PHYSIOTHERAPY STUDENTS’ LIVED EXPERIENCE OF FORMATIVE ASSESSMENT DURING PRACTICE EDUCATION

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Abstract

The purpose of this study was to gain insight into physiotherapy students' experience of formative assessment on placements. A purposive sample of nine physiotherapy students was selected from a pre-registration problem-based learning programme. Four postgraduate practice educators were interviewed to explore emergent themes. A qualitative phenomenological approach was adopted using semi-structured interviews. Reflective logs and theme boards were used to promote participants' reflection prior to interview. An interpretative phenomenological analysis (IPA) approach was used.

Five main themes emerged from the data: feeling overloaded; challenges of multiple educators; problem-based learning influences; fulfilling experiences; learning from relationships. A problem-based approach prepared students for feedback however they still found formative assessment overwhelming. A lack of communication between educators in multiple educator models resulted in conflicting feedback. Participants valued feedback from different sources. Potential exists for more effective use of interprofessional colleagues, peers, juniors and patients in formative assessment. Although peer learning was a key part of problem-based learning, opportunities for peer feedback were limited.

In a changing practice environment where practice educators inevitably face increasing time constraints, use of other team members to provide student feedback should be promoted. This will support student integration into the team. Facilitation of students' pro-active engagement in formative assessment will ensure that they are prepared for monitoring their future practice. Further research into multiple models of practice education is needed.

Keywords: feedback, interprofessional, multiple models.
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Finally I dedicate my thesis to my parents especially my mother who sadly died halfway through my Ed D.
Author's Declaration

I declare that the research contained within this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree, and does not incorporate any material already submitted for a degree.

Signed

Date
<table>
<thead>
<tr>
<th>Abbreviations</th>
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<tr>
<td>ACE</td>
<td>Accredited Clinical Educator</td>
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<td>APPLE</td>
<td>Accreditation of Practice Placement Educators</td>
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<td>CPD</td>
<td>Continuing Professional Development</td>
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<td>CSP</td>
<td>Chartered Society of Physiotherapy</td>
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<td>COT</td>
<td>College of Occupational Therapy</td>
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<td>DH</td>
<td>Department of Health</td>
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<td>Health Professions Council</td>
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1 Chapter one – Introduction and background to the research

1.1 Introduction

This thesis is an exploration of physiotherapy students' experiences of formative assessment during practice education. My interest in the topic was elicited when student evaluation and debriefing following their practice placements, consistently indicated that they were dissatisfied with the quality and amount of feedback they received in practice. This concern was highlighted by successive student cohorts across two higher education institutions, and subsequently confirmed by a small scale project that explored student perceptions of positive and negative aspects of practice learning:

"I think the feedback thing is something that is really lacking in a lot of placements. It's no good if they're going to give you positive all the time"

(Morris and Caladine, 2007:2)

The purpose of this chapter is to place the problem in the context of practice education, my own practice as an educator, and to provide a rationale for my research.

1.2 Practice education

"Practice-based learning forms an indispensable and integral part of the learning process and is vital to students' educational and professional development"

(CSP, 2003:3)

The above quotation from the Chartered Society of Physiotherapy (CSP), the professional body of physiotherapy, highlights the importance of practice education.

The practice setting is recognised as a primary site of learning where senior clinicians in their roles as practice educators act as "professional gate-keepers", taking responsibility for facilitating and assessing health professional students (Ilott and Murphy, 1999; CSP, 2001; CSP, 2003). Practice education is an essential, mandatory component of all health professional courses and is considered to be one
of the most important assets available to health professional students (Frantz and Rhoda, 2007; Kelly, 2007b; HPC, 2009). McAllister (1997:3) succinctly described it as:

"An experience-based teaching and learning process which is student-focused and may be student-led, which occurs in the context of client care ......clinical (practice) education occurs in an environment supportive of the development of clinical reasoning skills, professional socialisation, and life-long learning"

In the practice learning environment students engage in authentic experience that prepares them for their future professional life. Within this rich environment they learn how to effectively apply theory to practice, to develop their clinical reasoning skills, and their own sense of professional identity (Strohschein et al, 2002; McAllister and Lincoln, 2004; Delany and Bragge, 2009). The range of learning opportunities that practice settings offer enables students to develop the knowledge, skills and attitudes necessary to facilitate their professional growth, and prepare them for their future role as autonomous health professionals (McAllister and Lincoln, 2004; Cross et al, 2006).

Physiotherapy students are enrolled on programmes approved by the regulatory body the Health Professions Council (HPC). All physiotherapy students are required to complete a minimum of 1000 hours of practice, working alongside senior practitioners who adopt the role of practice educator. These senior practitioners are responsible for facilitating and assessing student learning in a variety of practice settings (Moore et al, 1997; CSP, 2002a). Students are required to pass all mandatory placements before they can register as practitioners with the regulatory body (HPC), and gain full membership of their professional body, the Chartered Society of Physiotherapy (CSP). It is only then that they are deemed fit for practice, fit for purpose and fit for award (Cross et al, 2006; HPC, 2009).

Practice placements focus on core areas of neuromusculoskeletal conditions, cardiorespiratory conditions and neurology conditions within a range of primary and secondary care settings. Traditionally the majority of physiotherapy student placements were undertaken in acute hospital trusts. During the last decade,
changes in the context of health and social care have resulted in the development of an increasing number of placements in non-traditional settings (CSP, 2006). These include community based settings, for example general practice, intermediate care homes and patients' homes (Kelly, 2007b).

It is essential that students on placements experience high quality teaching and learning approaches in order to benefit from their experience and to ensure that health professional programmes are educating high quality future practitioners (Cross et al, 2006). High quality placements should include the provision of effective feedback, an indispensable element of any learning experience. This allows learners to compare their own performance against the standard of practice required and may lead to increased motivation (Best and Rose, 2005; Clynes and Raftery, 2008; Van de Ridder et al, 2008). Feedback helps students to identify their strengths and weaknesses. This enables them to reflect and learn from their interaction with patients and other team members, facilitating their ongoing professional development (Cross et al, 2006; Molloy, 2009). Feedback forms an integral part of formative assessment which has:

"a developmental purpose and is designed to help learners learn more effectively by giving them feedback on their performance and on how it can be improved and/or maintained. Reflective practice by students sometimes contributes to formative assessment" (QAA, 2006:3)

1.3 Background to the research

As a principal lecturer for practice education, I have a lead role in actively monitoring the quality of learning and teaching in practice and work together with practice educators and learners to develop strategies for improving the learning experience for all concerned. My experience of developing postgraduate modules and an open learning text for practice educators (Cross et al, 2006) has enabled me to enhance my understanding of feedback as a concept and its importance in fostering learning (Eraut, 2006). I am aware of the challenges that both learners and educators face in relation to feedback and its impact on the quality of practice education. I was particularly interested in exploring learners' own unique experience of feedback and the ways in which they engage with feedback as part of the formative assessment process.
Although it is widely acknowledged that extensive evidence related to feedback exists, few studies have explored individual learners' experience of the formative assessment process during practice education. Morris (2007) highlights the dearth of studies related to health professional education that have explored individual students' perception of practice education. This study provided the opportunity for a group of physiotherapy students to disclose their experiences and perceptions of formative assessment during practice education.

As a health professional student in the early 1970's I experienced didactic learning and teaching approaches in both campus based and practice learning environments that were based on a traditional national physiotherapy curriculum dictated by professional and regulatory bodies. These approaches to learning and teaching did little to facilitate critical thinking or problem-solving skills. They were generally prescriptive in nature and I believe failed to encourage students to actively engage in the learning process.

Although the majority of my clinical educators adopted traditional approaches, often providing sparse feedback in an authoritarian way that did little to develop my practice, there were some who demonstrated the qualities and skills necessary for facilitating and supporting learning. These educators although few and far between, fuelled my early interest in education. When I graduated I was keen to support student learning from an early stage and was eager to offer placements to students in my practice setting.

As an educator in practice I was firmly committed to my role, and tried hard to provide a supportive learning environment and to establish an open relationship with students. However, the early learning and teaching approaches I adopted were very similar to those I had experienced as a student. Although I had begun to embrace the role of an educator in the practice setting, I lacked the underpinning educational knowledge or evidence to support my practice, and relied heavily on my own intuition (Cross, 1994).

During my early years as a practice educator I received feedback from students indicating that they felt supported. However I now feel that I failed to provide them with active learning opportunities and almost certainly mirrored the less facilitative feedback approaches demonstrated by my own educators. I believe this was due to
my early lack of understanding of learning and teaching approaches that support and facilitate student-centred learning. There was evidence that my actual practice failed to match my espoused practice. It was in sharp contrast to my underpinning values and beliefs that practice education should be student-centred, based on constructivist learning and teaching approaches.

There is research that suggests educators have a propensity to adopt learning and teaching approaches they experienced as students resulting in unsatisfactory learning and teaching approaches being perpetuated (Delany and Bragge, 2009). Research by Kell and Jones suggests that practice educators continue to adopt models of learning and teaching that focus on the acquisition of knowledge and skills (Kell and Jones, 2007), failing to promote novice practitioners' “professional ways of being” (Dall'Alba, 2009: 34).

1.4 Placing the problem in the context of my own practice

I have been actively involved in practice education for over thirty years, initially as an educator in practice, facilitating and assessing physiotherapy students' learning on placements in both acute and community NHS trusts. Following a move to higher education I held the post of clinical education tutor on physiotherapy programmes at two different Higher Education Institutions (HEIs). In this role I was responsible for the day to day organisation and management of the quality of placement learning and also for preparing physiotherapists to take on their role as educators in practice (practice educator). I have been a joint author of two texts on practice education.

As a principal lecturer with a lead role in practice education and course leader for a Postgraduate Certificate in Practice Education, I am responsible for maintaining the quality of placement learning across podiatry, physiotherapy and occupational therapy. I continue to support senior practitioners from a range of health professions in developing their role as practice educators, and to prepare students for placement learning.

As a result of my close involvement and extensive experience of practice education, I remain firmly committed to ensuring that students on placement receive high quality learning experiences. I acknowledge that this can only be achieved by the dedication
of practice educators who need continued support in fulfilling their role and developing the skills necessary to facilitate and assess student learning.

1.5 Preparation of practice educators

Physiotherapy students spend at least a third of their time in practice and on most UK physiotherapy programmes the practice education modules contribute towards the final degree award. Although it is considered good practice that most university educators complete learning and teaching qualifications in order to facilitate and assess student learning, this is currently not a mandatory requirement for allied health professional practice educators, despite the fact that practice education is an integral component of all health professional programmes.

In preparation for taking on the role of practice educator senior clinicians attend study days. However there is little opportunity for covering more than basic learning and teaching concepts during these sessions. As a result most practice educators have limited knowledge of underpinning educational theory and contemporary learning and teaching approaches to support their increasingly complex and vital role as educators (Kell and Jones, 2007; Heale et al, 2009). This inevitably has led to some disparity between theory and practice (Higgs and McAllister, 2005). My own firsthand experience suggests this is a problem that continues to present challenges for both students and educators. In addition practitioners are currently experiencing difficulty in obtaining study leave for courses that are not clinically related.

During the last decade a number of health professional bodies have developed schemes for accrediting practice educators, for example the Accreditation of Clinical Educators (ACE) scheme in physiotherapy (CSP, 2004) and the Accreditation of Practice Placement Educators (APPLE) scheme in Occupational Therapy (COT, 2005). These schemes focus on the quality of placement learning and acknowledge the significant contribution made by educators in practice who fulfil a complex role as facilitators and assessors of student learning (Pope, 2004). The current HPC Standards of Education and Training (HPC, 2009) highlight the need for practice educators to use a range of learning and teaching approaches, and to be prepared "to deliver both formative and summative assessment" (HPC, 2009:49). There is also
evidence that education and placement providers will be monitored to ensure these standards are met and the quality of placement learning is given priority (HPC, 2009; DH, 2010b).

However, accreditation of health professional practice educators is not a mandatory requirement of professional and regulatory bodies despite the fact that the Health Professions Council places increasing emphasis on the quality of placement learning (HPC, 2009). In contrast the Nursing and Midwifery Council (NMC) Standards for Education state that all educators who formally assess learners in practice must complete a mandatory mentorship module (NMC, 2008).

1.6 Current challenges in practice that impact on practice education

"Given the current economic, social and political pressures on healthcare delivery, learning and teaching are more complex than ever. Optimising opportunities to foster mutually supportive and collaborative relationships at all stages of professional development is fundamental to successful engagement with the changing world of workplace learning for healthcare professionals". (Cross, 2006:1)

In the current health and social care environment there are a number of factors that make learning and teaching on placements more multifaceted, and at times extremely challenging; these include economic, social and political pressures. Practice educators are facing increased demands on their time with ever changing roles and their ability to protect time for supporting students on placements may be increasingly challenged (Strohschein et al, 2002; Mooney et al, 2008). Cross (2006:1) suggests that in order to prepare future health professionals for a changing world of practice, educators and learners must engage in opportunities that promote partnership. If this is applied to placement learning, by adopting a more egalitarian approach to practice education students should be encouraged to actively engage in formative assessment with their educators and peers. This would ultimately develop skills of self-evaluation enabling them to monitor their own practice in preparation for their future role as autonomous practitioners (Ladyshewky, 2006; Boud and Falchikov, 2007) educators and leaders (DH, 2006).
1.7 Current pattern of practice education

There are currently two pre-registration physiotherapy programmes within the university. The BSc (Hons) course in Physiotherapy is a three year programme and the MSc in Rehabilitation Science is an accelerated Master's pre-registration programme for students who have completed a previous degree in a health related subject. Whilst students on the three year degree experience a range of learning and teaching approaches, the two year accelerated programme is based on a problem-based learning curriculum.

Students on both programmes complete five 6 week placements in a range of sites across the South East of England. They initially undertake some observation in year one of their respective programme of study. BSc Hons Physiotherapy students complete the remainder of their placements in years two and three of the course. In contrast students on the MSc in Rehabilitation Science complete all their placements in year two of the course when they have finished most of their academic modules. During their placements students on both programmes experience a range of placement models. These include the traditional 1:1 placement model (Moore et al, 2003) where a student works closely with one educator; the 2:1 collaborative placement model where one educator is responsible for facilitating two or more students (Ladyshewsky, 2006) and models of practice education, where more than one educator, and often the whole team take responsibility for student learning (Bennett, 2003; Stiller et al, 2004). These models are explored and discussed in more detail in the next chapter that reviews the literature on formative assessment.

1.8 Rationale for the study

Successive cohorts of physiotherapy students have shared their concerns during debriefing sessions about the quality of feedback they receive on placements. Although a small scale study exploring students' placement experiences identified that the lack of feedback was a problem, no previous study had explored students' experience of feedback and formative assessment as a whole process.

As an academic educator with responsibility for the quality of placement learning I felt that this problem should be investigated further as feedback forms such a key part of student learning on placement and is crucial to their professional development (Molloy, 2009). There is a wealth of literature related to feedback and
formative assessment in education and a developing evidence base in nursing and medical education. Nonetheless research evidence in health professional education especially in physiotherapy practice education remains sparse. Previous studies and my own research suggests that the quality of feedback learners receive does not always provide them with sufficient guidance to develop their practice and may leave them feeling dispirited when they have been in receipt of negative feedback (Young, 2000). In addition a number of concurrent National Student Surveys (2008; 2009; 2010) that focus on the overall student experience indicate that learners are most dissatisfied with the feedback and assessment they receive.

We are preparing health professional students for their future roles in increasingly unpredictable and challenging health and social care environments. Students must be ready to critically reflect on and monitor their own practice and that of others within the team. This will prepare them for their future as autonomous, innovative practitioners capable of taking responsibility for ensuring that the quality of health professional practice is sustained. It will also ensure that service users benefit from holistic approaches that meet their needs (Cross, 2006; DH, 2008). They must be accountable for their own practice and throughout their education need to develop skills of critical reflection and self-evaluation to enable them to effectively monitor their own practice and that of others (Boud, 2000; DH, 2010a).

A Department of Health review of the National Health Service (DH, 2008) identified the need for health professionals to place patients at the centre of care, enabling them to be fully involved in decision making about the future management of their conditions. In order for health professional students to develop the skills necessary for engaging patients in collaborative goal setting, they should experience collaborative learning and teaching approaches on placement that promote active participation (Laitinen-Vaananen et al, 2007).

There is an increased focus on the importance of developing leadership, communication and critical thinking skills during pre-registration education (DH, 2010b). These skills are crucial to prepare future health professionals for functioning effectively as independent practitioners who need to adapt to changes in service delivery and respond flexibly, whilst functioning effectively as team members within a range of practice environments (Cross, 2006; Ladyshewsky, 2006). I believe that all of
the skills outlined above can be promoted if students are encouraged to become more active participants in formative assessment on placement.

In my current role as an educator I have been closely involved in researching and developing new placement opportunities. I fully support advances that reflect contemporary health professional practice that will enable health professional students to adopt a more holistic approach to patient management, and to meet the individual needs of patients (Hilton and Morris, 2001; DH, 2008). Nevertheless, I remain increasingly conscious that these changes place increasing demands on practice educators who strive to juggle the demands of practice while attempting to support student learning (Higgs and McAllister, 2005; Mooney et al, 2008).

As an educator I am committed to a philosophy of education that supports social constructivist and sociocultural approaches to learning and teaching where students are encouraged to be active participants in all aspects of learning and assessment as opposed to being passive recipients (Carless, 2007; Crossouard; 2009). However there is a body of research in education that suggests students often remain passive recipients in formative assessment (Boud, 2000; Molloy, 2009). Previous research has focussed on feedback that is provided to students by their educator and by exploring physiotherapy students' experience of formative assessment in current practice I hoped to gain insight into their role within the process and to explore factors that influenced their experience.

