by the Department of Health and Children i.e. ........as part of in-service and continuing education prior to the implementation of the Degree Programme.
### Appendix II

**Comparison table Mentor/Preceptor**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mentor</th>
<th>Preceptor</th>
</tr>
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<tbody>
<tr>
<td><strong>Functions</strong></td>
<td>Facilitator, guide, advisor, counsellor, support, role model</td>
<td>Teaching and support, orientation and socialization to work setting, Role model, supervisor. (Morton &amp; Cooper 2000, McCarthy &amp; Cooper 2003, Billey &amp; Yonge 2004, Lillibridge 2007, Billey &amp; Myrick 2008, Yonge et al. 2007)</td>
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<tr>
<td></td>
<td>Inspirer, investor, support (Darling 1984, Yonge et al. 2007)</td>
<td>Constructive feedback (Billey &amp; Yonge 2004, Billey &amp; Myrick 2008)</td>
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<tr>
<td></td>
<td>Supervisor, professional socialization, assessment (Fulton 2007, Myall et al. 2008)</td>
<td></td>
</tr>
<tr>
<td><strong>Setting and Duration</strong></td>
<td>Nonspecific can be outside the work setting, Duration - years (Mills 2005, Yonge et al. 2007)</td>
<td>Day to day clinical practice setting, short period of time (Billey &amp; Yonge 2004, McCarthy 2003, Yonge et al. 2007)</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td>Voluntary and mentor chosen by mentee (Fulton 2007, Yonge et al. 2007)</td>
<td>Part of role expectation, preceptor selected by employer (Yonge 2007, McCarthy 2003, Hyrkas &amp; Shoemaker 2007)</td>
</tr>
</tbody>
</table>

### Classifications

<table>
<thead>
<tr>
<th>Mentorship</th>
<th>Preceptorship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>Experienced trusted advisor mentoring - encouraging Greek derivative</td>
</tr>
<tr>
<td><strong>Central characteristics</strong></td>
<td></td>
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</table>

(McSharry et al. 2012)
<table>
<thead>
<tr>
<th>Name</th>
<th>Methodology</th>
<th>Main Findings</th>
<th>Methodical considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donaldson &amp; Carter (2005). &quot;The value of role modelling: Perceptions of undergraduate and diploma nursing (adult) students.&quot; UK</td>
<td>Grounded theory Methodology individual and focus group interviews Sample: BNSC (n=20) diploma nursing (adult) students (n=20)</td>
<td>Students valued: access to good role model were student was facilitated to observe &amp; participate in practice teaching strategies exploration, supervision tailored to their level of competence; Teaching of demonstration and constructive feedback. These teaching strategies positively influence their competence and confidence. Absence of effective role model negativity affected these outcomes.</td>
<td>The concept of role modelling explored, yet pedagogical strategies reported in findings which is an expanded view of this concept.</td>
</tr>
<tr>
<td>Myall, M. Levett-Jones, T. Lathlean, J. (2008) Mentorship in contemporary practice: the experiences of nursing students and practice mentors. UK</td>
<td>Online survey questionnaire- pre-qualifying students (n=161 10% response rate), Postal questionnaire- mentors (n=156 21% response rate), Questionnaires (qualitative &amp; quantitative data).</td>
<td>Students Majority of students reported a positive experience Qualities of preceptor: knowledgeable, constructive feedback, challenges practice, provides time to reflect, being a good role model, setting learning outcomes. Over 60% of students felt mentors demonstrated these teaching attributes and teaching strategies. Mentors Over 80% of mentors felt they give constructive feedback and agreed with the importance of assessment. Benefit of preceptorship; updated knowledge, increased job satisfaction. Constraints to role; lack of time; staff shortages; inability to attend up-dates</td>
<td>Low response rate however, all students and 25% of mentors targeted. Questionnaires' not published hence unclear if clear comparison could be made between both groups. Findings indicate improvements in mentorship experience for students in the UK. This is not known in the Irish context.</td>
</tr>
<tr>
<td>Grealish &amp; Ranse (2009) An exploratory study of first year nursing students' learning in the clinical workplace. Australia</td>
<td>Narrative inquiry (critical incident approach). Sample (n=49) from a population of 80 first year BNSC students Thematically analysed by a team of researchers Wenger's (1998) theory of communities of practice underpinned this enquiry</td>
<td>Students valued role model who contributed to development of an image of what the students wanted to be as a nurse. They valued preceptors who were supportive, gave guidance; explanations, allowed them to participate and gave feedback on their performance. In the presence of poor role models they identified traits that they did not wish to emulate. In the absence of structured supervision they became proactive about their learning. Students learned from positive and negative experiences and constructed their own knowledge.</td>
<td>Limitations small number of students one institution. These were first year students it is premature to say that the negative role models and lack of structured support will not effect students' learning in a negative way.</td>
</tr>
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</table>
Appendix IV Table II - Irish studies evaluating elements of the preceptorship model on the undergraduate BNSC programme