My own philosophy of education has been influenced by the work of Brookfield (1998:199) who highlights the importance of educators:

“seeing our practice through learners' eyes helps us to teach more responsively”

When developing my research ideas, I returned to Brookfield's work and the importance he placed on educators listening to students in order to be responsive to their needs as learners.

The rationale for this research and background to the study has identified that in order to gain deeper insight into physiotherapy students' experiences of formative assessment I needed to listen to what they were saying about their experiences on placement. By undertaking research and listening to the "student voice", I hoped to develop insight into formative assessment. This increased understanding would
inform my practice as an educator and enable me to support students and educators as they face increasing challenges in practice.

In order to explore the "problem" I developed the following research questions:

1.9 Research questions

How do physiotherapy students experience formative assessment during practice education?

What are the implications of this for developing the practice of practice educators?
2 Chapter two - Literature review

"The purpose of education is to allow each individual to come into full possession of his or her personal power" (Dewey, 1938, p. 10).

The quotation from Dewey represents my underpinning values and educational beliefs in relation to formative assessment in practice education. I hold the conviction that if educators view practice education as a way of empowering students, as opposed to something that is "done to" students by educators both parties would be enriched by the whole experience.

This review addresses the literature on formative assessment and explores its relationship with feedback as an integral part of learning. It has been organised in a way that has enabled me to explore broad aspects of formative assessment from the wide body of literature and finally to place it in the context of health professional, and in particular physiotherapy practice education.

When considering the main focus of my research into physiotherapy students' experiences of formative assessment in practice education I felt unable to review the literature on feedback and formative assessment in isolation, as this would inhibit me from setting the study in context. Literature is therefore drawn from the wider context of education.

2.1 The role of the practice educator

Inherently the role of the practice educator is exceedingly complex, one that all too often gains the least recognition and as a result is most poorly resourced in practice environments (Higgs and McAllister, 2005). A plethora of terms was found that relate to health professionals who take on the role of educator during placement learning. These include mentor, preceptor, clinical educator, clinical instructor, medical teacher, fieldwork educator, clinical instructor and practice educator (Kelly, 2007a).

Throughout this thesis the term practice educator has been used when referring to senior physiotherapists who take on the multifaceted role of educator in practice
when they design, facilitate, assess and evaluate placement learning (Moore et al., 1997; Rose and Best, 2005; King et al., 2009). Historically the term clinical educator was used, however I feel the term practice educator more fully describes a role that is no longer restricted to clinical settings but transcends a range of practice learning environments. Essentially a practice educator acts as a communicator in a role that has three main dimensions. These include: facilitator, assessor and evaluator of student learning (Cross et al., 2006).

Practice educators act as facilitators and assessors of student learning during each placement. Their role is to provide students with feedback as part of the formative assessment process, and to complete a final summative assessment at the end of the placement. Students normally receive a grade for their performance at both the halfway and final stage of the placement. In this thesis my aim was to explore students' experience of feedback as part of the formative assessment process. I also wanted to gain insight into a process that I feel should be more in tune with social constructivist and sociocultural approaches to learning and teaching, that promote more active student participation focussing on assessment as a learning process as opposed to assessment that focuses purely on a measurement of grades (Gibbs and Simpson, 2004; Carless, 2006; Torrance, 2007). These learning and teaching approaches are explored later.

2.2 Definition of terms

2.2.1 Assessment

The term assessment broadly relates to measurement of student learning in relation to the knowledge and understanding gained and skills achieved (QAA, 2006). Assessment is a complex process that takes place all the time and is not confined exclusively to educational events. As Rowntree (1987) reminds us, assessment is an integral part of our life as we continually make judgements about other people on a daily basis. In health professional education practice educators make judgements about a student's progress related to the development of their cognitive, psychomotor and affective skills in the practice (McAllister and Lincoln, 2004; Rose and Best, 2005). Assessment in practice is a requirement of regulatory bodies in order for students to be deemed competent to enter their chosen profession (CSP, 2002; HPC, 2009).
following quotation by Taras (2005:467) drawing on the earlier work of Scriven (1967) defines assessment as:

"A judgement which can be justified according to a specific weighted set of goals, yielding either comparative or numerical ratings"

Taras (2005:467) proposed that assessment is a judgement that is made about a person's learning or performance in relation to criteria or standards and highlights the importance of "justifying the judgement against the stated goals and criteria".

Although, the above definition is clear, I think that its focus on the judgemental nature and role of assessment places too much emphasis on "assessment of learning" as opposed to "assessment for learning" (Boud and Falchikov, 2007:4). This suggests that the educator, in an assessor role is normally the person who makes the judgement about the student's achievement or lack of it. Here the educator appears to be placed in a position of power over the student, resulting in a hierarchical approach to assessment where the student may be seen as a passive recipient and the educator the active judge (Robinson and Udall, 2006). I acknowledge that ultimately the educator is the final judge. However in order to prepare students for future autonomous practice, I believe that assessment, especially formative assessment should be a collaborative process that promotes self-evaluation (Nicol, 2010). As educators we should ultimately be promoting more sustainable assessment. This form of assessment encourages students to actively participate in the process, developing critical skills necessary for monitoring their own performance (Boud and Falchikov, 2007; Hounsell, 2007).

As an educator who is committed to engaging students in the learning process, I initially felt uncomfortable with Taras's definition as its message created tension with my own beliefs and values. However, further analysis suggests that my initial judgement was tenuous and even biased. The definition does not exclude the student from the assessment process. Indeed, the student should take responsibility for making that judgement against criteria or standards when they are involved in self-evaluation (Robinson and Udall, 2006).

The implicit message proposed by Taras is that assessment judgements cannot be made in isolation. It is necessary to compare performance against criteria based on specific goals and standards (Taras, 2005: 467). Assessment forms a key part of our
role as educators, and it is essential that health professional students are assessed in order to be deemed competent to practice, and to ensure the public are protected (Liott and Murphy, 1999; Duffy, 2004). However, I remain committed to promoting assessment practice that promotes a partnership between learner and educator, as opposed to one where the educator assumes a position of expert and the “hegemony” of assessment is perpetuated (Leach et al, 2001:294). I believe it is essential for us to continue to support both educators and students in engaging more fully in formative assessment.

2.2.2 Types of assessment in practice education

Three main types of assessment are usually recognised in practice education. These include continuous assessment where a student's performance is assessed throughout a placement; summative assessment that takes place at the end of a period of learning that is more judgemental in nature, measured against criteria and expected standards of performance and formative assessment providing students with feedback on their performance and progress as part of an ongoing process (Cross et al, 2006)

2.2.3 Continuous assessment

Continuous assessment in the practice setting is felt to be more facilitative in nature, in contrast to one-off examinations that focus solely on single episodes of practice. My own experience of assessing students in practice as a practice educator, and later as a visiting tutor made me aware that “one off” assessment events often provoked anxiety in the student. They sometimes fail to take into account a student's overall competence in the context of the whole placement. Research into formative assessment highlights the importance of placing it in context (Sadler, 2010), suggesting that assessment is all too often seen as an isolated additional activity (Leach et al, 2001). However, in contrast to this view, students have viewed continuous assessment less favourably describing it as non-stop persecution as they feel that they are continually under scrutiny from their educator (Best and Rose, 1996). This suggests the need for more collaborative assessment approaches to be implemented that reflect a two way approach where students feel more in control and ultimately less threatened (Reynolds and Trehan, 2000; Leach et al, 2001).
2.2.4 Summative assessment

Summative assessment is the judgement that is made at a "given point" in the assessment process based on the evidence available at that point in time (Taras, 2005:467). It usually relates to a mark or grade for an assignment or an examination. In the case of practice education summative assessment is the more formal assessment of a student's performance in relation to the core placement learning outcomes that normally occurs at the midway stage and end of a placement (McAllister and Lincoln, 2004; Clynes and Raftery, 2008).

In its simplest form, judgement that occurs during the process of assessment and generates feedback becomes formative assessment if it is used by the student to inform his learning (Taras, 2005). If the learner for whatever reason is unable to use the feedback generated, the judgement remains summative as the learner cannot use it to develop his practice (Taras, 2008:390). This clarification of terms is essential for students and educators to understand, as the practice educator may have provided feedback to a student but unless the student understands the feedback it remains in a summative state. For example a health professional student may have received feedback from an educator who observed the student treating a patient. However if the student was unable to relate the educator's feedback to his patient it would be of little value. Although, the educator had provided feedback, it may have been too general for the student to make links with his practice. It therefore remained at a summative stage and its formative value was lost. This argument is supported by Sadler (2010:539) who highlights the need for teachers to focus more on making feedback more "visible" to students so that they can make sense of it.

2.3 Feedback

It is recognised that "feedback is central to the development of effective learning" (Sadler, 2010: 536) a key component of formative assessment (Rushton, 2005; Eraut, 2006; Sadler, 2010); and an essential learning and teaching approach (Poulos and Mahony, 2007). Feedback has a significant impact on student success (Hattie and Timperley, 2007) and as a concept it is thought to have originated in the
electronics industry before it was seen as a fundamental component of learning (Ende, 1983; Eraut, 2006). In health professional education, it is now considered to be a complex process that is inextricably linked to formative assessment (Rushton, 2005).

It is essential that all health professional students, including physiotherapy students develop cognitive, psychomotor and affective skills during placements when engaging with patients, carers and other multidisciplinary team members (McAllister and Lincoln, 2004). The importance of feedback in enhancing professional skills has long been recognised (Ende, 1983:778). Ende, a medical educator and advocate of high quality feedback, raised concerns about the poor quality of feedback he observed in clinical settings and the widespread practice of educators using “vanishing feedback”. This term referred to feedback that is withheld or so circuitous that its message remains inaccessible to the learner. He described the role of feedback in enhancing professional development:

“Feedback occurs when a student ....is offered insight into what he or she actually did as well as the consequences of his or her actions. This insight is valuable insofar as it highlights the dissonance between the intended result and the actual result, thereby providing impetus for change.” (Ende, 1983, p. 777)

As Ende suggested feedback is only valuable if it “highlights the dissonance” between real performance and the original goal, enabling students to make changes necessary to develop their practice. However, feedback is only effective if students are willing to take feedback on board or able to use it effectively to improve their performance (Eraut, 2006; Hattie and Timperley, 2007).

A lack of consensus regarding definitions of feedback in practice education prompted Van de Ridder et al (2008) to undertake a critical review of terminology, and concepts in medical and social care education. Following detailed synthesis of a variety of working definitions Van de Ridder et al (2008:194) settled on the following operational definition of feedback:

“specific information about the comparison between a trainee’s observed performance and a standard, given with the intent to improve the trainee’s performance”.
The authors proposed that providers of feedback should be clinical teachers or someone with similar expertise. The definition itself may be considered objective and measurable, and forms a useful starting point. Nonetheless, I feel the overall focus is on a deficit feedback model, where feedback about gaps in practice or "correctional" feedback is provided to a learner from an expert. Such a model fails to consider the learner's position within the feedback process, suggesting that feedback is an isolated activity and something that is delivered to a student by an educator in one direction (Wood, 2000; Taras, 2003; Hattie and Timperley, 2007). A transmission model of feedback is more traditionally adopted in medical and health professional education, and is felt to be closely linked to a biomedical model of practice where the practitioner is viewed as the expert and the patient as the more passive recipient (Molloy, 2009).

A more balanced and holistic definition of feedback is offered by Sadler (1998; 2010) an earlier promoter of the concept of "feeding forward", whose educational research into feedback and formative assessment has been influential in informing current practice:

"Feedback should help the student understand more about the learning goal, more about their own achievement status in relation to the goal and more about ways to bridge the gap between their current status and the desired status"

(Sadler, 2010:536)

Here the focus is on feedback as a tool for facilitating learning as opposed to information that is delivered to a student by an educator. Both Ramprasad (1983:4) and Sadler (1998:78) recognised the value of feedback in enabling students to "close the gap" between their actual performance, and the standards required. This is difficult to achieve if feedback from educators fails to provide students with the information necessary to make changes to their practice (Nicol and Macfarlane-Dick, 2006). As educators we must recognise that students frequently need help to understand feedback and to know how to use it productively in order to improve their performance (Sadler, 2010).

Sadler (2010:537) highlighted the importance of educators recognising that the feedback they provide is informed by their own "working knowledge" of the topic. He suggested that in order to use feedback effectively, students need support in
making links with the feedback and also in knowing how to make changes to their practice. Although Sadler's research focussed on education in schools and higher education, his emphasis on the key role of educators in helping students to interpret feedback is equally applicable to practice education. Students may be given feedback by a practice educator but it is of little value unless they are able to understand and apply it to their practice.

In addition to the factors identified above, a learner's self-efficacy may detract from his/her ability to effectively use feedback that is provided by an educator (Eraut, 2006; Hattie and Timperley, 2007). I have met students on placement who were anxious and lacked self-esteem. They may have received feedback from an educator but due to their low self-esteem have been unable to use it effectively to change their practice as they found the whole process too overwhelming. Unless the educator has the skill to produce feedback that is accessible to the learner it will fail to facilitate learning.

One of the few studies in physiotherapy education undertaken by Molloy in 2006 found that physiotherapy practice educators identified the need for a reciprocal feedback relationship to exist between educator and student. However their actual practice differed from their espoused beliefs. Findings indicated that practice educators were firmly positioned as the expert who delivered feedback to students who adopted the role of passive recipient (Molloy, 2006; 2009:135). Of note is the fact that student participants in the study adopted a dependent position during formal feedback despite having followed a problem based learning curriculum.

Although, Molloy's study was rigorous and provided some valuable insight into episodes of feedback introducing a new model, its focus was on formal feedback. It is also possible that the presence of a video camera (that was used for data collection) during episodes of feedback may have influenced student and educators' responses and practice.

A study by Perera et al (2008) explored student and tutor perceptions of feedback. Findings from the study indicated that students were dissatisfied with the feedback process. They disliked being provided with model answers on which to evaluate their performance, preferring immediate feedback and opportunities to discuss it with tutors. Formative assessment based on reflective discussion that supports active
student and peer engagement and ultimately promotes more informed judgement, may be of more value in developing self-monitoring skills that are essential for contemporary future practice (Nicol, 2010).

The need to distinguish between learning goals and performance goals in relation to formative assessment was identified in Eraut’s paper on feedback. Students who focus on learning goals tend to more actively seek feedback on their performance as they are driven by the chance to improve their practice and learn from experience. In contrast students, who focus on performance goals, frequently avoid negative feedback, preferring to hear positive comments as opposed to critical appraisal of their practice (Eraut, 2006).

Although, feedback is considered to be an essential and flexible tool it remains one that is all too often neglected by educators who fail to recognise its effectiveness in facilitating learning. As Wood (2000:19) suggested it remains a “valuable resource. most poorly and infrequently used”, with many educators focussing on providing feedback that corrects mistakes as opposed to feedback that promotes development (Hattie and Timperley, 2007; Molloy, 2009). If its facilitative purpose within formative assessment is more fully appreciated, learners may feel less under constant scrutiny and more able to engage in the learning process as a whole, instead of feeling they are victims of an unrelenting assessment process, where the focus is purely on meeting criteria and grades (Boud, 2000; Torrance, 2007).

2.3.1 Power of feedback

“Feedback is one of the most powerful influences on learning and achievement but this impact can be either positive or negative” (Hattie and Timperley, 2007:81)

In their influential review of research into feedback Hattie and Timperley (2007:81) explored the “power of feedback” and its key influence on learning. They depict feedback as a process consisting of three components “feed up”; “feedback” and “feed forward” within a cycle of learning. The initial part of the cycle or “feed up” enables students to plan the way forward if their learning goals and expectations are clear. The second component “feed back” is effective as long as learners understand their progress in relation to the goals. The final “feed forward” stage acts as a signpost, helping students to move forward to the next stage of learning.
This model has links with the concept of learning contracts used extensively in placement learning based on adult learning principles (Knowles, 1990). If feedback as an integral part of formative assessment was more closely linked with a student’s learning contract I think it may help learners and educators to view it as part of an holistic learning experience.

Drawing on an extensive body of research Hattie and Timperley (2007) explored the complexity of feedback relationships and its power to inhibit learning when viewed by educators as a way of testing. They emphasised the need for educators to view feedback as a two way process promoting reciprocal learning and self-regulation. They recognised the de-motivating effect that both negative feedback and feed forward may have on students with low self-efficacy. An educator may use feed forward to deliver yet more information making a student feel less confident. In contrast, if students are helped to explore learning opportunities for themselves, they inevitably retain control and self-regulation is increased. This should help to achieve a balance of power in the feedback relationship, increasing the possibility of more collaboration (Hattie and Timperley, 2007).

I find the following quotation from Boud (1995:43) a useful one as it illustrates the imbalance of power that may exist, suggesting educators sometimes fail to remember the power they have over students:

"We judge too much and too powerfully, not realising the extent to which students experience our power over them"

Dann’s early work on self-assessment and learning also explored power within assessment and challenged the assumption that self-assessment strategies were encouraged solely for the benefit of the student. Her observations may be considered contentious as she linked self-assessment practices to Foucault’s notion of the “confessional”, suggesting that self-assessment may be used by the educator as a form of scrutiny (Dann 2002, p.75) as opposed to a tool for supporting student learning. It must be acknowledged that these observations were classroom based, and derived from early research. Nevertheless there may be some links with practice education. Anecdotal evidence from students, and observations from Clouder's study on reflective practice, suggest that students remain reluctant to share self-evaluation
of their performance with someone who is responsible for their final grade (Clouder, 2000b).