<table>
<thead>
<tr>
<th>Name</th>
<th>Methodology</th>
<th>Main Findings</th>
<th>Methodical considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heffernan et al (2009)</td>
<td>Evaluating a preceptorship programme in South West Ireland: perceptions of preceptors and undergraduate students</td>
<td><strong>Main Findings</strong> The authors of this paper reported that learning outcomes of the preceptorship programme were reached as students and preceptors rated teaching attributes highly. Students ranked the characteristics of being approachable, supportive and having good communication skills as most important, and preceptors maintaining their own education as least important. Communication skills were also considered most important by preceptors and understanding the undergraduate programme least important. In regards to the characteristics that preceptors demonstrated, students reported knowledge and confidence as the most prevalent and understanding of reflection the least. Students considered preceptors’ ability to challenge students to think about clinical practice as the least important teaching skill.</td>
<td>Questionnaire was piloted and internal consistency of the questionnaire was tested. Reliability of findings increased due to exploratory phase and validation phase. Although the authors discussed differences between the two groups no inferential statistics were reported. The quantitative findings were only discussed in this paper. Questionnaire not published. Teaching attributes were not based on any educational theory. Specifics teaching methods not identified.</td>
</tr>
<tr>
<td>O’Connor et al (2009)</td>
<td>An evaluation of a collaborative approach to the assessment of competence among nursing students of three universities in Ireland.</td>
<td><strong>Main Findings</strong> Quantitative data preceptors and student reported satisfaction with structure and usability of the tool. Areas of dissatisfaction were preparation to use the tool &amp; lack of understanding of some teaching attributes. Satisfaction ratings was tested using the Mann Whitney test no statistical difference was found between groups Qualitative findings participants reported insufficient time to complete all competencies for assessment process. This was due to short clinical placements and constraints of shift work in attending interview. Some preceptors and students - Lack of preparation for assessment and support from lecturers.</td>
<td>Limitation: small sample prevents generalisability. Face and content validity were achieved through the use of an expert panel. However, a pilot study was not referred in article and no other tests mentioned. Data analysed using descriptive and some correlation statistics and thematic analysis for qualitative data. No percentages offered or tables to support these findings.</td>
</tr>
<tr>
<td>Timmins &amp; Dunne (2009)</td>
<td>An exploration of the current use and benefit of nursing student portfolios.</td>
<td>4080 students portfolios were examined for structure, process and content Online survey using a previous validated tool Measure nursing students (n=100) attitudes toward portfolio use</td>
<td>Although students (60%) felt that portfolios were beneficial to their learning they had little guidance on how to complete them. The written accounts presented were descriptive with no evidence of higher order thinking. Evidence of critical thinking or the ability to link theory to practice was not demonstrated in these portfolios.</td>
</tr>
<tr>
<td>McCarthy &amp; Murphy (2008)</td>
<td>Assessing undergraduate nursing students in clinical practice: Do preceptors use assessment strategies?</td>
<td><strong>Main Findings</strong> Paper reports on quantitative findings. The majority of subjects reported that they did use and understand the assessment strategies, only 30% assessed students’ ability to reflect and 46% did not understand the adapted Steinaker and Bell experimental taxonomy that deciphers students’ levels of performance. 54% choose to base descriptive statistics are presented. The use of inferential statistics may have added more depth to the study’s findings particularly as conflicting data was reported. The self-reporting nature</td>
<td>Pilot study carried out Single study site Response to web survey low (12%) Would have being useful to examine preceptors perspective of process structure and content.</td>
</tr>
<tr>
<td>McCarthy &amp; Murphy (2010) Preceptors experiences of clinically educating and assessing undergraduate nursing students: an Irish context Same study as above</td>
<td>Qualitative responses of the respondents preceptoring experiences and understanding of the role. Content analysis</td>
<td>Paper reports mostly on the qualitative responses. <strong>Quantitative results</strong> 86.6% preceptors enjoyed working with students 76.8% never failed a student's 47% found it difficult to do so. 57.2% did not receive feedback on their role and 38% did not feel supported by hospital management. <strong>Qualitative responses</strong> Findings preceptor enjoyed the role but felt overburdened, issues of concern were: lack of continuity with the students, lack of time to teach, needed more support from CPC in regards to assessment, recognition for the role from management, inadequate preparation and lack of feedback on the role.</td>
<td>Response to qualitative questions less than 20%. Only two open ended questions asked. Interviewing may have yielded more in-depth results.</td>
</tr>
<tr>
<td>McCarthy (2006) Translating person-centred care: a case study of preceptor nurses and their teaching practices in acute care areas.</td>
<td>Single Case study qualitative approach (six preceptors) Participant observation, documentation &amp; semi structured interviews. Theoretical propositions relating to person centred care and the teaching of person centred care underpinned enquiry.</td>
<td>Care based on the medical model was being taught in clinical practice. Preceptors were sceptical regarding the value of theory. They discussed nursing in terms of task oriented skills. Teaching concentrated on teaching facts and important things to remember. There was no evidence of challenging the students thinking. Preceptors felt confident in teaching practical skills but did not feel comfortable in being questioned on theoretical principles. Attributes that were considered to be important for students were to be respectful, have good manners, and provide comfort and reassurance to the patient.</td>
<td>Multiple sources of evidence which allowed for an in-depth examination. However, due to small sample size these findings would need to be explored further.</td>
</tr>
<tr>
<td>Duffy A. (2009) Guiding students through reflective practice - The preceptor's experiences. A qualitative descriptive study.</td>
<td>Qualitative descriptive study. Semi-structured interviews. Sample 7 preceptors undertaking a post registration educational programme. Thematic analysis</td>
<td>Preceptor had varying degrees of preparation. Difficult to understand new educational assessment terminology. Did not feel confident with teaching theoretical base to their practice. Comfortable in demonstrating nursing practice. Time was a constraint to preceptorship. Participants empathise with students. Some felt a lack of support from managers and CPC’s and some felt isolated and unable to challenge students who were not performing to standard. Participants did not understand reflection and did practice it until they had undertaken the current course.</td>
<td>Small study convenience sample very diverse as they were from 3 nursing disciplines from several hospitals in Ireland with varying experiences of preceptorship which were organised in different ways.</td>
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</table>
Appendix V – Example of one field note recorded in my reflective journal

Pre and Post tape talk my reactions and observations about the interview itself.