Leach et al (2001) proposed that although teachers are key players, who will inevitably play an essential part in assessment, the student’s role should not be ignored and partnership in the assessment process should be promoted. If students are encouraged to take a collaborative part in assessment student empowerment is increased and they become “agents in the whole assessment process” (Leach et al, 2001; 293).

The above definition suggests student empowerment should be a focus of assessment and if feedback is considered to be an integral part of formative assessment (Rushton, 2005; Eraut, 2006) it is essential for educators and students to collaborate and contribute to feedback to add rigour to the assessment process. Nevertheless, it is recognised that empowerment is a difficult concept for both students and educators to fully appreciate, and one that may be interpreted in a variety of ways (Leach et al, 2001).

Leach et al (2001) explored student and educators’ perceptions of assessment where a more equal partnership between student and educator was promoted. Students in the latter stages of the programme favoured a more egalitarian approach compared to learners at the start of the programme of study. However it was unclear from the paper how the data was collected and analysed.

2.3.2 Emotional impact of feedback

During debriefing sessions on campus, students remain concerned about the challenges they face when approaching some practice educators for feedback. Students at both pre-registration and postgraduate level often share their reflections on the emotional aspects of formative assessment. These include examples of how poorly delivered negative feedback that focussed on a student’s personality as opposed to his/her professional practice have had a long lasting and profound impact on future learning and practice development (Krapp, 2005). This is supported by Barnett (2007:30) who warns against casual feedback that can have a devastating effect on students as: “it reaches into the fulcrum of the student’s being” affecting their ontological journey.
Although there is evidence, that emotional feelings including increased anxiety are usually linked to exams, some students expressed concern about engaging in group activities (Falchikov and Boud, 2007). As participants in my study were used to active engagement within a problem based learning group, they may have been less threatened about contributing to discussion than students from more traditional educational backgrounds.

2.3.3 Student perceptions of feedback

As research evidence highlights, there has been an increased focus in higher education over many years for educators to adopt learning and teaching approaches that support adult learning and are student centred (Rust, 2002). The essential aim of this was to encourage students, as self-directed independent learners to be actively engaged in the learning process. If students are actively involved in feedback and formative assessment as part of the whole process of learning they develop the skills necessary for self-monitoring and continuing professional development (Nicol and Macfarlane-Dick, 2006; Hattie and Timperley, 2007).

However, evidence suggests that students continue to be dissatisfied with the amount of feedback they receive and appear to be ill equipped due to a lack of guidance to use feedback effectively (Burke, 2009). Although, the adoption of student-centred learning approaches has been fostered, formative assessment and feedback remain predominantly educator-led both on campus and in practice settings perpetuating a "one-way transmission process" (Perera et al, 2008: 395; Molloy, 2009) with some students feeling reluctant to solicit feedback (Daelmans et al, 2006). My experience suggests that despite the introduction of contemporary models of practice education intended to mirror learning and teaching approaches adopted on campus, pedagogic approaches in practice including feedback may have lagged behind. This finding was also identified in research into physiotherapy practice education by Kell and Jones (2007) and more recently by Delany and Bragge (2009), which found that educators in practice continue to adopt teacher centred approaches.

As previously acknowledged, the preparation of allied health professional practice educators differs from other professional groups. For example teachers and nursing colleagues are required to undertake mandatory academic and professional
accreditation before adopting the role (Turnock et al, 2005). Rodaway (2007) highlights the importance of postgraduate teaching courses for supporting the role development of novice lecturers to enable them to embrace new approaches in pedagogic practice. Yet in sharp contrast, physiotherapy practice educators are eligible to take on students after attending only one study day on practice education and are expected to participate in delivering contemporary models of practice education in an ever challenging practice setting.

In order to gain a balanced perspective of the process of formative assessment there is a need to have an increased understanding of the way in which students' interpret and experience feedback. Evidence from the literature suggests that although there is a substantial body of knowledge relating to feedback, most research is related to the role of the educator and has explored the content of feedback (Weaver, 2006;379), thereby neglecting the student voice (Carless, 2006; Poulos and Mahony, 2007).

One of the few studies in health professional education undertaken by Poulos and Mahony (2007) was prompted by a dearth of research on students' perceptions of feedback. A qualitative approach was adopted to gain insight into pre-registration students' interpretation and perceptions of feedback across four health professional programmes. Findings highlighted that feedback is indeed a multifaceted concept. Students held many different views about what feedback actually is and what they identified as feedback. A lack of feedback and poor communication made the initial transition from school to university difficult; this was exacerbated by aloof lecturers and unconstructive feedback. Students also valued feedback provided by lecturers who they perceived as capable (Poulos and Mahony, 2007:145)

I acknowledge that the research focussed on campus-based learning as opposed to practice-based learning. Nonetheless, I feel that its message should not be discarded as it provides some useful insight into the student perspective and demonstrates how different learning environments impact on the feedback process. However, in Poulos and Mahony's qualitative study focus groups were used to generate student feedback. This might have resulted in some students withholding more sensitive information and follow up individual interviews may have generated more in depth data.
Research within medical education that explored the student perspective indicated that students who were given grades were more reluctant to use formative assessment effectively preferring to receive a final mark for an assignment than accessing tutor feedback (Sinclair and Cleland, 2007). However, it was unclear from the study if students were following a modular programme that might have influenced their engagement with feedback (Mutch, 2003; Torrance, 2007). In contrast research by Taras (2003) found that if grades were withheld from students they used feedback more effectively, and developed their ability to self-evaluate.

Some practice educators have adopted a similar approach at the halfway stage of placements to encourage students to self-evaluate their performance on placement. However there is currently no research in health professional education that has explored the effectiveness of this strategy.

Burke (2009) designed a questionnaire to gather both quantitative and qualitative data from 350 humanities students, to explore their views on feedback strategies. Only 40% of those surveyed (n=350) reported that they had received guidance on using feedback effectively at the start of the programme. Findings from the study indicated that students were forming links between feedback and learning. However most students felt they would benefit from additional strategies to make more effective use of tutor feedback. There was no indication of the response rate to the questionnaire and it was recognised that this was a small scale study.

Contemporary research into feedback and formative assessment by Nicol and Macfarlane-Dick (2006) highlighted a dearth of research that has explored students' engagement in formative assessment. The researchers argued that despite student centred approaches being widely promoted in higher education, educators have failed to embrace formative assessment approaches that actively engage learners. I concur with this argument, although practice educators are beginning to adopt some adult learning and teaching approaches, assessment of learning still remains firmly within the educator's domain (Leach et al, 2001; Robinson and Udall, 2006).

In the next section the concept of formative assessment is introduced before the position of feedback within the broader context of formative assessment is explored on page 35.
2.4 Formative Assessment

Formative assessment has long been recognised as an integral part of learning and my review of the literature has identified a range of research into formative assessment (Black and Wiliam, 1998; Nicol and Macfarlane-Dick, 2006; Carless, 2007; Pryor and Crossouard, 2008) that has been conducted in primary, secondary and higher education. I have also found studies relating to feedback and formative assessment in nursing and medical education (Kelly, 2007a; Sinclair and Cleland, 2007). However, there is currently a dearth of studies that have explored students’ perceptions of formative assessment in health professional and in particular physiotherapy education (Rushton, 2005; Molloy and Clarke, 2005; Molloy, 2009).

The literature on formative assessment contains a complex array of terms and concepts. The following interpretation by Taras helped to clarify my understanding. Feedback is an essential part of formative assessment and “formative assessment by subsuming the use of feedback becomes a process for promoting learning” (Taras, 2008; 390). As educators we should not treat feedback and formative assessment as separate entities but as a whole process that facilitates learning.

I have adopted a working definition of formative assessment proposed by Black et al (2002:1) where formative assessment is seen as a process that facilitates learning and feedback is the “guidance” that forms an integral part of the whole process:

"An assessment activity can help learning if it provides information to be used as feedback, by teachers, and by their pupils, in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged. Such an assessment becomes ‘formative assessment’ when the evidence is actually used to adapt the teaching work to meet the learning needs”

In the above definition Black et al (2002) emphasise the need for all parties to be involved in formative assessment. Words such as “each other” suggest that formative assessment should an active and reciprocal process, tailored to the learner’s needs and not something that is delivered by an educator (Cross et al, 2006). Emphasis is placed on “evidence” that is “actually used” to allow the educator to make adjustments to facilitate learning and meet the needs of the learner. This definition embraces a more facilitative approach placing the onus on the educator to
be more flexible in meeting an individual learner’s needs. However it does not rule out the student’s role and responsibility in the process, recognising the important role of self-evaluation in informing learning (Black and Wiliam, 2009). It builds on earlier definitions of formative assessment and focuses on the needs of the individual learner while still retaining the message that if formative assessment is effective both educators and learners should benefit and feedback should be a two-way integral part of the process (Wood, 2000; Black and Wiliam, 2009).

2.4.1 Purpose of formative assessment

The main purpose of formative assessment is to facilitate learning by providing students with feedback on their performance (QAA, 2006). Formative assessment is interpreted as informing or having an influence on student learning. This occurs when a student has received feedback on an assignment (Gibbs and Simpson, 2004:17) or to put it in the context of practice education, has been given some feedback on how his or her practice is developing in relation to the core placement learning outcomes (Cross et al, 2006). As discussed earlier assessment is only formative if learning has taken place and the student is able to use the feedback effectively to inform his/her learning (Taras, 2003; Sadler, 2010).

Eraut (2006) proposes that in higher education and practice environments feedback is an essential component of formative assessment, “where its main purpose is intended to be the provision of guidance on the quality of a person’s understanding and / or performance” (Eraut, 2006:111). This is supported by Higgs and Edwards (1999), who view feedback as a fundamental part of any learning and teaching activity providing learners with insight into the quality of their practice. However, they also suggest that when feedback is termed ‘formative assessment’ it may have more of a judgemental purpose as opposed to an informative one, an opinion shared by Shepard (2005) and Carless (2007).

I have facilitated debriefing sessions with students following their placements where they talked about feeling “under constant surveillance” and continually being assessed. Eraut (2006:111) also concurs with this view suggesting that problems occur when feedback is linked to formative assessment with “quasi-formal” links to
autocratic educators. This contrasts with evidence supporting the need for feedback to be facilitative and collaborative (Ende, 1983; Henry, 1985; Wood, 2000). I remain concerned that practice educators’ interpretation of feedback as part of the formative assessment process may have closer links with transmission models of teaching (Kell and Jones, 2007) that focus on a more didactic style of education as opposed to a student-centred facilitative approach (Lizzio et al, 2002).

A substantial body of literature exists that has explored the purpose of assessment within education (Black et al, 2002 and 2003; Rust et al, 2003; Gibbs, 2006). Historically assessment has been viewed as judgement of learning measured against standards of performance. This is commonly termed “assessment of learning” (Taras, 2005:466) Whilst it is acknowledged that it is essential for the quality of performance to be measured against standards there was concern amongst some educators that the focus on assessment as a valuable tool to support and facilitate learning may have been declining (Gibbs and Simpson, 2004; Harlen, 2005). Nonetheless, most of the evidence base related to assessment suggests that continued focus on “assessment of learning” as opposed to “assessment for learning” results in assessment practices that continue to fuel superficial learning, failing to promoting life-long learning or equip students with the ability to monitor their own progress (Boud, 2000; Gibbs and Simpson, 2004; Torrance, 2007).

In recent years there has been an increased focus on “assessment for learning” (Taras, 2005:466), a pedagogic concept closely linked and in some cases used synonymously with formative assessment (Gipps, 2002; Taras, 2008; Crossouard; 2009). Educators who are committed to “assessment for learning” suggest that it facilitates a more holistic approach, where the links between learning and assessment are more transparent and the student’s ability to monitor their own practice and that of others is more readily developed (Gibbs and Simpson, 2004; Nicol and MacFarlane-Dick, 2006).

There has also been an increased focus on the potential for viewing formative assessment as a tool for facilitating learning as opposed to something that is done to learners by educators (Carless, 2007). The concept of a more facilitative form of assessment is felt to actively engage learners in the process, increase their understanding and ultimately supporting deeper learning. As a result students are being encouraged to develop critically reflective and self-evaluative skills that will
enable them to monitor their current and future practice, skills deemed essential for future autonomous professional practice (Boud, 2000; Hounsell, 2007).

Current constraints in schools and higher education institutions, for example increasingly large class sizes, and plummeting staff-student ratios have made it more difficult for educators to actively involve students in formative assessment (Mutch, 2003; Carless, 2007). Although, formative assessment should make educators aware of a student's understanding of a topic, allowing them to adjust their approaches to meet the needs of their learners, there remains an inherent lack of understanding about its purpose and how valuable it can be as a tool for facilitating learning (Black and Wiliam, 1998; Yorke, 2003; Carless, 2007). As an educator I have been aware of the impact that the introduction of modularization has had on aspects of the curriculum, often forcing course teams to overload programmes with summative assessments, driven by external monitoring and the need to continually meet standards (Mutch, 2003; Torrance, 2007).

If this debate is translated into the placement arena, practice educators in their role as professional gatekeepers may be tempted to focus solely on making summative assessment judgements mapped against criteria, rather than exploring the facilitative nature of actively engaging students in formative assessment. Faced with many external and internal constraints (Mooney et al, 2008) including lack of time, shortages of staff, and re-configuration of teams, it is unsurprising that some practice educators may take the path of least resistance and fail to engage students more readily in formative assessment.

In an attempt to revisit the construct of formative assessment and to explore it from different perspectives, Carless (2006) suggested that formative assessment needs to be repackaged and seen as an extension of learning and teaching. By adopting a pedagogic approach to formative assessment, involving interaction between educator and student at an early stage of anticipatory or “pre-emptive formative assessment”, educators and students are encouraged to focus on learning as opposed to assessment. This strategy does not preclude formative assessment feeding into summative assessment and may even strengthen the links in a more positive and holistic way (Carless, 2006).
Although, the examples cited by Carless focussed on learning and teaching on campus, there is potential for practice educators to adopt a form of anticipatory formative assessment on placements. This could take the form of a briefing session before a patient assessment enabling student and educator to identify any areas that the student needed to focus on in advance. It has close links with Van Manen's concept of anticipatory reflection (Van Manen, 1977) and may help educators to view formative assessment as a tool of facilitation feeding into a cycle of learning.

I concur with the interpretation that views formative assessment as a tool that enables educators to gain insight into the student's position within the overall learning experience. Unless an educator is able to reach this point and is aware of an individual student's position within the learning process, they cannot effectively facilitate or assess learning in a way that supports student development. Feedback from my own students suggests that some educators continue to link formative assessment to more formal assessment, failing to view it as a tool for developing practice and building on previous learning.

If formative assessment is viewed as a dynamic process it can enable students to build on “what they already know to what they are able to do next” ultimately resulting in more confident and deeper learning (Shepard, 2005:66). We need to encourage practice educators to explore the potential that formative assessment offers for promoting learning as opposed to viewing it as a separate entity, linked purely to assessment of the student's ability to meet criteria and standards (Branch and Paranjape, 2002; Norcini and Burch, 2007). My own experience suggests that this will encourage students to move along a continuum of learning, from an initial position where they seek more direct guidance from their practice educator, through a period of collaboration, and ultimately towards a more consultative phase of self-monitoring (Anderson, 1998; Cross et al, 2006). Indeed, this may ultimately reduce pressure on educators enabling them to balance practice demands and student support by gradually making students more self-reliant (Higgs and McAllister, 2005).

2.4.2 Types of formative assessment

The literature on formative assessment distinguishes between two main types:
- Planned or formal formative assessment (Carless, 2007) also termed deliberate formative assessment (Cross et al, 2006).
- Interactive or informal (Carless, 2007) also termed instinctive formative assessment (Cross et al, 2006).

Although, both types should facilitate learning and development, the formal type focuses on a more structured approach. In practice education it is often associated with formal episodes of feedback when learning outcomes are reviewed as part of a learning contract and has associations with reflection on action (Schon, 1987). Whilst the latter, a more spontaneous form, often happens either at the point of practice or soon after, involving more interaction between learner and educator and has links to reflection-in-action (Schon, 1987; Cross et al, 2008; Carless, 2007). In this study I wanted to explore students' perceptions of both forms of formative assessment in practice education in order to gain an increased understanding of the ways in which students have experienced them during their placement learning.

An additional classification of formative assessment by Pryor and Crossouard (2008) provides a possible explanation for the variation that exists when practice educators deliver feedback. Their research carried out in a range of schools and higher education establishments identified convergent and divergent forms of formative assessment.

Pryor and Crossouard described convergent formative assessment as a form of formative assessment that is predominantly teacher led, focussing on testing students' knowledge or understanding of a topic in relation to pre set goals and criteria. The educator provides feedback that is focused on the goals and the whole process is linked to an Initiation Response Feedback (IRF) model of formative assessment. In contrast, a divergent form of formative assessment was also identified where the educator adopted a more facilitative approach. This approach promoted discussion as educators used open questions and feedback to explore ideas. Within divergent assessment both educator and student engage in more collaborative discussion, prompting reflection and exploration of assessment criteria against a wider context (Pryor and Crossouard, 2008).

Findings from the research suggest that divergent formative assessment enables students and educators to explore the wider context and to consider how current
learning can be used to support future practice in different situations. A sociocultural model of formative assessment was developed from the research (Pryor and Crossouard, 2008). Within this model of formative assessment, convergent and divergent formative assessment has an almost symbiotic relationship. The convergent form with its set criteria forms the base from which the more open divergent form can emerge. Although the research was based in schools the insights gained from the research may be transferable to health professional education.