Preceptor (P1b) to 4th year students (S1b)

Pre interview

Arranged to meet ...... at 6.30 pm when I went in she was at her tea on her break, so I went to the canteen to meet her. We sat and had a cup of tea, we chatted about working on the ward and how she enjoyed the work, got on with the team, but it had got shorter staffed in recent times. She said it was 9 years since she qualified and she was more interested in the practical side of things. She really had no interest in doing anything more in college. I felt that she was trying to justify the fact that she had not done any further study to me because she felt that is what I was interested in.

She started to talk about how she enjoyed working with her current student because the student was a care assistant before and she was confident and learned quickly. She said it was unusual to have worked with a student so much but that the student had asked to be put on the same shifts with her because they both had volunteered for the study. We went up to the clinical nurse mangers office and I went through the main purpose of the interview and filled up the demographics.

My reactions and subjective observations

My impression of this preceptor was that she did not value theory. Her nursing care was task oriented. Taking care of the patients was a priority over learning. She accepted students as part of the team but they needed to do useful tasks that helped her to do her work. She was not really interested in the student’s development or committed to the role. She didn’t really accept any responsibility as a teacher in the learning process and she was not aware of curriculum objectives. She based her assessment on what she knew herself.
In her view the competencies documents were just paper work to be filled. She did not want to address students who were not performing to standard. If they were disinterested she was not interested in teaching them. She had no difficulty or hesitancy in telling me she had no time to explain things to students, to do reflection or to give feedback. She spoke confidently about her practice, answering questions quickly with no real pauses. She had an air of disinterest in her body language.

I found she gave short answers and did not elaborate. I got the impression that she liked student nurses who got on with the work. I felt she cared about patients but placed great value on the routine and the need for self-directed student who could help with the work. I felt she had very little teaching skills and did not know the ideal teaching practices but she had no insight into this. She herself had a very unquestioning approach.

During this interview I tried not to show any verbal or nonverbal reaction when the preceptor discussed the students in terms of being a working member of the team rather than a learner. I activity listened and explored to her perspective. I could eventually hear her perspective; she felt she had an onerous workload and she was doing the best she could do in the circumstances.

Post interview

I thanked her for her valuable contribution.

We arranged when she was going to do the assessment interview with the student and she agreed that I could come in. She warned me that these interviews don't always occur at a time or date sometimes someone else might have to do it with the student.
Appendix VI
Prejudgements, prior understandings or presuppositions

I recorded my pre-study assumptions at the outset of the study in May 2008 in my reflective diary. See following for a synopsis:
My perceptions regarding teaching and learning in clinical practice were that students needed to participate in clinical practice in order to learn the practice of nursing. Preceptors guided and facilitated students to participate in the delivery of nursing care and students learned how to practice from them. From my experience I had concerns over the assessment process. Preceptors seemed to be reluctant to fail students and I anticipated preceptors may have problems fulfilling their assessment role particularly in relation assessing students' holistic competencies. Hence I was interested in exploring the assessment practices of the preceptor. As I felt this was an extremely important part of the preceptors' role. I perceived preceptors had a critical role in that they judged whether a student was competent or not hence I perceived them to be the ultimate gatekeepers of the profession. I presumed that preceptors would require more support from educationalist in the assessment process.

I subsequently recorded my pre study assumptions regarding teaching and learning in clinical practice within preceptorship on the 4th of November 2009 prior to data collection for the initial study. My thinking in regards to clinical teaching and learning and the preceptors' role following an extensive review of the literature review began to expand. I began to see how the assessment of the students was greatly influence by what was taught, how it was taught and the students' learning experience. Therefore I began to become more interested in exploring the teaching strategies and practices of the preceptor and what how and what the students was learning. Some of the assumptions I had at this stage of the study were as follows.
1. The presence of a good role model who is competent, interested in teaching and spends time with the student greatly influenced the students' learning.

2. The relationship between the preceptor and student was key to an effective teaching learning experience.

3. Difficulties for preceptors may be workload and shifts that do not align with the students.

4. Preceptors may have difficulties with implementing teaching strategies such as setting goals, feedback, questioning and linking theory to practice.

5. Preceptors may not understand the assessment process or tools used.

6. Preceptors may be unhappy with the preparation and support they receive for the role and may not feel adequately prepared to teach.

7. Students may be unhappy when their preceptors do not implement the aforementioned teaching strategies.
### Source of Index

#### Deductive codes

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<th>Codes</th>
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<td>Modelling – demonstration</td>
</tr>
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<td></td>
<td>Coaching – observation of students performance and feedback</td>
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<tr>
<td></td>
<td>Scaffolding – accessing what level the novice is at and plans activity to process the student along the learning continuum</td>
</tr>
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<td></td>
<td>Articulation – the teacher questions the novice to illicit their problem solving skills</td>
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<td></td>
<td>Reflection encourages the student to reflect on their own performance</td>
</tr>
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<td>Exploration – encourages students to set further goals</td>
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<td>Knowledge and skills and values taught in practice</td>
<td>Cognitive</td>
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<td>Support for Role</td>
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<td>Inductive codes derived from coding transcripts</td>
<td>Organisation of the preceptorship model</td>
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<th>Types of knowledge for expertise - prioritise care</th>
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<tr>
<td></td>
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<td>How to learn in clinical practice, watching and asking</td>
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<td></td>
<td>Rules of thumb</td>
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<tr>
<td></td>
<td></td>
<td>Sequencing / Routine</td>
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</table>