2.5 Learning theories underpinning models of formative assessment

A number of models of formative assessment identified in my review of the literature have drawn on social constructivist (Vygotsky, 1978; Rust et al, 2005; Ladyshewsky and Gardner, 2008) and sociocultural theories of learning (Pryor and Crossouard, 2008; Crossouard, 2009).

2.5.1 Social constructivist approach

A social constructivist approach to learning and teaching is based on the early work of Vygotsky (1978) who viewed learning as an activity that is socially constructed and does not happen in isolation. His work has been influential in informing current learning and teaching approaches for example collaborative and peer learning (Ladyshewsky, 2006; Hammond et al, 2010). Vygotsky proposed that if students work together to discuss and explore concepts and ideas, their knowledge and understanding will ultimately be increased.

Vygotsky believed that a collaborative approach to study results in deeper learning and moves students into a "Zone of Proximal Development" (1978:67). This term was used by Vygotsky to describe an increase in learning and development that occurs when students study together. In contrast students working in isolation are unlikely to achieve such deep learning as the potential for extending their cognitive boundaries is less (Ladyshewsky and Gardner, 2008). Black and Wiliam (2009) highlight the importance of educators recognising that Vygotsky's aim was not solely to improve a student's knowledge but to increase their overall development. This is relevant to practice education where the aim of placements should be about a student's overall professional development and not only their acquisition of knowledge and skills.
A number of learning and teaching models in education professional practice have drawn on the social constructivist approach of Vygotsky (1978). These Peer Assisted Learning (PAL) models where students learn and work together incorporate peer teaching (Ross and Cameron, 2007); feedback and peer assessment (Boud et al, 2001; Topping, 2005; Liu and Carless, 2006; Vickerman, 2009; Hammond et al, 2010).

PAL models have also been developed in practice education. These include the 2:1 and 3:1 models of practice education (Baldry Currens and Bithell, 2003; Moore et al, 2003; Martin et al, 2004; Ladyshefsky, 2006). Whilst the majority of these studies have employed strategies for facilitating learning they have not focused specifically on peer feedback and a number of them were small scale studies.

A case study by Ladyshefsky and Gardner (2008) explored final year physiotherapy students' perspectives of the use of an asynchronous online blog to support peer assisted learning in practice education. Focus groups were used to gather data from both students and academic tutors and findings from this qualitative study indicate that students valued the opportunity for reflecting with their peers and receiving peer feedback. Although the limitations of the study were not identified and the approach to data analysis was unclear nevertheless the findings demonstrate how learning technologies can be used successfully to support feedback in practice education.

A model of formative assessment that promoted self-regulation, identified seven principles of feedback facilitating the ability of students to monitor their own progress was developed by Nicol and Macfarlane-Dick (2006). Whilst the model draws on a social constructivist approach, it also embraces the wider context by promoting students engagement with external feedback.

In a later review of current research into feedback Nicol (2010:501) drew on the important work of Laurillard (2002) proposing that there should be more emphasis on feedback as a "dialogue" involving teachers and peers in the process. Although, his evidence was based on written assignments in higher education, there is potential for promoting feedback conversations in physiotherapy practice education (Molloy, 2009).
2.5.2 Sociocultural learning theory

There are similarities between social constructivist learning theories and sociocultural learning theories. Both approaches promote active engagement of the learner, however as Crossouard (2009:770) suggests, the main focus of sociocultural approaches is to move beyond the development of knowledge and to enable learners to develop new identities within a learning community or "community of practice" (Wenger,1998:103). Wenger’s vision of a community of practice is based on the concept of:

"groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly”

When exploring both theories of learning in relation to formative assessment I think they each have something to contribute to practice education. The social constructivist approach enables students to reflect on issues together and provide each other with feedback developing their reflective and self evaluative skills (Ladyshewsky and Gardner, 2008).

In addition the sociocultural model that is firmly embedded within a learning community has a wider focus. It builds on student engagement in formative assessment to support their professional development, strengthening links with the wider context, and enabling them to transfer learning from one environment to the other (Crossouard, 2009). Students are initially peripheral members and gradually become part of a community of practice through working alongside educators and interacting with others in the wider community (White, 2010). This has particular relevance in today’s health professional climate where students need to work effectively within a team and are moving from one practice environment to another.

The focus on the development of student identity is also addressed by Dall’Alba and Barnacle (2007), Dall’ Alba (2009:34) and Barnett (2009) who recognised the value of students being supported in “becoming” professionals in order to manage the challenging demands of future professional life. They stressed the need for higher education to focus on students’ ontological as well as their epistemological journey in order to support their transition into professional life. All too often a focus on the
development of knowledge and skills fails to take into account “who students are becoming” (Dall’Alba, 2009:680) and the transferable skills students need to possess in order to make links between theory and practice (Dall’Alba and Barnacle, 2007:680). Such an approach should facilitate students’ engagement in “authentic assessment” including active participation in formative assessment (Vu and Dall’Alba, 2008:2) to prepare them for developing the critical skills necessary to support self-evaluation of their practice (Hounsell, 2007).

2.6 The position of feedback within the context of formative assessment

In this section the position of feedback within the wider context of formative assessment is explored and related to the overall purpose of formative assessment.

It is acknowledged that feedback forms an integral part of formative assessment (Nicol and Macfarlane-Dick, 2006) and is seen to have a coterminous relationship with formative assessment (Black, 2007). In education, feedback and formative assessment are terms often used synonymously (Davies and Ecclestone, 2008). Nonetheless “contested views” exist regarding the interpretation of formative assessment and its relationship with feedback (Daly et al, 2010:1).

However researchers in the field of education propose that it is essential to view the position of feedback within the broader and richer notions of formative assessment (Torrance and Pryor, 1998; Black and William, 2003; Pryor and Crossouard, 2010). When considering feedback within formative assessment it is important to think about feedback as a central part of a much wider pedagogic process, as opposed to viewing it in isolation.

Models of formative assessment developed by Nicol and Macfarlane-Dick (2006) and Pryor and Crossouard (2008) illustrate that although feedback is an essential element of formative assessment, it is only part of a much bigger picture. These models draw on findings from authentic assessment episodes and highlight the importance of viewing formative assessment as a much wider pedagogic concept. If learners are engaged in active dialogue with educators and peers as opposed to being pure recipients of feedback they are more likely to be empowered as “self-regulated learners” and to be more aware of who they are becoming as professionals (Nicol and Macfarlane-Dick, 2006:199; Pryor and Crossouard, 2010).
Although it is recognised that feedback forms a key part of the process it should not been seen as the sole constituent.

Formative assessment is a much broader concept that involves questioning, and exploration of students' understanding together with interactive discussion that may involve educators and students, or groups of students (Torrance and Pryor, 1998; Pryor and Crossouard, 2008; 2010). Research by Torrance and Pryor (1998) identified that formative assessment is made up of a series of "assessment events" that take place within "rich learning contexts" and consist not only of assessment tasks but assessment dialogue between teachers and students (Torrance and Pryor, 1998:4).

Feedback is generated when a teacher or peer makes a judgement about a student's performance or an individual student is engaged in self-assessing his /her performance. This may occur through questioning, observation, listening or discussion (Sadler, 1998; Davies and Ecclestone, 2008). It is acknowledged that students cannot use formative assessment to improve their performance, unless feedback is generated which they can access and use effectively to move their learning forward (Sadler, 1998).

In order to have an increased understanding of the position of feedback within formative assessment, it is useful to revisit the purpose of formative assessment which is primarily to support and enhance learning (Gibbs and Simpson, 2004). Recent research by Pryor and Crossouard in 2010 challenged previous conceptions of formative assessment, and identified the need for educators to explore pedagogic approaches that are fit for purpose in the 21st century. They propose that formative assessment should go beyond assessment of knowledge and performance. Educators should be encouraged to adopt more flexible pedagogical approaches that focus on students' ontological as well as their epistemological journeys (Pryor and Crossouard, 2010:265). If formative assessment is confined to delivery of feedback related to a student's knowledge or performance, the educator's interpretation of the purpose of formative assessment remains too narrow. As a result, the value of formative assessment that promotes dialogue between educator and student (Nicols, 2010; Pryor and Crossouard, 2010) within a wider sociocultural context of learning is lost (Pryor and Crossouard, 2010). Recognition of the
importance of the wider sociocultural context in which formative assessment takes place is essential to support students in developing new identities through "social participation" within "communities of practice" (Wenger, 1998:4).

By embracing a richer and wider view of formative assessment, and adopting pedagogic approaches that facilitate reciprocal feedback promoting self and peer assessment, educators will more fully prepare students for current and future practice (Nicols and Macfarlane-Dick, 2006; Pryor and Crossouard, 2010) Students are therefore encouraged to develop sustainable skills essential for potential employment. Formative assessment should not be seen as a static process but one that occurs "across a concrete-procedural-reflective-discursive-existential continuum and between convergent and divergent" (Pryor and Crossouard, 2010:265).

If the above concept of formative assessment is translated into practice education, at the "concrete/procedural" end of the continuum the focus of formative assessment is on a student's actual performance and how they can improve it. At the next stage of the continuum a more "reflective/discursive" form of formative assessment enables students to make links between their performance and the standard required against a set of criteria (Pryor and Crossouard, 2010:270). This may involve a student and practice educator reflecting together after the educator has observed the student treating a patient. In the practice education context the pre-set criteria would be linked to core learning outcomes that form the practice education assessment tool (Cross et al, 2006). At the "discursive/existential" end of the continuum of formative assessment, the student is encouraged to relate any learning gained from the educator's feedback and or his/her own self-assessment to "prospective and current social future identities" and who they are becoming as a professional within a sociocultural model of formative assessment (Pryor and Crossouard, 2010:265).

As previously highlighted, formative assessment across the continuum may be either "convergent", or "divergent" (Pryor and Crossouard, 2008:3). Convergent formative assessment focuses on completion of tasks and how a student's performance relates to criteria and standards. During a convergent approach to formative assessment feedback is normally delivered by an educator in the form of an initiation-response-feedback (IRF) model. In contrast a divergent approach to formative assessment incorporates a more dialogical form of feedback that facilitates
a feed forward approach through an open learning relationship between educator and learner (Pryor and Crossouard, 2008; 2010). Divergent approaches to formative assessment engage learners within wider “communities of practice” (Lave and Wenger, 1991:92). This is particularly important in current practice education environments where teams are forming and reforming on a constant basis and health professional students will have to be prepared for becoming lifelong learners within a range of practice contexts and communities.

However it is acknowledged that there needs to be movement along the continuum and across the convergent and divergent approaches of formative assessment. Although more discursive/existential forms of formative assessment, facilitated through a more divergent approach will support the development of professional identities, and lead to “powerful” learning, students inevitably continue to value direct feedback gained through concrete/procedural and reflective/discursive formative assessment (Pryor and Crossouard, 2010:270). There are also times when direct feedback in the form of an IRF model is essential for example during physiotherapy practice education where patient safety may be compromised.

The conceptual model of formative assessment and feedback promoting self-regulation designed by Nicol and Macfarlane-Dick in 2006 incorporated seven principles of good feedback practice. In the model a distinction is made between internal and external feedback. During internal feedback students engage in self-assessment whilst external feedback is normally provided by teachers and peers (Nicol and Macfarlane-Dick, 2006). Both types are an essential part of formative assessment, and should facilitate learning by helping students to identify gaps that need to be addressed in order to improve their performance (Sadler, 2010). Black and Wiliam also highlight the importance of teachers, peers and learners being involved in formative assessment and recognise that feedback forms a key part of the process at the “how to get there” stage of learning by identifying what the learner has to do to move their learning forward (Black and Wiliam, 2009:5).

When considering the position of feedback within formative assessment it is important to recognise the limitations of feedback. Sadler argues that despite its value, feedback alone cannot “carry the burden of being the primary instrument for improvement” and argues that students need to be given opportunities for “appraisal
experience" (Sadler, 2010: 541). By adopting this approach within the context of formative assessment students are encouraged to develop more sustainable skills of peer and self-assessment (Boud et al, 2001) The above interpretation of the limits of feedback clarifies its limitations within formative assessment and highlights the value of educators and students viewing formative assessment as a much broader and richer process.

Davies and Ecclestone (2008: 74) undertook research into vocational education and distinguished between learning and teaching approaches that adopted either the "spirit" or "letter" of formative assessment. Tutors who adopted the "spirit" of formative assessment promoted sustainable learning by encouraging students to self-assess and placed less emphasis on feedback related to criteria. This approach to formative assessment is more closely linked to divergent formative assessment promoted by Pryor and Crossouard (2008). In contrast those who strictly adhered to the "letter" of formative assessment focussed on students' achievement of learning outcomes that met pre-determined criteria and provided feedback that was related to grades (Davies and Ecclestone, 2008: 74) practice more analogous with convergent formative assessment (Pryor and Crossouard, 2008).

Davies and Ecclestone acknowledged that practitioners who are educators in practice fail to distinguish between formative and summative assessment. This perpetuates "teacher-led" practice failing to actively engage students in formative assessment. They concur that practitioners need more help in facilitating "sustainable formative assessment" that will prepare them for monitoring their future practice (Davies and Ecclestone, 2008: 72). Their research within vocational education has close links with practice education where formative assessment is situated in authentic learning contexts.

As review of the literature has indicated a reciprocal exchange of feedback that adopts a divergent approach should be promoted for assessment to be formative for both educator and student (Cross et al, 2006; Nicol and Macfarlane-Dick, 2006). However in most health professional practice education scenarios it appears that feedback continues to be transmitted between educator and student (Kell and Jones, 2007; Molloy, 2009) within a convergent formative assessment model. In addition the majority of practice educators continue to focus on a deficit IRF model of feedback
where practice educators engage in diagnosing gaps in students' performance (Molloy, 2009). This inevitably perpetuates a somewhat narrow view of feedback and results in educators failing to embrace the richer concept of formative assessment that could more effectively engage students in assessment for learning supporting the transition into their chosen profession.

2.7 Integrating reflective practice into formative assessment

"Reflection is a form of mental processing - like a form of thinking that we use to fulfil a purpose or to achieve some anticipated outcome. It is applied to relatively complicated or structured ideas for which there is not an obvious solution and is largely based on the further processing of knowledge and understanding and possibly emotions that we already possess" (Moon, 2001:3 based on Moon, 1999).

This definition demonstrates the close links between reflection and the process of formative assessment. Reflection enables us to process information in order to achieve a goal. In the case of formative assessment, feedback is the information that we have based on judgement that has taken place, and reflection on that feedback as part of the whole formative assessment process enables a student to adjust their practice to work towards the desired goal.

Reflection has been widely recognised in education for many years as a tool for facilitating learning since its early introduction by Dewey (1933), and later links with learning from experience (Kolb, 1984; Schon, 1987; Boud, et al, 1985; Moon, 2004). Nonetheless, the concept of reflective practice as a tool for facilitating learning and professional development has only comparatively recently been recognised in health professional education (Donaghy and Morss, 2000; Lahteenmaki, 2005). It has become an increasingly popular concept that has been embraced by medicine and other allied health professions, including physiotherapy, where its value in developing more holistic and critically evaluative approaches to practice was recognised (Clouder, 2000 b; Kember, 2001; Eraut, 2004).

Reflection now forms an essential element of all pre-registration health professional courses (Dalley, 2009) and is considered by many to be a key pedagogic tool for equipping students with the skills necessary for thinking about and critically evaluating their own practice and promoting continuing professional development (Brown and Ryan, 2003; Bradbury-Jones et al, 2009). In order to prepare students for
engaging in reflective practice, all health professional courses are required to ensure that the curriculum contains a range of learning outcomes and assessment strategies that aim to assess students' ability to engage in reflective practice and to demonstrate their competence as reflective practitioners (HPC, 2009).

However, some authors in the field have raised concerns about the term reflection becoming overused (Eraut, 2004:1; Saltiel, 2006), resulting in the concept of reflective practice becoming unclear. As a consequence practitioners may reflect on their practice at a more superficial level (Moon, 2001; Bradbury-Jones et al, 2009).

Reflection has long been recognised as a tool for facilitating learning (Boud et al, 1995) and as a key component of formative assessment where its prime role is to promote reflective dialogue between educator and student (Brookfield; 1998; Brockbank and McGill, 1998). An early model of reflective learning proposed by Brookfield (1998:10) places “praxis at the heart of facilitation” where learning occurs by educator and learner actively reflecting and analysing practice incidents together. I have found this model useful in promoting reflection with educators in practice as it highlights the importance of an analytical phase of reflection which should ultimately lead to deeper learning. Nonetheless, I remain mindful of its time consuming nature in today's practice environment where pressures on educators' time continue to increase and show no sign of abating (Mooney et al, 2008).

In their early work on facilitation Brockbank and McGill explored reflective dialogue in higher education (1998) as a two-way process promoting exchange of feedback and enhancing the ability of students to develop the skills of giving as well as receiving feedback; skills essential for current practice and a key part of the education of patients as well as students. However, in recognition of the constraints placed on educators' time they proposed the use of student triads to facilitate critically reflective feedback. Despite the fact that this work is now more than a decade old and primarily focussed on campus based learning, I feel it has much to offer practice education. However the evidence supporting the use of peer feedback in physiotherapy practice education remains limited.
2.7.1 Barriers to reflection

Whilst the value of reflection as a component of formative assessment is not in question there are barriers that may deter students and educators from actively engaging in it. One major constraint that educators and students have identified is the lack of time that is available for reflection in busy practice settings (Morris and Stew, 2007). In today's practice environment where educators face increasing demands, protected time for reflective activity may become increasingly scarce.

Eraut (2004:3) suggests that reflection may also be limited by novice practitioners being unaware of the complex factors within the practice environment that impact on their practice. He highlighted the need for practice educators to draw on significant practice episodes that provide more immediate feedback to learners. I agree (with this argument) that some novice students may initially have difficulty in picking up contextual changes. However I think this fails to take into account the prior experience that many pre-registration students now bring to practice environments. In fact students may be more likely to observe factors impacting on practice than some senior practitioners whose practice has become habitual (Argyris and Schon, 1996; Eraut, 2004). This skill is being acknowledged by the leadership and innovation council (DH, 2009) who suggest that health professional students are well placed to notice innovations to practice that could be made to improve the quality of the patient experience.

My own experience of debriefing with students following their placements suggests that some educators support learners in exploring practice events. Nonetheless there are many practice episodes that could form an excellent basis for formative feedback that remain unexplored. Research by Clouder (2005:505) suggests that opportunities for exploring episodes of practice, for example emotional and behavioural domains, help novice practitioners to move through 'threshold concepts'. This results in a higher level of learning as students gain increased understanding of professional practice.

Current Department of Health policy proposes that higher education institutions should be developing skills as part of the pre-registration curriculum where students have the opportunity to make small but innovative changes in practice that will help to support their development as future leaders (DH, 2010b). In order to meet these
policy demands it is even more essential for students to develop the skills of reflection and analysis, to enable them to identify where changes need to be made within the current practice context. By making reflection a key part of formative assessment students will become active participants in change as well as actively managing their own learning and professional development.

As previously highlighted, students often remain “passive recipients” of formative assessment, and educators frequently remain in a position of power where they deliver feedback to the students and retain the “driving seat” of the learning process. When educators deliver feedback, students often fail to engage with the message and are not encouraged to develop the skills of critical reflection, self-monitoring and autonomy that are felt to be essential components of current practice (Robinson and Udall, 2006:93). Most research into the use of reflection as part of formative assessment has been undertaken in education. Research by Clouder (2000a) explored the use of reflective practice in physiotherapy and identified that dialogical reflection between practice educators and students was limited. However, Clouder's research focussed on more generic practice education approaches as opposed to formative assessment.

2.8 Models of practice education

In recent years there has been an increased focus within health professional programmes on the development of new models of practice education, for example collaborative models (Moore et al, 2003); interprofessional models (Stew, 2005); team models (Bennett, 2003; 2008) or shared responsibility models (Stiller et al, 2004). Some health professional groups, for example occupational therapy, have also adopted role-emerging models of practice education (Huddleston, 1999; Thew et al, 2008; Clarke, 2010) where the day to day educator is not from the student’s own profession. These models have been explored for a number of reasons, including the need to address placement shortages (Baldry Currens, 2003) and also to reflect the educational benefits of moving away from the traditional one to one model of practice education that was felt to make students more dependent on their educator (Huddleston, 1999).
In the next section of this literature review I draw on literature relating to some of the
different models of practice education more commonly used in physiotherapy
practice education.

2.8.1 Collaborative models of practice education

The term collaborative model of practice education refers to a peer assisted learning
(PAL) approach where one practice educator facilitates and assesses the learning of
two or more students in the practice setting (Baldry Currens and Bithell, 2003; Moore
et al, 2003; Martin et al 2004). Collaborative learning also termed peer assisted
learning (PAL), draws on social constructivist learning theory (Duncombe and
Armour, 2004; Cross et al, 2006; Ladyshewsky, 2006) and focuses on the way
students learn from each other.

Collaborative learning encourages students to engage in peer learning activities that
encourage them to reflect and actively engage in problem solving activities together.
This is felt to lead to a deeper form of learning and to promote team skills in contrast
to cooperative learning where students merely share ideas (Ladyshewsky, 1993;
2006). As the following definition suggests, collaborative models of practice
education promote an active supportive environment (Cross et al, 2006:78):

"Collaboration involves a genuine desire and active interest in identifying and
solving problems jointly. Inherent in this approach is commitment to assisting
fellow learners, as far as possible, to achieve their own learning goals as well as
goals shared by the group"

This definition highlights the importance of interdependence a concept identified by
Johnson and Johnson (1991) whose early work in secondary education laid the
foundation of peer learning. Interdependence refers to the need for commitment by
all learners in a peer learning model to help fellow students to achieve their learning
goals (Ladyshewsky, 2006). Thus a truly collaborative model requires reciprocity in
the learning process, and a reciprocal partnership to be established between
students for effective learning to occur.

Whilst the definition by Cross et al (2006) identifies the qualities required for true
collaboration to occur, I feel it could be extended further to acknowledge the
importance of the educator's role within the model. My own research and experience
of introducing peer assisted learning models in the practice setting indicates that unless the educator has the skills necessary to facilitate peer learning in an open and transparent way, promoting collaborative as opposed to competitive learning, students end up working in a hybrid version of the traditional one to one model. This offers little opportunity for students to reflect, provide peer feedback or problem-solving together (Ladyshewsky, 2000; 2006), and frequently results in educators feeling overwhelmed as they try to manage two learners who are functioning in splendid isolation.

Although there have been a number of research studies that have explored peer assisted learning approaches in physiotherapy practice education (Ladyshewsky, 2000; Baldry Currens and Bithell, 2003; Moore et al, 2003; Martin et al, 2004), the majority of these have been small scale studies and to date no studies have focussed solely on students' experiences of their role in peer feedback as part of the formative assessment process.

2.9 Peer learning and peer feedback

Peer learning has been defined by Boud et al (2001:3) as collaborative:

"two-way reciprocal activity ..... networks of learning relationships among students and significant others"

Peer learning has been used extensively in education and has been increasingly promoted to support students in developing the skills necessary for working effectively in teams in preparation for practice in increasing challenging work based environments (Boud and Lee, 2005). Findings from Boud and Lee's study provide insight into how communities of practice support peer learning. However the research was based on postgraduate doctoral research in education making the findings less transferable to practice education.

It is essential that health professionals develop the skills necessary to monitor their own practice, to support lifelong learning and continuing professional development. These skills are deemed essential in today's health and social care environment where practitioners are accountable for their own practice and face frequent changes in service delivery and increasing economic constraints (Cross, 2006). Within health and social care this need is becoming ever more apparent as interprofessional
working is increasing, and practice roles are continuing to evolve to support patient centred approaches (DH, 2008).

2.9.1 Peer feedback

There is evidence that frequent high quality feedback is valuable for promoting learning and professional development however, it is becoming increasingly difficult for educators to meet individual students' needs (Higgins et al, 2002). In recent years an increase in diversity within student cohorts coupled with an increase in student staff ratios has made it difficult for educators to provide students with constructive feedback tailored to individual needs (Chanock, 2000). Research suggests that active participation of students in peer feedback will restore the balance by sharing the responsibility to be shared between educators and students (Mutch, 2003). However most research has been undertaken in campus based learning environments demonstrating the need for further research into feedback in practice education to be undertaken.

The benefits of peer feedback in practice education are demonstrated in Ladyshewsky’s research into peer coaching (Ladyshewsky, 2006; 2010). Within a peer feedback relationship interdependence is promoted and the success of each student is dependent on reciprocal peer support (Johnson and Johnson, 1991). This leads to a more successful partnership and has benefits for students and patients (Ladyshewsky, 2006). Peer feedback in the form of reflective discourse allows students to reflect on their practice and to explore it from different perspectives (Ladyshewsky, 2006, Crossouard, 2009). This enables them to gain insight into strengths and weaknesses preventing them from remaining oblivious to mistakes (Sockmann and Sharma, 2008).

Reciprocal peer feedback should not be restricted to students on placements but fostered in any professional practice partnership. Ladyshewsky (2006:5) highlights the importance of “Socratic humility” a concept that is based on practitioners openly sharing mistakes with colleagues or a “critical friend”. As a result both parties learn and work together to support ongoing professional development. However, there is concern that in current health and social care environments professionals maybe reluctant to share mistakes for fear of appearing incompetent (Ladyshewsky, 2006).
It must be acknowledged that students may initially struggle with the concept of peer feedback (Reynolds and Trehan, 2000) and require time and preparation for this role (Ross and Cameron, 2007). In order to become less reliant on their educator for feedback, students need help to develop critically evaluative skills to support their own practice development and to provide constructive feedback to their peers (Ladyshewksy, 2006). Nonetheless, there is evidence that participative approaches to feedback and assessment remain challenging and the complex interactions that are present need to be recognised by educators (Mutch, 2003).

Additional challenges of peer feedback were identified by Reynolds and Trehan (2000:273) who drew on the work of Foucault (1979). Assessment that was educator led was depicted as a "traditional prison cell" and compared to a "panopticon" that represented peer assessment. Reynolds and Trehan suggested that although the panopticon design may appear more open and friendly, it may result in an increase in peer power. Although their research was not conducted in the practice setting, it provides some insight into the possible constraints of peer feedback.

A study by Vu and Dall' Alba (2007) that explored students' experience of peer assessment in a professional course highlighted the need for students to have additional support from tutors in preparation for peer feedback. By observing and assessing their peers students benefit from exploring different learning approaches (Vu and Dall' Alba, 2007).

Despite evidence supporting the positive outcomes of peer feedback there has been a dearth of research that has explored students' perceptions of the feedback process including their interpretation of peer feedback.

2.10 Contemporary learning and teaching approaches

2.10.1 Student-centred learning

The concept of student-centred learning originated from client-centred approaches to counselling and has become increasingly popular during the last few decades (O'Neill and McMahon, 2005). A major change in approaches to learning and teaching occurred, when educationalists recognised that teaching had long been overvalued. It was felt that students would benefit more from being more actively
engaged with the process, taking more responsibility for their own learning (Rogers, 1969). Educators who are committed to student-centred learning support a constructivist approach to learning an approach (which I advocate). This involves students constructing their own knowledge with teachers facilitating, as opposed to directing, learning (Rogers, 1969; Knowles, 1990). In student-centred learning that focuses on student independence, students are encouraged to be self-directed so they take an active part in planning, monitoring and evaluating the whole process (Dolmans et al, 2005:733).

In true student-centred approaches there is a recognised alteration in the balance of power from educator to student. Current research suggests, that whilst many programmes of study profess to adopt student-centred approaches, many continue to retain teacher-led approaches (Lea et al, 2003:322). When talking to students about their placements they often report that whilst educators appear to promote student-centred approaches, in reality practice educators still appear to control their learning; a finding supported by Kell and Jones (2007) in physiotherapy practice education. In contrast to these findings a study by Lea et al (2003) reported that many students are unfamiliar with the term or what it involves, suggesting that both students and educators may need support in adopting truly student-centred approaches.

2.10.2 Adult learning

It is essential for practice educators to have some knowledge and understanding of how adults learn in order to effectively support student learning in the practice setting. Unless a practice educator understands the rationale behind some of the learning and teaching approaches that draw on adult learning principles, they will be less likely to use them effectively to facilitate student learning, and will remain unable to “close the gap between espoused theory and theory-in-action” (Higgs and McAllister, 2005:166). The research into health professional education by Higgs and McAllister that drew on the earlier work of Argyris and Schon (1996) suggests that we need to support practice educators more in developing their own practice theory to enable them to develop their own strategies for supporting student learning.

In his pioneering work on adult learning theories, based on student-centred approaches, Knowles (1990) identified some key principles of adults as learners that remain a useful foundation on which many contemporary learning and teaching
approaches are based. These examples include problem-based learning and negotiated learning contracts, a key tool for facilitating learning in practice education. He proposed that adults as learners are keen to take responsibility for directing their own learning. They possess a wealth of experience to draw on that should be harnessed by educators. Knowles also suggested that the adult learner, who he once described as a "neglected species" is motivated when the learning activity is related to his/her own needs, and tends to respond well to problem-solving activities as opposed to abstract concepts (Knowles, 1990:1; Cross et al, 2006).

It is common practice in placement learning and in most higher education courses that students and educators use a learning contract in order to ensure that the learner’s needs are met (Knowles, 1990; Whitcombe, 2001). However, I feel that unless an educator understands the rationale for adopting and negotiating a learning contract based on adult learning theory, they will be unable to facilitate its use in a meaningful way. Negotiated learning contracts are well recognised as tools for promoting adult learning in practice settings. Their aim is to enable learning and teaching approaches to be adapted to meet individual students’ needs and through the process of negotiation to promote collaboration between educator and student. This should increase student motivation and encourage students to take more responsibility for designing their own learning (Whitcombe, 2001; Best and Rose; 2005)

From my early experience of encouraging students and educators to use learning contracts on placements I have always considered them to be an essential tool for facilitating learning, providing an excellent framework on which formative assessment that engages the student in partnership with their educator can be built (Cross et al, 2006; Nicol and Macfarlane-Dick, 2006). However I remain mindful of the challenges faced by educators and students when adopting them during practice education. These include time constraints; an increase in paperwork and frustration faced by students whose educators fail to take on board the concept of adult learning, and continue to prescribe learning outcomes as opposed to supporting students in developing their own (Whitcombe, 2001). When preparing students for adopting adult learning approaches, I may also have failed to acknowledge that the somewhat abstract concept of negotiated learning contracts may need a more practical introduction. Despite extensive evidence supporting their use in medical
and health professional education, there has been limited research linked to their role in formative assessment.

Hodgen and Marshall (2005:160) described layers of "scaffolding" interspersed with feedback that represent zones of increased understanding through which learners pass, or as Vygotsky (1978:67) described, the "Zone of Proximal Development" (ZPD). This enables students to achieve their potential through a collaborative socialconstructivist approach. Although these layers of scaffolding are not described as a learning agreement, there are parallels between both concepts as they promote collaboration between educator and student, moving the student to the next stage of development.

2.10.3 Experiential learning

In order to learn effectively and to become competent future health professionals it is imperative that students gain experience whilst on placements, and are able to put into practice and develop the knowledge, skills and attitudes previously gained through campus based learning. It is only as a result of this "real life" experience working alongside a range of experienced health professionals and actively treating patients that they are able to move from a position of novice practitioner, to that of a competent health professional, who is able to take responsibility for their own practice and function effectively within a health professional environment (McAllister and Lincoln, 2004). This process of active learning, commonly termed experiential learning is depicted in Kolb's experiential learning cycle (1984) that relates to four stages of learning. These include concrete experience followed by a period of critical reflection. At the next stage of the cycle links are made to other areas of practice before the learning gained is used to make changes to future practice (Cross et al, 2006:4).

There is distinction in the literature between didactic and facilitative approaches to learning and teaching (Lizzio et al, 2002). The didactic form also known as a transmission model, is generally characterised by educators who fail to adopt adult learning approaches, preferring to control the placement and spend their time transmitting information to students. Of interest to my own research are the findings by Kell and Jones (2007) in physiotherapy education that showed the majority of practice educators continue to deliver a transmission model of learning and teaching.
In contrast, educators who adopt a facilitative approach are much more flexible and remain committed to enabling students to achieve their own learning goals. They encourage students to explore practice from different perspectives, and focus on the process of learning as opposed to goal achievement. However, Lizzio et al. (2002) present a balanced view recognizing that educators who are committed to facilitative approaches may occasionally need to draw on didactic approaches to meet their students' needs. I am aware that I need to remain mindful of this balance as my commitment to student-centred approaches may at times lead me to reject findings that support more direct approaches.

White (2010: 796) argues that education in practice should go beyond "learning by doing" and practice educators should support students in engaging actively within "communities of practice" (Wenger, 1998: 7). This will enable them to gain "legitimate peripheral participation" within their professional community and continue to develop professional identities (Lave and Wenger, 1991: 29). Such an integrated or situated approach to learning, where students learn from other practitioners places it firmly in context (Wenger, 1998).

2.10.4 Problem-based learning

In this section of the literature review I have explored some of the literature pertaining to problem-based learning which forms one of the major theoretical concepts of my research. All of the student participants in my study followed a problem-based learning (PBL) curriculum. My rationale for focusing on a PBL approach was triggered by my involvement in the development of an accelerated pre-registration programme in physiotherapy that is entirely problem-based. I was particularly interested in exploring how students who had been used to a student-centred approach that promoted reflection, active engagement and peer learning during campus based learning related to their experience of formative assessment whilst on placements.

Problem-based learning is an educational approach that has become increasingly popular in medical and health professional education in recent years (Dolmans et al., 2005) since its earlier introduction (Barrows and Tamblyn, 1980).

At a basic level the process of PBL enables students to deal with problems or triggers from practice and to work together in collaboration with their peers to identify what they need to know and the steps they need to take in order to solve the
problem (Sadlo, 2006; Applin et al, 2011). Problem-based curricula are designed to encourage students to actively engage in real life cases from practice that have little resemblance to text book cases (Savin-Baden, 2000).

The philosophical approach of PBL is felt to promote team skill development as students work in small groups to explore "real live" cases (problems). Students are encouraged to develop a critically reflective, analytical, and self-directed learning approach (Williams, 2004; Williams and Beattie, 2008) as they sift through the evidence relating to the problem and seek solutions (Tiwari et al, 2006). In essence the broad aims of PBL are to deepen learning and understanding. Students following a PBL curriculum are generally considered to be motivated, to learn from and with each other, to take responsibility for their learning and managing their time effectively (Thomas, 2010). In addition by working as a team they are prepared for current practice where efficient clinical reasoning and effective team skill development form essential components of current health professional and social care practice (Smith and Coleman, 2008).

When reviewing the literature on PBL I became aware that the four key principles of education on which PBL is thought to be based, namely "constructive, self-directed, collaborative and contextual learning" (Dolmans et al, 2005: 732) have close links with the social constructivist approaches to formative assessment previously identified (Carless, 2007; Nicol, 2010). By exploring the views of students engaged in a PBL curriculum I hoped to gain insight into how their experience of formative assessment during practice education related to the PBL approach they experienced during campus based learning.