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<th>Students attributes</th>
<th>Intrinsic motivation confidence initiative reliance ability to self-assess</th>
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<td></td>
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<td>Student to ask question</td>
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<tr>
<td></td>
<td></td>
<td>Keep busy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Help out</td>
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<td></td>
<td>speed</td>
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<thead>
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<th>Learning environment</th>
<th>Relationship</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Time to teach and assess</td>
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<tr>
<td></td>
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<td>Belonging to the team</td>
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<td></td>
<td></td>
<td>Working as a team getting the work done</td>
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<tr>
<td></td>
<td></td>
<td>Learning community - sharing learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Time together</td>
</tr>
</tbody>
</table>
Appendix VIII
Chart Classification Summary

Classification 1 - Teaching methods

- Modelling and coaching – preceptor verbalising thought processes and actions, guiding delegating, under their wing gives feedback scolding versus prompting hinting, lack of feedback
- Scaffolding - knowing the students level of performance, giving psychological support, students’ needs to self-assess and request support request guidance advice and to be taught. working consistently with students facilities scaffolding, working together getting direction versus working alone and expecting student to work independently
- Articulation -questioning
- Reflection -promoting self-assessment debriefing
- Exploration- initiative encouraged to do more on their own

Classification 2 - The Organisation of the preceptorship model

- Consistency of working with preceptor
- Assessment process – student lead
- Team teaching and assessing

Classification 3 What is taught in practice

- Knowledge recall
- Rules of thumb/ learning the routine
- Putting knowledge into action – organisational skills( team work, time management, assessment skills -problem identification, problem solving skills- prioritising, reporting skills
- Affective skills -Communication skills, caring
- Psychomotor skills – Basic nursing care Importance of psychomotor skills

Classification 4 -The learning environment

- Relationship
- Intrinsic motivation of the student – initiative, confidence interested insight in to learning need promoting confidence
- Priority patient care – time for teaching and assessing
- Working together to get the work done: Importance of helping out, hardworking
- Learning community – shared learning. Interested in teaching and learning
Appendix IX- Interpretation process: mind map: development of themes and subthemes

**Attitudes**
Student needs to be Useful
Appreciated
Keep busy
Invited to come along
Preceptors Unhappy no time to explain
Preceptors Unhappy no continuity
Patient responsibility and getting the work done more important than students’ education
Sympathy towards student

**Motivations**
Get the work done
Student allocated tasks that they are competent in
Students sets the learning agenda
Mutual beneficial relationship
Preceptors need to be interested in teaching
Some preceptors Interested in rationale for care and holistic care these are interested in teaching
Appreciation
Students try to learn the routine
All students motivated to learn practical skills
Passing on knowledge

**Behaviours**
Showing
Observing
Watching
Talking through explaining
Guiding
Prompting
Feedback only at interviews

Student ask questions

Students try to learn practice

**Theme 1 Teaching clinical practice**

1. Team teaching and assessing
2. Verbalising practice – explaining talking through practice, verbal persuasion, encouragement
3. Level of supervision and support – keep an eye on, watching them bring them along, working together, working on your own, guiding, observing/watching, doing
4. Preceptors and students questioning methods (questions and answers)
5. Time together – continuity
6. Looking it up together

**Theme 2 What is taught**

1. Learning the routine, prioritising care
2. Organisational skills, time management
3. Communication skills, conversational skills
4. Practical skills, hierarchy of tasks, learning the basics, practical skills important

**Theme 3 Becoming a member of the team**

1. Follow me, Under the wing
2. Get stuck in, personal attributes of a good student, showing initiative, confidence
3. Sharing knowledge
4. Priority patient care, ad hoc learning, providing a service, being useful
### Appendix X – Analysis process Coding – interpretation

Extracts from a preceptor interview where a preceptor on Unit D explains how she taught and worked with an “excellent student”

<table>
<thead>
<tr>
<th>Excerpts from interview transcripts</th>
<th>Initial coding</th>
<th>Charting Classification</th>
<th>Interpretations → Theme and subtheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>R:</em> Yeah, I suppose I did [enjoyed working with this student]. We worked a lot together.</td>
<td></td>
<td>Classification 1 Teaching methods</td>
<td>Preceptor enjoys working consistency with students</td>
</tr>
<tr>
<td><em>I:</em> And does that help, working a lot together?</td>
<td></td>
<td>Student /preceptor continuity</td>
<td></td>
</tr>
<tr>
<td><em>R:</em> It’s a huge thing, it really is. You really have to be working with them, and she actually was on our nights as well, so it was great. Time constraints is just such a problem here and different off duty and night duty. When you’re on night duty you’re gone for two weeks. I know they have associate preceptors but that’s not saying that they’re going to be working with them either because they could be going on nights the week after you.</td>
<td></td>
<td>Time to teach</td>
<td>Preceptor unhappy when she has no time to teach</td>
</tr>
<tr>
<td><em>I:</em> So when you were working with somebody for a long period, you feel its better?</td>
<td></td>
<td>Classification 2 The Organisation of preceptorship Consistency of working alongside preceptor</td>
<td>Lack of management commitment to preceptorship concept.</td>
</tr>
<tr>
<td><em>R:</em> Definitely, yeah. You can see the potential in them or if there would have been a problem that you could have identified it, definitely. But definitely a close working relationship is the best way to go. And even from my own experience as a student, the more you worked with a nurse, the more you learnt and the more you felt confident to ask them questions.</td>
<td></td>
<td>Classification 3 Learning environment Time to build a relationship</td>
<td>Building mutually trusting relationships where the preceptor can advance the students level of performance and the student feels safe to ask questions takes time</td>
</tr>
</tbody>
</table>

**Excerpts from interview transcripts**

**Questions and Answers**

**R:** Yeah, I suppose I did [enjoyed working with this student]. We worked a lot together.

**I:** And does that help, working a lot together?

**R:** It’s a huge thing, it really is. You really have to be working with them, and she actually was on our nights as well, so it was great. Time constraints is just such a problem here and different off duty and night duty. When you’re on night duty you’re gone for two weeks. I know they have associate preceptors but that’s not saying that they’re going to be working with them either because they could be going on nights the week after you.

**I:** So when you were working with somebody for a long period, you feel its better?

**R:** Definitely, yeah. You can see the potential in them or if there would have been a problem that you could have identified it, definitely. But definitely a close working relationship is the best way to go. And even from my own experience as a student, the more you worked with a nurse, the more you learnt and the more you felt confident to ask them questions.
Appendix XI - Letter to Director of Nursing seeking permission to access clinical sites

Nursing and Health Studies Department.

Dear Director of Nursing,

I am undertaking a Doctorate in Education at The Open University and will be conducting a research dissertation under the supervision of Professor Judith Lathlean.

The overall aim of the study is to describe how preceptors engage in the clinical teaching and assessment of undergraduate BNSC (general) students. The study will identify the learning process being utilized by the preceptors and the curriculum i.e. values and knowledge that underpins what is being taught and assessed in practice. Finally a best practice model in relation to the clinical teaching and assessment of student nurses will be identified. Hence I am interested in determining the aspects that are working well and identifying areas that require improvement.

The study will involve a single case study approach. The case that I intend to examine is preceptors teaching and assessment practices in .......... Hospital. The study will investigate both the students and preceptors views and experiences of this process.

The sample will include 12 students and 12 preceptors who are working together on four clinical areas in the hospital. I am seeking your permission to access your clinical areas as sites for this study.

An initial study is planned to take place in November 2009 which will involve two preceptor and two students. The main study will take place October 2010–June 2011. Students and preceptors will be interviewed separately, some teaching and assessment practices will be observed and relevant teaching and assessment documentation will be examined in order to gather data to answer the research question that is how preceptors engage in the teaching and assessing of students nurses.

I would like to assure you that this study has been reviewed and has received ethical clearance through the Research Ethics Committee........... However, the decision on whether you allow access to your site is entirely up to you. If you would like more information concerning this research project, please feel free to contact me at...........
Thanking you in advance, for your consideration of this request.

Yours sincerely,

Edel Mc Sharry
Appendix XII - Participant Information Sheet (Preceptors)

Title of the study:
An exploration of the teaching and assessing practices of the preceptor in an acute care hospital in Ireland

Invitation to participate.
You are being invited to take part in this study because you are preceptor in ..........Hospital and I wish to explore and elicit your perspective on how you teach and assess students in clinical practice. This study is being carried out as part of my Doctorate in Education programme at the Open University. Before you decide, it is important for you to understand why the research is being done and what it will involve. This participant information sheet will tell you the purpose, risks, and benefits of the study. If there is anything you are unclear about you can contact me directly, (contact details listed below).

What is the study about?
The overall aim of the study is to describe how preceptors engage in the clinical teaching and assessment of undergraduate BNSC (general) students. The study will identify the learning process being utilized by the preceptors and the curriculum i.e. values and knowledge that underpin what is being taught and assessed in practice. Finally a best practice model in relation to the clinical teaching and assessment of student nurses will be identified.

How was I chosen?
The chosen population for this research study involves up to 12 preceptors and 12 students. You have been chosen because you have been a preceptor for a least 2 students, and you work on one of the following clinical areas:............. I have obtained your contact details from the Clinical Nurse Manager and the Centre of Midwifery and Nurse Education (CMNE), and these details will remain confidential for the purpose of selecting study participants.

What will taking part involve?
Taking part in the study will involve you being interviewed by me where I will ask question about your experiences and views of teaching and assessing undergraduate students. This interview will take approximately one hour and will be tape-recorded. I will organise at a location and time that suits you. If you agree to be involved, I may also be taking part in some of your teaching and assessment activities with the students as an observer.
The Study Process:

This study will involve a single case study approach. The case that is being examined is preceptors teaching and assessment practices in Hospital. It will investigate both the students and preceptors views and experiences of this process. Numerous sources of evidence will be gathered which will include interviews with both students and preceptors, observation of teaching and assessment process, and reviewing documentation and records relating to the teaching and assessment of BNSc (general) students. International literature in relation to clinical practice education will also be examined. An initial study will take place in November 2009. The main study will take place October 2010–June 2011. Students and preceptors will be interviewed separately, some teaching and assessment practices will be observed and relevant teaching and assessment documentation will be examined in order to gather data to answer the research question that is how preceptors engage in the teaching and assessing of students nurses.

What will happen to the Information once collected?

During the data collection period I will transcribe from the audio tape all interviews and will type up all field notes from the observations and documentary evidence. Your responses will be treated with full confidentiality and anyone who takes part in the research will be identified only as code numbers or false names. You can request a copy of the interview transcript if you wish. I will extract the information I need to understand and describe the assessment and teaching practices of the preceptors and will use a scientific qualitative framework to help make sense of the information.

Where will the Information be stored and for how long?

The Information gleaned from the Interviews, observation and documentation will be stored on computer as one body of information. It will be stored until data analysis has been completed. It will be stored in the form of a password protected file. The audio tapes and field notes will be stored in a locked secure place at all times. The audio tapes will be destroyed after they have been transcribed.

Who will have access to the Information?

The only people who will have access to information will be myself, (the researcher) and as this study is in fulfilment of a Doctorate in Education; my research supervisor will have limited access to the information.

Are there any negative consequences if I choose to participate?

There are no negative consequences to participating in the study. All interview transcripts and field notes of observations will be numerically coded and thus your name or other identifying features will not appear on data collected for this study. If talking about your teaching and assessment experiences becomes upsetting for you. You are free to stop the interview at any time if you do not wish it to continue. If you feel you would like some additional help after the interview I will be able to advise you who to contact, for example a Counsellor, Clinical placement co–ordinator, Practice Development Co–ordinator or Clinical Nurse Manager.
Are there any consequences if I choose not to be part of the study?