These educational principles imply that learning should be an active process allowing students to construct knowledge together. By promoting self-direction PBL encourages them to be involved in the whole process of learning from its inception to its final evaluation. If problem-based curricular are true to its underpinning philosophy, collaborative approaches enable students to work together sharing ideas and taking responsibility to solve a problem that is set firmly in context (Dolmans et al, 2005). However it is acknowledged that the "implementation" of PBL within the physiotherapy curriculum remains in its "infancy" (Solomon, 2005: 49).
2.11 Summary of the literature review

Throughout this chapter I have reviewed a range of evidence from education; medical education and health professional education literature relating to formative assessment. There is increasing evidence that suggests that formative assessment with feedback as its central core should be seen as a learning process that informs but is not driven by summative assessment. A number of contemporary models of formative assessment in education have been developed that have drawn on research evidence (Hattie and Timperley, 2007; Nicol and Macfarlane-Dick, 2006; Pryor and Crossouard; 2008) and in physiotherapy education (Molloy, 2009). These models emphasise the importance of students being actively involved in formative assessment that promotes reflection and dialogue between educators and learners. Formative assessment should be rooted within a community of practice that supports student learning and prepares students for future practice (Wenger, 1998).

My interest in feedback as part of the formative assessment process and collaborative approaches to learning and teaching has arisen from an ongoing fascination with the power of formative assessment and its impact on student learning. Previous studies and my own Ed D research suggest that the quality of feedback learners receive does not always provide them with sufficient guidance to develop their practice and may leave them feeling dispirited when they have been in receipt of negative feedback (Young, 2000). There are also indications that students all too often remain passive recipients of formative assessment (Boud, 2000; Molloy and Clarke, 2005; Molloy, 2009). In addition research by Kell and Jones suggests that practice educators continue to adopt models of learning and teaching (Kell and Jones, 2007) that focus on the acquisition of knowledge and skills, failing to promote novice practitioners' “professional ways of being” (Dall' Alba, 2009:34).

My research into formative assessment as part of this literature review also led me to consider how students who are engaged in a programme of study based on a PBL approach respond to feedback in the practice setting. I was particularly interested in exploring their perceptions of formative assessment as there has been little research into how students from a problem-based course experience formative assessment on placements. Whilst previous research has been undertaken into the way students
on the accelerated course have responded to the problem-based curriculum, their experience of formative assessment in practice remains uncharted water.

Although it is widely acknowledged that extensive evidence related to feedback exists, the majority of studies focussed on campus based learning in education and few studies have explored individual student's experience of formative assessment during practice education. Morris (2007) (not the current author) noted that student evaluation is diligently completed following placements on all health professional programmes. Nonetheless she expressed concern that despite this practice, research into individual health professional students' perception of practice education remains limited.

Having reviewed the literature it is clear that formative assessment is a complex concept that continues to challenge both educators and students. The research that has been undertaken has provided some useful insights into the process and as a result a range of models have been developed. However as previously highlighted, most studies have been undertaken in education and there is currently a paucity of research into formative assessment in health professional education (Molloy, 2009). This research provided the opportunity for a group of physiotherapy students to disclose their experiences and perceptions of formative assessment during practice education. In order to gain an increased understanding of formative assessment as part of the whole learning experience this study aimed to:

1. explore physiotherapy students' experience of formative assessment during practice education
2. explore their preparedness for formative assessment
3. identify factors that influence students' experience of formative assessment
4. inform the future preparation of practice educators and students
5. identify future research opportunities
3 Chapter Three – Methodology

In this chapter I initially explore my ontological and epistemological positions within the research process before providing an overview of my chosen methodology together with its philosophical underpinnings. Where appropriate I have drawn on literature to justify my methodological approach. Throughout this section I have attempted to identify my philosophical stance highlighting my reasons for adopting an interpretive (qualitative) research paradigm based on a phenomenological approach (Willis, 2007).

During the course of my Ed D, I found the opportunity to reflect on my own position as a researcher invaluable as it helped me to view the research process in a more holistic way, and enabled me to have a clearer understanding of why I have adopted an interpretive research paradigm as opposed to a positivist approach to my research. Having embarked on the process, and hopefully gained increased insight into both my epistemological and ontological stances, I concur with Finlay (2006) who suggested that unless researchers have some understanding of philosophies and paradigms that form the backdrop of their research, they fail to develop a holistic approach to the research process. This may result in researchers blithely adopting an approach that is totally inappropriate for their chosen research question. This view is supported by Crossan (2003), who proposed that by exploring their philosophical and theoretical stance before embarking on research, researchers are more likely to choose a methodological approach that will enable them to come closer to answering their research question.

For the purpose of this study I was interested in exploring physiotherapy students’ interpretations of formative assessment during practice education.

3.1 My ontological stance

My ontological stance is based on my belief that multiple realities exist as opposed to belief in a single reality, one which can be measured objectively (Nicholls, 2009a). This view originates from the premise that every person is an individual who brings his or her own interpretation to any given situation (Fade, 2004). As a result our experience of that situation will be unique to us, and will be different from another
person’s experience of the same situation, as we each interpret the social world in which we exist in different ways (Finlay, 2006; Nicholls, 2009a). I see reality as something that is socially constructed, and reliant on the experiences of people. I have therefore adopted a stance that is in contrast to a positivist position where reality is viewed as objective and measurable (Lichtman, 2006; Darlaston-Jones, 2007).

I am member of a health profession that has historically adopted a more positivist scientific view of the world. The physiotherapy profession together with a number of other health professions, with the possible exception of occupational therapy, has traditionally focussed on evidence generated from positivist research approaches (Wiart and Burwash, 2007). Physiotherapy has by tradition embraced an approach to patient care more closely linked to a biomedical model of practice in contrast to one that is socially constructed, and which embraces a more holistic approach (Donaghy and Morss, 2000). However, changes in national policy, practice and service delivery have resulted in health professionals, including physiotherapists recognising the need to adopt a more holistic patient centred approach (DH, 2010a). Practitioners have become increasingly aware of the importance of focussing on individual patients’ experiences and goals, recognising the impact that psychosocial factors have on patient care (Reynolds, 2005; Wiart and Burwash, 2007: Nicholls, 2009a).

Evidence suggests that proponents of positivism, who view reality as something that is objective, measurable and can be generalised to the whole population have a tendency to approach their practice in a similar way (Finlay and Ballinger, 2006). Darlaston-Jones (2007:20) adopted a somewhat contentious stance suggesting that positivism in psychology research has resulted in individuals being viewed as “passive receptacles” with little recognition being given to how they perceive and experience the world. Although a positivist research approach was traditionally adopted in health professional education and practice, the balance is currently changing in favour of interpretive approaches. An increasing number of researchers are adopting methodological approaches from qualitative paradigms that enable them to listen to the voices of their service users and to gain insight into the way they experience health and social care practice (Johnson and Waterfield, 2004; Endacott, 2005; Nicholls, 2009a).
Throughout my professional career I have held beliefs and assumptions that have provided a focus for my practice both as a physiotherapist, and an educator. These are based on the need for practitioners and educators to adopt a holistic approach to practice, and to listen to the experience of those we engage with during our practice (Ohman, 2005). My own beliefs and values were initially fostered when I worked closely with other team members in a variety of interprofessional teams including intensive care; renal medicine and surgery, and latterly within a primary care setting where I worked predominantly in patients' homes. I was fortunate to practice within close knit teams where team members were committed to patient empowerment, and demonstrated respect for individual patients' needs. Whenever possible those team members actively engaged patients and their relatives in the management of their disease.

When considering my ontological stance, I reflected on my early work with patients. I now consider that my belief in the existence of multiple realities was forged at the formative stage of my professional career when working in renal medicine with patients who had chronic kidney failure. At that time, I began to explore my own view of reality, and realised that each patient experienced dialysis in a different way, his experience was individual. It was therefore imperative that as a practitioner I acknowledged those needs when designing physiotherapy programmes, to ensure that rehabilitation took into account a patient's labile mood and reduced energy levels resulting from his or her complex renal problems.

As I reflected on my early professional experience, I began to see how the team's holistic approach to patient care has influenced my choice of research approach. For example, if the interprofessional renal team, who made such an impact on my professional beliefs and values, had based their treatment approaches solely on objective measurements, they would have failed to achieve a holistic therapeutic relationship that valued the patient perspective and met their individual needs. I concur with the thoughts of Cresswell (2009) who suggests that researchers' world views are gained from personal and professional experience and this experience often shapes their research approaches.

My own professional education was influenced by an objective view of reality that implied there was only one answer to a question. This ultimately led to a very
inflexible approach to learning and teaching. My perception is that it ultimately resulted in a somewhat constrained approach to practice as we adopted rigid prescriptive treatment approaches where the practitioner was viewed as the expert who delivered treatment to the patient in an unequal relationship. Nonetheless, my valuable interprofessional opportunities, and more recent experience as an educator, highlighted the importance of taking different perspectives into account, viewing reality as something that is socially constructed, and based on individual perceptions (Finlay, 2006; Nicholls, 2009a). My commitment to adopting a humanistic approach to education has also influenced my ontological stance. This is based on the need to create a supportive learning environment that values students' opinions, whilst encouraging them to take responsibility for their learning (Hesketh and Laidlaw, 2002; Cross et al, 2006).

3.2 Exploring my epistemological roots

By undertaking research within an interpretive paradigm using a phenomenological approach, I was able to listen to the voices of physiotherapy students, and to gain some idea of their interpretation of the phenomenon of formative assessment during practice education.

As previously highlighted, in contrast to an interpretive stance a positivist epistemology focuses on objective measurements. The assumption underpinning all positivist research is that "objective reality exists" (Crossan, 2003:48) and results of research can be generalized (Racher and Robinson, 2002). Such an approach would have been inappropriate for my study as I wanted to explore physiotherapy students' interpretation of formative assessment within the context of practice education. My aim was not to obtain objective measurements (Finlay, 2006) but to gain an increased understanding of formative assessment by listening to physiotherapy students' interpretation of their placement experiences (Molloy, 2006). However, I remain mindful of the work of Vaalsiner (2000) who cautions against researchers seeing positivist and interpretivist paradigms as being in total opposition.

Proponents of an interpretive qualitative paradigm aim to interpret and ultimately to gain an increased understanding of the lived experience of those people who are part of that experience and inhabit that world (Racher and Robinson, 2002). I have
returned to a quotation by Finlay (2006: 19) which I feel clearly illustrates my own position as an interpretive researcher:

"the interpretivist researcher recognises that they are part of the world they are studying, rather than external to it"

I saw myself as inextricably linked with the physiotherapy students who were my participants. I felt I have a close understanding of the practice education context in which they gained their experience having worked in that context as a practitioner, clinical educator and lecturer practitioner. The focus of my research was to gain insight and understanding as opposed to truth and objective data that could be measured (Ohman, 2005).

I adopted an interpretive phenomenological approach (IPA) for this study as it enabled me to explore the lived experiences of physiotherapy students who had experienced formative assessment during their placements in a variety of practice settings. Phenomenology is a philosophical approach to qualitative research that has been widely adopted in health professional education (Hammell, 2002)

As I explored my epistemological stance and the way it has informed my chosen methodological approach I drew on the work of previous researchers who have adopted a similar interpretive approach to research. This helped me to justify my own position and my methodological approach. Darlaston-Jones (2007:21) who studied psychology students’ experience of university life recognised that individual student realities are based on “their experience of life, the cultural context in which the experience takes place, and the way they adapt and integrate within that context.” When selecting a methodological approach that would enable me to explore physiotherapy students’ experience of formative assessment during practice education, I needed to ensure my choice of methodology would make it possible for me to take into account the experiences of each participant recognising their “separate and unique reality” (Darlaston-Jones, 2007: 21).

I appreciated that each participant’s unique experience of formative assessment would be informed by his or her prior experience of practice education. Students’ experience would inevitably be influenced by the context in which the learning took place, for example an acute hospital or community setting and their professional socialisation within that learning environment. A phenomenological approach would
enable me to acknowledge the diversity and range of practice settings in which students had gained their experience, together with the variety of teams in which they worked.

3.3 Phenomenology

Phenomenology has its roots in the work of philosophers including Husserl, Heidegger, Merleau-Ponty and later Gadamer (Kvale and Brinkmann, 2009; Smith et al, 2009). Husserl’s work focussed predominantly on the individual experience and suggested that by being “phenomenological” individuals can adopt a reflective approach to get to the very essence of an experience. Smith et al (2009:13) suggest that:

"in order to be phenomenological, we need to disengage from the activity and attend to the taken-for-granted experience of it"

In order to achieve a more in-depth exploration of a phenomenon Husserl suggested that “taken-for-granted” aspects of the experience must be bracketed, to allow us to explore our perceptions of the phenomenon in more depth as we step back from it, and begin to reflect on each individual aspect (Smith et al, 2009:13). This approach termed “eidetic reduction” where each component of a phenomenon was explored in detail, allowed researchers to get to the real meaning or “essence” of the phenomenon. Husserl believed that in order to achieve “eidetic reduction”, researchers should “bracket” all previous thoughts or preconceptions about the phenomenon in question. He felt that adopting the practice of bracketing would enable them to get to the heart of the phenomenon (Husserl, 1927; Smith et al, 2009:13).

In contrast to early philosophical beliefs Smith et al (2009:14) propose that researchers who adopt an Interpretative Phenomenological Analysis (IPA) approach cannot completely eliminate “taken for granted” aspects of their experience as individual parts exist within the whole experience. I agree with this suggestion as I believe that as a researcher I was inextricably linked to my participants and the research study as a whole. In order to appreciate and make sense of my students’ experiences of formative assessment it would have been impossible for me to bracket my own beliefs and values as they formed an essential part of my interpretation of the phenomenon (Clarke, 2009:38). In addition an IPA approach, on
which my study, is based seeks solely to “capture” the experience as opposed to get to the “essence” of the experience (Smith et al, 2009:16; Williams and Paterson, 2009).

Heidegger (1962:61) a later pioneer of phenomenology, who also explored the “lived experience”, drew on some elements of Husserl’s earlier work. However, he held contrasting opinions to Husserl, and his philosophical approach took phenomenology in a new direction. His work focused on "Dasein" which explores “being in the world”. He recognised that we need to interpret our relationship with the real world, and become aware that we are part of a community and therefore cannot exist as a separate entity. Heidegger proposed that it is impossible to set aside our previous experience. He believed that our own interpretation will always be influenced by our previous understanding of the phenomenon in question, and as researchers we cannot completely discard our beliefs, values and understanding (Clarke, 2009:38). We exist in the world and remain influenced by the context and our interaction with others.

The concept of “being in the world” on which Heidegger’s work was based is closely linked to the way students learn to develop as professionals within their chosen professional context. For example when students are on placements they are not only developing their interpersonal and practical skills when assessing and treating patients but also learning how to become a professional as they become integrated within a health professional team. Dall’ Alba (2009) stressed the need for educators to recognise that in addition to developing professional knowledge and skills, students also need to develop “professional ways of being” within the practice environment (Dall’ Alba, 2009:1469). She argued that sometimes we remain so focussed on epistemological aspects of learning, and intent on students accruing facts and practical skills that we neglect the ontological component. As a result we fail to consider how students learn to become professionals.

I concur with Dall’ Alba’s analysis (2009) as it resonates with my own concerns that the formative element of assessment in practice education is sometimes neglected in favour of a focus on summative assessment linked to grades and criteria. This sometimes prevents educators from having conversations with students about their own professional journeys. However, as an educator based primarily in a campus
based environment I must recognise that practice educators are often under pressure to assess students in a relatively short time frame.

3.4 Interpretative Phenomenological Analysis (IPA)

3.4.1 The hermeneutic circle

Phenomenology is a research philosophy that uses an interpretative or hermeneutic approach to interpret individuals' experience of a phenomenon (Smith et al, 2009). The hermeneutic circle is a circle of interpretation that allows participants, and researchers to explore a phenomenon. During the research process individual participants are engaged in interpreting their own experiences of the phenomenon in question. Interpretation is a continuous process, beginning at the point of data collection, and continuing throughout the analysis and the writing up phase of the research. This circle of interpretation known as the "hermeneutic circle" is often called a "double hermeneutic" as the experience is initially interpreted by the person who experienced it and secondly by the researcher. The circle illustrates the inextricable link between participants and the researcher in a phenomenological study (Clarke, 2009; Smith et al, 2009:35). Some early phenomenological research in nursing has been criticised for being too descriptive (Barkway, 2001; McNamara, 2005). However, by adopting a "double hermeneutic approach" IPA is felt to embrace a deeper, less descriptive, level of analysis (Smith and Osborn, 2003; Smith et al, 2009:35).

I adopted an IPA approach for this study as my aim was to interpret physiotherapy students' lived experience of formative assessment during practice education. I wanted to increase my understanding of how physiotherapy students experience feedback on placements. A number of evidence-based models of formative assessment based on sound research already exist in education (Nicol and MacFarlane-Dick, 2006: Pryor and Crossouard, 2008), nonetheless there has been little empirical research into physiotherapy students' experience of formative assessment (Molloy, 2009).

By adopting a phenomenological approach I hoped to "represent the lived experience in as raw and un-elaborated way as possible" (Willis, 2001:1). My intention was not to produce findings that could be generalised to the physiotherapy
population as a whole, however, as Willis (2001:2) suggests, findings from the research might "generate some echoes in others". Throughout this thesis I have attempted to approach my research in an open and transparent way.