There is no obligation on you to participate in the study. If you do not wish to participate, do not complete a consent form.

What should I do if I want to drop out of the study?

It is up to you to decide whether or not to take part, if you decide to participate initially; you are still free to withdraw at any time without giving a reason for doing so. A decision to withdraw at any time, or a decision not to take part, will not affect your role as a preceptor or the professional relationship that you have with myself or ...... college. If you do withdraw from the study all data collected in relation to your participation will be destroyed.

Will I benefit from participating or be paid for participating?

It is anticipated that participating in this study may stimulate a process of self-reflection of your teaching and assessment experiences; however, there is no guarantee that you personally will receive any direct benefit from the research in the immediate future. However, the findings of the study should produce information that may, in the future, influence Clinical nurse managers, other preceptors, educationalists and policy makers in addressing issues of concern around the teaching and assessment in clinical practice and assist in discovering ways of supporting preceptors in the clinical education of student undergraduate nurses. It will offer recommendations of best practice.

What happens at the end of the study?

Following the completion of the thesis for submission in fulfilment of the Doctorate in Education, the researcher will compile a report and the findings will be submitted to Journals such as Journal of Nurse Education. Presentations will also be made at relevant conferences.

Whom do I contact for more information or if I have further concerns?

You can contact Edel McSharry on emcsharry@...... Or You are welcome to phone me on....

Thank you for taking time to read this leaflet and for considering taking part in this study.
Appendix XIII–Participant information Sheet (Students)

Title of the study:

An exploration of the teaching and assessing practices of the preceptor in an acute care hospital in Ireland

Invitation to participate.

You are being invited to take part in this study because you are a BNSc (general) student here at ...... college and I wish to explore and elicit your perspective on how you are taught and assessed by the preceptor in clinical practice. This study is being carried out as part of my Doctorate in Education programme at the Open University. Before you decide, it is important for you to understand why the research is being done and what it will involve. This participant information sheet will tell you the purpose, risks, and benefits of the study. If there is anything you are unclear about you can contact me directly, (contact details are listed below).

What is the study about?

The overall aim of the study is to describe how preceptors engage in clinical teaching and assessment of undergraduate BNSc (general) students. The study will identify the learning process being utilized by the preceptors and the curriculum i.e. values and knowledge that underpins what is being taught and assessed in practice. Finally, a best practice model in relation to the clinical teaching and assessment of student nurses will be identified.

How was I chosen?

The chosen population for this research study involves students who are undertaking the BNSC Nursing (General) Degree in ...... College and who have been allocated to one of the following clinical placements:............. I have obtained your contact details from the allocations officer here, at the college and these details will remain confidential for the purpose of selecting study participants.

What will taking part involve?

It will involve you being interviewed by me where I will explore what your perceptions of the teaching and assessment practice of the preceptor. This interview will take approximately one hour and will be tape-recorded. It will take place at a time and location convenient to you. Furthermore, I will be reviewing your competency /assessment documents and any other learning material that you were provided on clinical practice. If you agree to take part it may also involve you being observed while you are being taught or assessed by the preceptor.

The study process:

This study will involve a single case study approach. The case that is being examined is preceptors teaching and assessment practices in .......... Hospital.
The study will investigate both the students and preceptors' views and experiences of this process. The study will involve up to 12 preceptors and 12 students. Numerous sources of evidence will be gathered which will include interviews with both students and preceptors, observation of the teaching and assessment process, and reviewing documentation and records relating to the teaching and assessment of BNSc (general) students. International literature in relation to clinical practice education will also be examined. An initial study will take place in November 2009. The main study will take place October 2010–June 2011. Students and preceptors will be interviewed separately, some teaching and assessment practices will be observed and relevant teaching and assessment documentation will be examined in order to gather data to answer the research question that is how preceptors engage in the teaching and assessing of students nurses.

What will happen to the information once collected?

During the data collection period I will transcribe from the audio tape all interviews and will type up all field notes from the observations and documentary evidence. Your responses will be treated with full confidentiality and anyone who takes part in the research will be identified only as code numbers or false names. You can request a copy of the interview transcript if you wish. I will extract the information I need from the data to understand and describe the assessment and teaching practices of the preceptors and will use a scientific qualitative framework and computer package to analyse and to help make sense of the information.

Where will the information be stored and for how long?

The information gleaned from the interviews, observation and documentation will be stored on computer as one body of information. It will be stored until data analysis has been completed. It will be stored in the form of a password protected file. The audio tapes and field notes will be stored in a locked secure place at all times. The audio tapes will be destroyed after the contents have been transcribed.

Who will have access to the information?

The only people who will have access to information will be myself, (the researcher) and as this study is in fulfilment of a Doctorate in Education; my research supervisor will have limited access to the information.

Are there any negative consequences if I choose to participate?

There are no negative consequences to participating in the study. All interview transcripts and field notes of observed teaching and assessment practices will be numerically coded and thus your name or other identifying features will not appear on data collected for this study.

If talking about your learning and assessment experiences becomes upsetting for you. You are free to stop the interview at any time if you do not wish it to continue. If you feel you would like some additional help after the interview I will be able to advise you who to contact, for example a counsellor, Clinical placement coordinator or Year leader.
Are there any consequences if I choose not to be part of the study?

There is no obligation on you to participate in the study. If you do not wish to participate, do not complete a consent form.

What should I do if I want to drop out of the study?

It is up to you to decide whether or not to take part, if you decide to participate initially; you are still free to withdraw at any time without giving a reason for doing so. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of education services you receive or affect your access to facilities as a student of ....... college in any way. All data collected in relation to your participation will be destroyed.

Will I benefit from participating or be paid for participating?

It is anticipated that participating in this study may stimulate a process of self-reflection on your learning. However, there is no guarantee that you personally will receive any direct benefit from the research in the immediate future. The findings of the study should produce information that may, in the future, influence Clinical nurse managers, Preceptors, Educationalists and policy makers in addressing issues of concern around the teaching and assessment of students in clinical practice and assist in discovering ways of improving the clinical education of student undergraduate nurses. The study will offer recommendations of best practice.

What happens at the end of the study?

Following the completion of the thesis for submission in fulfilment of the Doctorate in Education, the researcher will compile a report and the findings will be submitted to Journals such as Journal of Nurse Education. Presentations will also be made at relevant conferences.

Whom do I contact for more information or if I have further concerns?

You can contact Edel Mc Sharry on emcsharry@....... or you are welcome to phone me on ...

Thank you for taking time to read this leaflet and for considering taking part in this study.
Appendix XIV - Consent Form

Consent by preceptor to participate in the research study:

Study Title: An exploration of the teaching and assessing practices of the preceptor in an acute care hospital in Ireland.

Principle Investigator: Edel Mc Sharry (professional details and address)

1. I confirm that I have received a copy of the information sheet for the above study. I have read it and I understand it. I have received an explanation of the nature, purpose, duration and foreseeable effects and risks of the study and what my involvement will be.
2. I have had time to consider whether to take part in this study and I have had the opportunity to ask questions.
3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without risk of penalties or adverse treatment in any professional dealings with the investigator in the future.
4. I agree to take part in the above study.

-------------------------------  ---------  ------------------
Name of participant         Date       Signature

-------------------------------  ---------  ------------------
Investigator                 Date       Signature
Appendix XV- Consent Form

Consent by student to participate in the research study:

Study Title: An exploration of the teaching and assessing practices of the preceptor in an acute care hospital in Ireland.

Principle Investigator: Edel Mc Sharry, (professional details and address)

1. I confirm that I have received a copy of the information sheet for the above study. I have read it and I understand it. I have received an explanation of the nature, purpose, duration and foreseeable effects and risks of the study and what my involvement will be.
2. I have had time to consider whether to take part in this study and I have had the opportunity to ask questions.
3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my education or student status being affected.
4. I understand that sections of my clinical competency/assessment document will be reviewed as part of this study. I give permission to the investigator to have access to my clinical assessment records/documents for the purposes of this study.
5. I agree to take part in the above study.

-----------------  -----------------  -----------------
Name of participant  Date  Signature

-----------------  -----------------  -----------------
Investigator  Date  Signature
Appendix XVI - Demographics (Preceptor)

Unit Code:

Participant Code:

Choose from the following:

Male/ Female

Age profile

<table>
<thead>
<tr>
<th>Age Range</th>
<th>□</th>
</tr>
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<td>50–59</td>
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<tr>
<td>60–65</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many years are you qualified?</td>
<td></td>
</tr>
<tr>
<td>Where have you worked as a nurse since you qualified?</td>
<td></td>
</tr>
<tr>
<td>How long have you worked on this unit?</td>
<td></td>
</tr>
<tr>
<td>What are your professional qualifications?</td>
<td></td>
</tr>
<tr>
<td>What are your academic qualifications?</td>
<td></td>
</tr>
<tr>
<td>How long have you been a preceptor?</td>
<td></td>
</tr>
<tr>
<td>How many students have you precepted?</td>
<td></td>
</tr>
<tr>
<td>Have you done the preceptorship course?</td>
<td></td>
</tr>
<tr>
<td>Have you done any preceptorship update?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix XVII -Semi - Structured Interview Guide - Preceptors

Can I ask you a few questions about your experience of teaching students?

1. How do you teach the students?
   • Modelling
   • How do you get the student to observe your nursing practice?
   • Coaching
   • From your experience can you tell me how you teach the student a new nursing skill?
   • Scaffolding
   • Can you tell me how you supervise the student and when would you allow the student to do some nursing actions on their own?
   • Articulation
   • Can you give me some example from your experience of how you find out what the student knows?
   • Reflection
   • How do you reflect with the student?
   • Exploration
   • Can you give me examples of how you get the student to solve nursing problems and how you get the students to decide what they need to learn next?

2. Can you tell me what kind of knowledge and skills do you feel is important for the student to learn
   • Nursing care/management/ value that student can take part in or learn
   • Psychomotor skills
   • Describe a good student.
   • What do you think about reflection?

3. Tell me of your experiences of assessing the students' competency?
   • Evidence needed
   • Domains of competency
   • Psychomotor skills
   • Failing a student/ weak student what do you do?

4. How does preceptorship work for you?
   • How do you feel about being a preceptor?
   • Can you think of a good/bad experience of teaching a student?
   • What kind of relationship do you have with students?
   • Have you ever learned anything from a student?
   • What helps you in your role and what other supports could help you?
Appendix XVIII- Semi-Structured Interview Guide - Students

I am interested to know how you learn from your preceptor and how your practice is assessed. From your experience of being taught by the preceptors on this placement can you answer these questions?

1. How does the preceptor teach you?
   - Modeling
   - Tell me how your preceptors demonstrate nursing skills and practice to you?
   - Coaching
   - Can you tell me when and how you have received feedback on your performance?
   - Scaffolding
   - When have you been encouraged to work on your own?
   - Articulation
   - How and when does the preceptor ask you questions about your practice?
   - Reflection
   - When has the preceptor asked you to think about your strengths and weaknesses?
   - Exploration
   - Tell me how you and the preceptor decide what you are going to learn on this placement.