3.5 Rationale for methods of data collection including reflective approaches

Methods of data collection were chosen that would promote a reflective approach as the whole focus of the study was about the student experience. I felt the use of theme boards and reflective logs would help me to harness students’ initial reflections on their placement experiences. Theme boards are a form of memory collage that allow participants to cut and paste images on a flat surface in order to illustrate a point of view, a concept or an experience (Crilly et al, 2006) I intended to use the initial data from participants’ reflective logs and theme boards to elicit further reflection to inform the face to face interviews (Butler-Kisber and Poldma, 2009). I had previously used a reflective time line as an interview prompt during an earlier Ed D study but felt that use of a theme board would help me to explore students’ experiences of formative assessment in more depth. Evidence suggests that theme boards help to unleash hidden understandings by augmenting the process of reflection (Butler-Kisber and Poldma, 2009). A more detailed explanation of the approach is included on page 65.

The face-to-face interview was chosen as the prime method of data collection as it allowed me to gain insight into physiotherapy students' lived experience of formative assessment, and to "listen to the voices of students" as they talked about their placements in a variety of practice settings. This type of interview approach is considered to be the most appropriate data collection tool for a phenomenological study as it enables researchers to listen to the lived experiences of participants and to gain an increased understanding of the phenomenon that is being explored (Kvale and Brinkmann, 2009).

Lichtmann (2006:119) provides a useful interpretation of qualitative face-to-face interviewing suggesting that its purpose:

"is to hear what the participant has to say in her own words, in her voice, with her language and narrative ........participants can share what they know and have
learned and can add a dimension to our understanding of the situation that questionnaire data does not reveal”

Face-to-face semi-structured interviews are also considered to be a flexible research tool as they enable the interviewer to clarify and adjust their questions (Cresswell, 2007; Kvale and Brinkmann, 2009). A semi-structured approach or “guided interview” (Lichtmann, 2006, p.118) provided me with a basic framework to encourage participants to talk about their experiences. I wanted to hear about physiotherapy students' experiences of feedback and to explore their thoughts in relation to formative assessment as a whole. This method of data collection enabled me to adopt a more flexible approach to questioning. I was mindful of the fact that participants had experienced a range of learning environments and different educators and therefore it was likely my questions may have to be adapted.

A questionnaire approach would have made it possible for me to access a larger number of participants, yielding a mixture of quantitative and qualitative data. This method of data collection was inappropriate for my study as questionnaires are potentially less flexible, and may easily be misinterpreted (Dreyer, 2003). It is not a method of data collection normally associated with phenomenological studies that seek to capture the lived experiences of people.

I initially explored the possibility of using telephone interviews as I felt they may be more practical, as the physiotherapy students I wanted to interview were away from campus on placements for periods of six weeks. However, I decided against this method of data collection for several reasons. I would have been unable to observe participants' non-verbal communication during a telephone interview, and I felt that was a key part of the research process (Shuy, 2003). I was also concerned that if participants disclosed sensitive information during a telephone interview I may have been unable to respond appropriately (Cresswell, 2007). Another consideration was the fact that my design incorporated the use of theme boards to prompt reflection during face-to-face interviews and it would have been impossible to adopt this method during a telephone interview. Telephone interviews are also thought to limit participants' ability to respond to a range of questions (Drever, 2003; Shuy, 2003).

Although focus group interviews are not considered data collection tools of choice for phenomenological research, they have been used in some studies and are
commonly used in health professional and education research (Tiwari et al., 2005). A focus group approach may have enabled me to access information from a wider range of participants and would probably have generated more discussion (Kreuger and Casey, 2000; Kreuger, 2007). However, I wanted to listen to the views of individual participants and was aware that some of my participants may have felt uncomfortable in disclosing sensitive information within a focus group. This may have limited my ability to explore aspects of individual student's experiences of formative assessment in more depth (Kitzinger, 1995).

3.6 Exploring my rationale for using theme boards as a method of data collection

Visual imagery in the form of collages is felt to be a successful way of helping participants to express their feelings more freely. It promotes reflection, unlocking hidden meanings and encourages participants to explore ideas from different perspectives (Crilly et al., 2006; Butler-Kisber and Poldma, 2009; Ridley and Rogers, 2010). I chose a theme board activity to enable my participants to illustrate their experiences of formative assessment. I felt this approach would prompt participant reflection and form a useful point of reference during face-to-face interviews, enabling me to explore issues raised by participants in more depth.

Collages have been used creatively by a number of artists in the 20th century but their use as a research method is relatively new and such approaches continue to be underrated in qualitative research (Prosser, 2005). Nonetheless visual methods are seen as a method of augmenting the face-to-face interview as they promote reflection, help to draw out ideas through elicitation, and may help researchers to formulate their ideas (Butler-Kisber and Poldma, 2009). "Visual elicitation stimuli" range from drawings, maps, collages and video clips. These act as props helping researchers to extract data that may be inaccessible by interviews alone (Crilly et al., 2006:341). In this study I initially used the theme board to encourage participants to reflect on their experience of formative assessment and at a later stage during the face-to-face interviews, I encouraged them to return to their theme boards, adopting them as a form of elicitation or prompt. My aim was to deepen participant reflection on the phenomenon and hopefully to unearth meaning that may otherwise have remained hidden (Butler-Kisber and Poldma, 2009).
When researching the use of visual techniques as a source of data collection I was encouraged by two key findings by Coad (2007) that related to my own role as a researcher. One finding identified that researchers do not have to be artistic in order to adopt creative visual techniques such as theme boards. I was encouraged by this finding as I have never been artistic and initially felt daunted about using a creative method of data collection. However, when introducing participants to the theme board activity I remained mindful of the need to adopt a facilitative approach, promoting flexibility and creativity, whilst retaining some structure (Coad, 2007).

The second finding from Coad’s study suggested that a researcher who adopts artistic techniques helps to relax participants making the whole process more egalitarian. As an insider researcher I was aware of the possible imbalance of power within the research process and wanted to make my participants feel at ease. However, Coad’s research focussed on young people and children and therefore may not translate to my own research.

3.7 Rationale for using a reflective log

A reflective log was included as a method of data collection in addition to the theme board as it enabled participants to capture episodes of feedback during their placements. By reflecting on episodes of feedback during one of their placements participants were able to draw on examples from their logs during the interviews. Each student participant was provided with a blank folder that is based on the design of an “ordinance survey map” and can be folded up easily. This enabled participants to record their thoughts using a section per day. I encouraged student participants to use a reflective model of their choice to prompt their reflection. Please see appendix two page x for an extract from a participant’s reflective log.

3.8 Ethical considerations and governance issues

In accordance with the British Educational Research Association (BERA) guidelines and the University’s Good Practice in Research Ethics and Governance guidelines issues of confidentiality and protection of participants’ identity were observed (BERA, 2008; UOB, 2010). To ensure participant confidentiality they have been identified by code on all transcripts. The data has been made anonymous so that it cannot be linked to the individual who supplied it. Any personal details of participants were known only to myself as the researcher and have been held in a separate file in a
computer that is password protected. All participants were given numbers and pseudonyms to prevent any quotations being attributed to them in a future research paper or presentation at a conference. No names are included on transcripts or in the body of this thesis. Any reference to specific placement sites has been removed from all transcripts. Access to data was restricted to me and my supervisors. I informed participants in advance of the interviews that if they shared any information that I felt needed to be disclosed, I had to abide by my ethical duty as a researcher and health professional and disclose it. I would inform the participant of my intention and my reasons for disclosure (BERA, 2008) and would formally document my decisions and discuss the matter with my supervisors or my line manager.

Conducting research from a small group of students meant that I needed to take care to ensure their anonymity, especially as some of the findings could be considered sensitive. In order to gain a true picture of participants' perceptions they were re-assured that specific comments could not be attributed to an individual. No detailed demographic data has been included within the thesis to prevent any identification of participants.

The data collected was treated in accordance with the University's Good Practice in Research Ethics and Governance (UOB, 2010) and the Data Protection Act (1998).

3.9 Reflexivity

"Reflexivity refers to the assessment of the influence of the investigator's own background, perceptions and interests on the qualitative research process" (Krefting, 1991:218)

Throughout this study and during the process of writing up this thesis I have been continually aware of my position within the research process. I am considered an insider researcher as I have been involved in researching participants who are students on a programme within my own Higher Education Institution and I also know the group of participants being researched (Mercer, 2007). I have been conscious of my role as a senior academic with responsibility for the quality of practice education and the impact this may have on participants. As a result I have tried to maintain an open and transparent approach at all times and have made my own position as a researcher very clear to participants. I completed a reflective log during the research process to enable me to explore my own thoughts and feelings.
during the interview and analysis process. I have included extracts from it in appendix six page lxi of this thesis.

Although I knew my participants before I undertook this research, my role within the school changed during the course of my doctorate. I was no longer involved in the day to day management of practice education, and therefore did not retain such close contact with the cohort of students who were my participants. In contrast if I had recruited participants from the undergraduate pre-registration physiotherapy course I would have been able to draw on a much larger sample of participants but as I am a supervisor for a number of their dissertations and module leader for one of the final year modules, I felt it would have been unethical for me to engage them as participants.

Once students were recruited to the study, I ensured that I did not visit them on placements. I felt it was essential that during the course of my research I did not supervise any of the MSc in Rehabilitation Science student dissertations to ensure that I would not be influencing their assessment or final degree award. Findings from Drake and Heath (2008), whose research focussed on insider researchers, identified the concern raised by Educational Doctorate researchers that participant recruitment may be influenced by students who were interested in gaining additional credit. Throughout the research I have been aware of the bias that I may have brought to the study, due to my enthusiastic interest in formative assessment and the importance I place on the quality of feedback. I am also aware that I am intolerant of educators who adopt hierarchical approaches and who use formative assessment as a tool for undermining student confidence. Holstein and Gubrium (2003) highlight the need for researchers to be aware of their position within the research process and to consider that respondents in turn might also be wondering what the researcher’s position is.

I recognised the need for me to be open about my position as a researcher and to maintain a transparent approach throughout the study. However, as an educator who has extensive experience in the field of practice education it would be impossible for me to remain neutral within the research process (Carpenter and Hammell, 2000; Williams and Paterson, 2009). I could not disregard my own prior knowledge and
understanding of formative assessment and in some ways this may be considered an advantage as it has informed the research design and process.

Some research literature (Mercer, 2007) suggests that an insider researcher is less likely to have an impact on the research environment as they blend more easily into the setting where the research is being undertaken. I feel this debate is more relevant to an observational ethnographical study than one based purely on interviews. However, I felt that my journey as a researcher may have been made easier as I had an increased understanding of the research context and perhaps may have been better placed to pick up hidden meaning when participants were describing their experience of formative assessment. However, it remains unclear if the knowledge I gained by being an insider researcher led to “thicker description or greater verisimilitude” (Mercer 2007:11).

3.10 Participants

A purposive sampling method (Cresswell, 2007) was selected for this study as it allowed me to access physiotherapy students who had experienced formative assessment during practice education and who were students on the MSc in Rehabilitation Science Course. This method of sampling was also used for practice educators as I felt it was appropriate for me to seek the opinions of a small group of experienced educators.

I initially recruited 10 physiotherapy students. However, due to pressure of work one student had to withdraw from the study. The final sample consisted of 4 male and 5 female pre-registration physiotherapy students with a mean age of 26 years. I also recruited 1 male and 3 female physiotherapy practice educators. Although the numbers were relatively small they are considered to be appropriate for a phenomenological study (Nicholls, 2009b).

3.11 Student participants

3.11.1 Inclusion criteria

Participants were pre-registration physiotherapy students (from the researcher’s university) who had completed a range of placements in the practice setting.

Participants were all selected from the:
- MSc in Rehabilitation Science (pre-registration accelerated pre-registration physiotherapy course) Students on the course follow a problem-based learning curriculum.

3.11.2 Exclusion criteria:

- Students who were not registered on the MSc in Rehabilitation Science (Pre-registration accelerated physiotherapy programme).
- Students who had not completed a range of placements.

I chose to include students from the pre-registration accelerated physiotherapy programme as I am not a modular leader for the course and during the duration of the study I did not supervise or assess any of the students' final year projects. I felt that it may have been unethical for me to interview students who I was responsible for assessing. I was also interested in exploring the experiences and perspectives of students who had followed a problem-based learning curriculum, where self-directed learning approaches are actively encouraged.

3.12 Participants who are practice educators

3.12.1 Inclusion criteria

For the purpose of this study, I recruited experienced physiotherapy practice educators who had all supervised physiotherapy students on placement and had experience of problem-based learning. All practice educator participants were postgraduate students and alumni of the university, who had completed Master's modules in practice education. I did not interview educators on NHS premises or during NHS funded time.

3.12.2 Exclusion criteria

Practice educators, who were not postgraduate students or alumni of the university and who had not had physiotherapy students from the university on placement.

Practice educators were interviewed either in a pre-booked room on campus site or at a location that was convenient for them.

All participants were required to complete a consent form before taking part in the research study. Please see an example of a consent form in appendix one page viii.
3.13 Recruitment and consent

I was initially concerned about my ability to recruit participants as the group of students I wanted to interview were final year pre-registration students from the MSc in Rehabilitation Science. These students were in the middle of completing their own research projects and final placements. However, I was fortunate enough to have a prompt response from a number of students who expressed interest in my study and were willing to offer their time. Although one student who initially volunteered to take part subsequently dropped out due to pressures of work, that student continued to be interested in the progress of my research.

An email inviting students to participate in my study was sent to the cohort of second year physiotherapy students on the MSc in Rehabilitation Science (accelerated physiotherapy programme). The email was sent by an independent administrator in the university. Any student who was interested in participating in the study was invited to contact me. As soon as a prospective participant expressed interest in taking part I sent them a copy of the participant information sheet. Please see appendix one page iii.

I undertook a pilot study with a participant from a previous MSc in Rehabilitation Science cohort. The pilot study enabled me to “fine tune” my interview approach as the participant gave me some feedback on my technique and approach to questioning providing some useful feedback about my interview skills. He suggested that my questions were very open and this made him feel comfortable when talking about his experiences. However, he thought that I needed to be aware that some participants may feel less comfortable with my very open approach. This is something I remained aware of during the interviews with student participants and I found that theme boards were a useful prompt that enabled me to explore some of their experiences of formative assessment in more depth.

3.14 Data collection

3.14.1 Stage one: completion of a reflective log

During stage one of the data collection participants were asked to complete a reflective log focusing on episodes of feedback over a period of six weeks during one of their placements. In order to maintain confidentiality, participants were reminded
that they should not identify educators or sites in their reflective log. Participants were asked to hand their reflective logs in before the face to face interviews to enable me to identify emerging themes. Please see themes from the reflective logs in Table 4 Appendix two page xi.

Participants were asked to draw on examples of significant incidents from their reflective logs during the interviews. Students on the MSc in Rehabilitation Science Course are familiar with the term significant incident as they complete a reflective assignment (based on a significant incident that has informed their learning in practice) as part of a module in year one of the course.

3.14.2 Stage two: theme board activity
The theme board activity took place in a pre-booked private room on campus at a time and date that was convenient for the student participants. I invited all student participants to come together as a group to design individual theme boards when they returned to campus in the autumn trimester after their placement.

Although I wanted participants to design individual memory collages (theme boards), I decided to ask them to come together as a group to complete the activity as they are used to working in groups on their PBL course and I felt a group environment would provide some peer support.

Research by Coad (2007) encouraged participants to design individual collages during the actual face-to-face interview. I initially considered using this approach as I had attended a workshop where concept mapping (another visual approach) had been successfully used as an integral part of the interview process. However, I finally decided to keep the theme board activity as a separate stage of data collection. If participants were designing a collage during the interview, I might have found the activity distracting, and it may have prevented me from focussing on participants’ non-verbal and verbal communication. This distraction may have stopped me from actively listening to participants, and prevented me from following up on their responses (Kvale and Brinkmann, 2008). By undertaking the theme board activity in advance of individual interviews I hoped that participants would engage in the approach without too many pre-conceptions. I decided to use the theme board as a prompt during the individual interviews to allow me to explore their experiences in more depth (Butler-Kisber and Poldma, 2009).
I used some open questions as a prompt for introducing the theme board activity to the group. What does formative assessment on placements mean to you? How could you represent your experience of formative assessment as part of the feedback process? I initially explained the purpose of the theme board activity and briefly talked about the concept of using visual activities as part of the research process. Participants signed consent forms in advance of the activity and I reminded them that they were free to withdraw from the research at any time.

When participants had completed their theme boards I recorded their initial thoughts about their individual theme boards. By listening to the audiotapes following the group activity and making additional field notes I gained further insight into the issues raised. My intention was to use the theme board approach to promote reflection and to elicit information during the face-to-face interview. It was inappropriate for me to analyse individual theme boards and my final analysis was drawn from my interpretation of the interview as a whole.

3.14.3 Stage three: face-to-face interviews with student participants

Following initial review of the reflective journals and theme boards, individual interviews were undertaken with physiotherapy students.

Each interview was held in a pre-booked private room of suitable size, in a quiet location on campus. Adler and Adler (2003) highlight the importance of researchers considering the location of the interview to ensure that participants feel comfortable. I chose a room that is normally used for quiet study and in as neutral a position as possible (Lichtmann, 2006). I was conscious that as an insider researcher I needed to choose a place where I was able to focus and demonstrate commitment to my role as a researcher and temporarily set aside my role as an academic.

It was inappropriate for me to interview participants in the practice setting as this would have disrupted their placement learning, may have impacted on their summative assessment and their therapeutic relationship with patients. Previous research that I undertook with students on placement took place on NHS premises. At the time of my earlier study the NHS ethical panel raised concerns about the possible impact of my presence on patient contact time. I therefore made the decision prior to this study to avoid undertaking any research that would impact on students or health professionals contact with patients. However, I remain mindful of
the fact that this may have limited the depth of the data as research undertaken where experience takes place is thought to add to richness to the data (Drever, 2003).