2. What values and skills are you taught in clinical practice by the preceptor?
   - What elements of nursing practice on this clinical area are you taking part in (what areas are you not exposed to)?
   - What do you feel is important to learn on this clinical area?
   - What do you admire about your preceptors' nursing practice?
   - Have you had any experience where you were taught practices that you felt were wrong?
   - What values and skills do you think a good student nurse should have?
   - Do you ever teach the preceptor?
   - What resources does the preceptor use to teach you (books, internet, policies)?
   - What are you interested in learning?
   - What knowledge or skills have you learned on other areas that you use here?

3. Tell me of your experiences of having been assessed?
   - Tell me what you have to learn on this clinical placement in order to pass your competencies/practice assessment?
   - What do you think the preceptor believes a good student to be?

4. How does preceptorship work for you, what are your experiences?
• Can you tell me of a time when you had a good/bad experience with a preceptor on this or other placements in the hospital?
• What type of relationship do you have with the preceptors in this area?
• What supports (e.g. CPC, Link Lecturer, Clinical Nurse Manager, other) do you use to help you in your learning?
• Tell me of your experiences of reflecting with the preceptor on this or other areas?
Appendix XIX—Interview extract
Third year student Surgical Unit (S2b)

Example of probing, silence pacing clarification statements

Extract of a sensitive issue where the student discussed preceptors high expectations of her—

Field notes: recorded that the student was looking down and avoiding eye contact when she was talking about this incident. She also blushed at times and her tone was angry when she discussed issues that made her feel inferior.

R: They asked me on my first day. But there is still that expectation of us, as 3rd students, that we.... (then a long silence)

I: And how would you have known that? I know it’s difficult to think on the spot but can you think what was said to you that you thought that they expect me to do this?

Long pause no answer

I: So are you telling me that they expect you to do more than you can because of the lack of clinical experience you have because you are only at the beginning of 3rd year

R: Yeah

I: That’s what you’re saying? How do you know you they expect more from you what would they be saying?

R: Well, you know, even something as simple....I had never taken out a cannula. It’s so simple to take out a cannula but because of my clinical experience up until now I had no experience of actually doing that. They were kind of nearly amazed that I hadn’t done....I’m very willing to do stuff but I never actually had the experience of doing it.

I: So what did they say?

R: They didn’t really say anything. They just looked amazed. I’m able to do it now but, you know, there is that expectation.

I: And how did you feel when that was going on, when they were amazed that you didn’t know how to do it?

R: I didn’t feel anything. I just asked them to explain to me how to do it and that I’d do it. I’d no problem in doing anything.

I: And did they teach you how to do it?

R: They did.

I: And do you feel you’ve learnt that now?
R: For something so basic I just felt at a loss.

I: You were left wondering how to do this and they expected you to do it?

R: Yes

I: And was there many other incidents like that, where they were kind of expecting you to do something and you weren't able to do it because you hadn't been taught?
Appendix XX—Interview Extract
Preceptor (P1b) Surgical Unit

Field notes recorded: During this interview I tried not to show any verbal or nonverbal reaction when the preceptor discussed the students in terms of being a working member of the team rather than a learner. I activity listened to her perspective and validated her point of view.

I. And what about after the day's work, would you ever have taken a student aside to reflect or to think about what happened in a situation with their patients or would you ever have taken them and the two of you talked about an incident with the patient?
R: not really, unless something serious happened. No, I haven't
I: Unless it was-
R: something serious, which never really
I: has that ever happened, where you've had some kind of serious thing?
R: No.
I: But otherwise you wouldn't talk about the care given?
R: Not really. I suppose we don't have the time, again. You're always thinking ahead of what you've to do and that time isn't there, I suppose, to do that. You're still kind of running at the end of the day and then the night staff are coming on so you're trying to get everything sorted to hand over to them. And then at the end the students can be...when you're handing over they could be here answering bells that are going off while you're handing over. There's not the time.
I: Okay, that's fair enough
Appendix XXI—Diagrammatic representation of final themes

Clinical teaching and learning within a preceptorship model in an acute care hospital in Ireland

Teaching Clinical Practice

Working together on a consistent basis
Watching, talking through and doing practice
Assessing and advancing students level of performance
Preceptors’ questioning methods

Learning Practice Knowledge and Skills

Learning to organise, deliver and prioritise care within the unit’s routine
Rationale for care
Professional communication and caring attributes
Practical skills

Becoming a member of the team

Building a relationship based on mutual trust
Showing confidence and initiative
Helping to get the work done
Appendix XXII—Clinical Teaching and Learning Model

**Situated Learning Within Communities of Learning**
- Student advances participation under appropriate guidance

**Clinical Teaching and Learning Model**

**Situated Teaching Techniques**
- Strategies that promote performance, understanding, critical thinking & learning

**Professional Practice**
- Learning how to manage individualised holistic patient care

**Organisational commitment to nurse education; preceptors allocated time to teach/consistency of contact time between student & allocated preceptor**

**Preceptor preparation and ongoing support for the role. Collaborative educator/preceptor partnership approach to teaching and assessing in practice**

**Individualised approach to teaching: setting learning goals & developing learning styles**

**Reciprocal student/preceptor learning relationship based on equality & mutual respect**

**Dialoguing practice, scaffolding student to the next level of participation, continuous assessment, confidence building strategies**

**Contextual questioning, situational constructive feedback, student self evaluation**

**Facilitated Reflective practice**

**Professional skills acquisition; technical/communication**

**Practical wisdom; clinical reasoning & judgement**

**Formation of a professional identity based on knowledge, skills & altruism**