At the start of each interview I took a few minutes to establish a rapport with each participant (Lichtmann, 2006) before asking them to reflect on their experiences of formative assessment using their individual theme boards as a prompt. I wanted participants to talk freely about their experiences so I kept the questions as open as possible in order to avoid directing the interviewee (Lichtmann, 2006). Each interview which lasted between 40 and 60 minutes was recorded on a high quality digital recorder.

Brief field notes were made during each interview (Drever, 2003; Lichtmann, 2006). However, I remained mindful of the need to actively listen to the interviewee. Smith et al (2009) suggest that the whole purpose of a qualitative interview is for the interviewee to talk and for the researcher to actively listen. This approach may help researchers to bracket their own thoughts regarding the phenomenon. I concur with these views and felt it was important for me to focus on what the interviewee was saying and to take minimal notes as this may have distracted from the interview process. As the interview progressed each participant was invited to talk about his or her theme board. This allowed it to be used as a prompt, and helped me to explore aspects of an individual participant’s theme board in more depth.

3.15 Data analysis of student interviews

The recorded interviews were transcribed verbatim prior to analysis of the data. I asked an independent person who has experience of transcribing qualitative research to transcribe my interview data. I then checked each transcript for accuracy by listening to the tape and reading the transcript (Poland, 2002). Field notes were made during and immediately after the interviews. I also kept a reflective journal throughout the research process.

I adopted an interpretative phenomenological approach (IPA) to data analysis as it provided me with a framework for analysis (Smith et al, 2009). I had previously used a similar approach during a pilot study for my Ed D but this time decided to adopt a more authentic step-by-step approach to IPA following guidance by Smith et al.
(2009). I adopted the steps of data analysis identified below and recommended by Smith et al (2009) but have also allowed some flexibility in the process.

3.15.1 Step one: reading and re-reading
I initially read through each transcript several times to enable me to “immerse” myself in the data (Burnard, 1991; Cresswell, 2007). This stage of analysis may slow the process of interpretation down, and deter researchers from jumping to impulsive conclusions (Smith et al, 2009:82). Before this stage of data analysis I made brief notes outlining my initial thoughts about the content of each interview. Some researchers suggest that this helps to set aside or bracket a researcher’s immediate assumptions allowing them to view individual data from a fresh perspective. As I re-read the transcripts I also listened to the digital recording and made some notes on the transcript that helped me to hear the “participant voice”. This helped to bring the interview transcript “to life” as the participant talked about their experiences of formative assessment (Lichtmann, 2006:164).

3.15.2 Step two (a): making initial notes
During the second stage of the analysis phase I made notes on each transcript and began the analysis of each participant interview in turn. My aim was to make notes on the entire transcript whilst recognising that some aspects of it would yield richer data than others (Smith et al, 2009). As I read through the transcript again I began to record my own thoughts. Please see an example in appendix three page xxviii. This iterative approach to data analysis is felt to be an essential phase, allowing the researcher’s initial thoughts to emerge from the data. I found this part of the data analysis time consuming but it made me step back from the data and prevented me from jumping to conclusions or falling into the “quick and dirty analysis trap” (Smith et al, 2009:82) which I had encountered during an earlier study as part of my Educational Doctorate. During that research I had unintentionally completed my data analysis phase too quickly resulting in superficial interpretation of the data (Wolcott, 2001; Lichtmann, 2006). Although the renewed data analysis was time consuming and at times frustrating the overall depth of analysis was improved.

3.15.3 Step two (b): exploratory comments
At this stage of the analysis I reviewed the transcripts and added a column on the right hand side of the original transcript. This enabled me to add in my initial
exploratory comments which were mainly descriptive in nature. I then looked at participants' use of language and finally added in any additional questions that came to mind as I continued to interpret the data. This stage is felt to increase analysis of the data moving it from a descriptive to a more interpretive stage (Smith et al, 2009). I looked for examples of metaphor in the interview transcripts and in the theme boards as metaphor is thought to be a "powerful component of the analysis" (Smith et al, 2009:88). I found this approach useful as I was later able to use some examples of metaphor to illustrate my main themes. For example one of the themes of "my brain is overloaded" came from an image of an overloaded car depicted on one of the theme boards and explored further during an interview. Please see an example of exploratory comments in appendix three. page xxix.

3.15.4 Step three: developing emerging themes
Having completed this phase of my analysis I began to develop initial themes from the data and placed an additional column to the left of the main transcript. Please see appendix three. page xxxii. This approach allowed me to use my initial exploratory comments and to generate some emergent themes using both my participant's words and my own interpretation of the interview. At the end of this stage I produced a list of emergent themes for each individual participant interview and then attempted to arrange the themes into clusters that appeared to be related (Fade, 2004; Smith et al, 2009:96).

3.15.5 Step four: Clusters and quotes
During the next stage of my analysis I continued working with individual participant transcripts and mapped each participant's quotes against the cluster of themes to ensure that I had a transparent audit trail of the data and could link a participant's quotations to each cluster. I found this process time consuming but felt that it was worthwhile as it enabled me to get closer to my data and later helped me to begin to see links between themes from each participant and the data set as a whole. An example of some clusters and quote for participant one is included in appendix three. page xxxvii.

3.15.6 Step five: Case by case analysis
I completed the same pattern of analysis for each student participant and drew up a concept map illustrating the emergent themes for each participant in my study. To
enable me to retain the individual voice of each participant I also wrote a short story drawing on examples from analysis of the participant’s reflective log, theme board and interview. Please see examples of participants’ stories in appendix five. pages liii – lx. Excerpts from some of these stories have also been incorporated in Chapter Four of my thesis where I present my research findings and discussion. This approach enabled me to draw together my interpretation of the data from the different methods of collection.

3.15.7 Step six: looking for patterns across the participant cases

At this stage of the data analysis I looked across the whole data set to determine common patterns in the data and created main themes across the group of participants. I adopted a “hands on” approach and lay the themes emerging from the clusters from each participant on a large surface and looked for connections between participant themes. This is presented in a master table of themes for the whole participant group Table 1. on page 78. It includes overarching themes, main themes and themes and sub-themes. There are two overarching themes contained within the data:

- Formative assessment that detracts from student learning.

- Formative assessment that enhances student learning.

Both overarching themes contain a number of main themes and sub-themes.
<table>
<thead>
<tr>
<th>Formative assessment that detracts from student learning</th>
<th>Formative assessment that enhances student learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main theme:</strong> Feeling overloaded</td>
<td><strong>Main theme:</strong> Problem-based learning influences</td>
</tr>
<tr>
<td><strong>Sub-themes:</strong></td>
<td><strong>Sub-theme:</strong></td>
</tr>
<tr>
<td>- &quot;My brain is overloaded&quot;</td>
<td>- &quot;taking stock and looking ahead&quot;</td>
</tr>
<tr>
<td>- Ill-timed feedback</td>
<td></td>
</tr>
<tr>
<td>- &quot;It's always about testing&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Main theme:</strong></td>
<td><strong>Main theme:</strong></td>
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<tr>
<td><strong>Sub-theme:</strong></td>
<td><strong>Main theme:</strong></td>
</tr>
<tr>
<td>- &quot;Getting inside two people's heads&quot;</td>
<td><strong>Main theme:</strong></td>
</tr>
<tr>
<td><strong>Main theme:</strong> Challenges of multiple educators</td>
<td><strong>Main theme:</strong> Fulfilling experiences</td>
</tr>
<tr>
<td><strong>Sub-theme:</strong></td>
<td><strong>Sub-themes:</strong></td>
</tr>
<tr>
<td>- &quot;Brings it all together &amp; gels it&quot;</td>
<td>- &quot;in tune and parallel&quot;</td>
</tr>
<tr>
<td>- &quot;Tangible goals and nothing woolly&quot;</td>
<td>- collaborating with others</td>
</tr>
<tr>
<td><strong>Main Theme:</strong> Learning through relationships**</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-themes:</strong></td>
<td></td>
</tr>
<tr>
<td>- &quot;In tune and parallel&quot;</td>
<td></td>
</tr>
<tr>
<td>Table 1. Master table of themes for the participant group</td>
<td>78</td>
</tr>
</tbody>
</table>
I have included an additional master table of themes for the group. Please see Table 6 in appendix four page xlvi. This includes participant quotations mapped against the main themes. I constructed a concept map of initial emergent themes (please see appendix three page xliii) to enable me to talk to practice educators about my findings. My intention of interviewing practice educators was not to validate my analysis as I recognised that findings from this study are based on my own interpretation of the data. However, as the aim of Education Doctoral research is to move my practice forward I took the opportunity of sharing my emerging themes with experienced educators to elicit their thoughts about my findings and to explore ways in which they could be used to inform practice education.

3.15 Stage four: of data collection

3.16.1 Interviews with individual practice educators
Practice educators were invited to take part in semi-structured interviews to explore the themes emerging from the interviews with student participants. This approach enabled me to explore the data from educators' perspective in addition to exploring formative assessment from the students' perspective.

Each interview lasted between 40 and 60 minutes. The interviews with educators took place at a time and place that was convenient for individual participants. I initially considered using telephone interviews as an alternative method of data collection for practice educators. I finally decided against this approach as I had constructed a concept map to illustrate student participants' emerging themes which acted as a prompt during interviews with practice-based educators. As a result telephone interviews would have been more difficult to conduct.

3.17 Analysis of the data from practice educators' interviews
I adopted an interpretative phenomenological analysis approach to interpret practice educators interview data. I read through each practice educator’s transcript before making exploratory comments. I then identified emergent themes before grouping the emergent themes into clusters mapping participant quotes against the clusters. The themes from practice educators' data can be found in Table 5. appendix four. page xlv. The final themes from both student participants and practice educators are represented in Table 1 page 78.
3.18 Critical reflection on my adherence to rigour and trustworthiness

In an attempt to ensure that my study was both rigorous and trustworthy, I adopted a framework proposed by Yardley (2000) and endorsed by Smith et al (2009:180). Yardley identifies four principles to improve the quality of a qualitative research study. These are: 1. sensitivity to context; 2. commitment and rigour; 3. transparency and coherence; and 4. impact and importance. She proposed that researchers need to be sensitive to the context of the research by being aware of the need to establish a rapport with their participants and to consider the influence their role as a researcher may have on their interviewees. I took time at the start of each interview to establish a rapport with each participant, and I felt that the presence of a theme board helped to make the interview process more collaborative, as we were able to look at the images together. One participant who initially seemed cautious talking about his experiences appeared to open up more easily when we looked at his theme board.

Throughout this study, I was aware of the impact that my role as an academic may have had on participants’ perceptions of my role as a researcher. During an early meeting with my supervisors, they suggested that at the end of each interview it might be useful for me to ask participants about their perceptions of my role during face-to-face interviews. I adopted this approach and was encouraged by participants’ responses. Some participants saw me as a researcher, others a lecturer undertaking research, and some a peer interviewer. This was encouraging as none of them thought of me in my role as a senior academic. However, I remain mindful of the fact that participants were from my own institution; this could have influenced their response. They may have provided me with information they felt I wanted to hear rather than their actual perceptions.

I believe that I am sensitive to the practice context having worked as an educator in a variety of health professional contexts. However, I recognise that there is a significant gap between my own experience as an educator in practice, and current practice. Although I have been in higher education for many years, I continue to visit practice education settings on a regular basis, retaining contact with the context, and as a member of a National Practice Education Forum and local practice education networks I maintain contact with the international and national context.
I have tried to remain sensitive to the data, ensuring that my participants' voices were heard, and have therefore included substantial extracts from participant interviews in my findings chapter. To ensure I was fully immersed in the data I also wrote a short story about each participant's experience whilst listening to the audiotape of an interview. These stories helped to increase my understanding of individual experiences, as well as to identify parallel themes between data sets. Please see appendix five pages lvii-lx.

However at times, I struggled to decide which verbatim extracts to discard, and which to retain. The IPA process of analysis kept me so close to the individual participant voice that at times I feared that by losing quotations I might have prevented a participant's voice from being heard. Smith et al (2009) suggest that a researcher's reluctance to lose quotations may be due to a lack of confidence in the data analysis, and that by reviewing and discarding quotations that may be repetitive, the researcher moves on to another deeper stage of analysis. I felt this was the case in my own interpretation of the data. As I made decisions about which participants' quotes to keep and which to lose I was aware that the very act of discarding quotations took my analysis a stage further, and moved me away from participants' original transcripts in preparation for more detailed analysis and discussion of the findings as a whole and their link to future practice.

3.19 Commitment and rigour

During the course of my data collection and analysis I was aware of the importance of demonstrating commitment to my participants who had given up their time to be part of my study at a time when they also had considerable demands on their time. I acknowledged their contribution by sending individual emails thanking them for their time and by sharing emerging themes with student participants during the early stage of data analysis.

During the data analysis phase of the study I used the IPA framework suggested by Smith et al (2009) to guide me through the stages of analysis, and mapped quotations from a number of participants under each theme. By adopting this approach I tried to ensure that themes were generated from a range of participants as opposed to one or two participants.
3.20 Transparency and coherence

I have included a description of each stage of the data collection and analysis and kept a reflective log during the research process. Extracts from my log can be found in appendix six pages lxi-lxv. The Master Tables of quotes for each theme and sub-theme has been included in appendix four page xlvi to provide evidence of how each theme emerged from participants' transcripts.

In addition to sharing the findings with practice educators and my supervisors I shared my emergent themes with student participants. During the latter stages of my final data analysis I presented my findings at a pedagogic research group to gain feedback from peers who acted as critical friends. Feedback from the group was valuable and indicated that I had initially focussed on too many sub-themes and would benefit from allowing the student voice to emerge more clearly from each theme. I subsequently returned to the data and reviewed the grouping identifying two overarching themes together with the final main and sub-themes shown in table 1 on page 78.

In the next chapter my findings will be presented and discussed.
4. Chapter Four-Findings and Discussion

4.1 Introduction
In this chapter of my thesis the findings and discussion from my interpretation and analysis of the data are presented. Participants' own words are included throughout, and where appropriate are used to identify individual themes. Pseudonyms have been used to protect participants' anonymity. In addition descriptions of images from participants' theme boards are used to illuminate individual themes. Photographs of the theme boards can be found in appendix seven pages lxvi-lxxi. Although there were a number of participant comments associated with each theme a selection of exemplars has been chosen to illustrate individual themes. Additional examples of participant quotations may be found in appendix four pages xlvi-lxi. In some sections more detailed examples from student participants are included to add depth to my interpretation of a theme. Links are made throughout the chapter with the literature.

4.2 Overarching themes
Participants reported formative assessment experiences which enhanced or detracted from their learning. My interpretation of the data suggests that there were two overarching themes:

- **Overarching theme one**: formative assessment that detracts from student learning

- **Overarching theme two**: formative assessment that enhances student learning

The initial overarching theme represents students' perception of a negative type of formative assessment that detracted from their learning. It contains two main themes. The first main theme: feeling overloaded, represents episodes of feedback where participants felt overwhelmed by either large quantities of feedback; feedback that was poorly timed or where there was too dominant a focus on assessment.

Within the main theme are three sub-themes: “my brain is overloaded”; ill-timed feedback and “It’s always about testing”. The second main theme: Challenges of multiple educators represents some of the feedback challenges students...
experienced within a multiple educator model. It contains one sub-theme “Getting inside two people’s heads”. This reflects the challenges students found when trying to manage feedback from a number of different educators as they tried to deduce each educator’s expectations or preferred practice approach.

The second overarching theme represents students’ perception of a more positive experience of formative assessment that enhanced their learning on placement. It contains three main themes: The first main theme: Problem-based learning influences, describes how problem-based learning prepares students for feedback on placements. It contains one sub-theme “taking stock and looking ahead”. The second main theme fulfilling experiences has two sub themes. The first “brings it all together and gels it”, focuses on the importance of immediate feedback whilst the second sub theme “tangible goals and nothing woolly” identifies the need for feedback to be specific and linked to clear goals. The final main theme: learning from relationships, represents the range of feedback relationships that enhanced student learning on placement. It has two sub-themes “in tune and parallel” and collaborating with others. The first sub-theme focuses on the value of an open relationship between educator and student and the second sub theme focuses on a range of collaborative formative assessment relationships.

The overarching themes form the outer level of analysis with the main themes and sub themes forming the inner levels where participants’ voices bring the data to life. However, interpretation of the data identified three essential interconnecting factors that form another level of analysis, linking all themes and sub-themes together. These interconnected factors namely: the style, amount and timing of feedback influence all aspects of formative assessment and in essence form the core of the analysis.

In an attempt to show the levels of analysis I have included the overarching themes and main themes together with the interconnecting factors: style; amount and timing of feedback in Figure 1 page 85 below:
Figure 1. Layers of analysis - Physiotherapy students' lived experiences of formative assessment during practice education

The central circles forming the core of the analysis with links to all the data demonstrate how participant experiences of formative assessment were influenced by the Amount, Timing and Style of feedback. The left hand side of the figure represents the overarching theme formative assessment that detracts from student learning and is linked to the two emergent main themes:

- feeling overloaded
- challenges of multiple educators

The right hand side of the figure represents the overarching theme formative assessment that enhances student learning and is linked to the three emergent main themes:

- problem-based learning influences
- fulfilling experience
- learning through relationships
4.3 Overarching theme one
In the following section I interpret and discuss the findings from the main themes and sub-themes that form the overarching theme one: formative assessment that detracts from student learning. The overarching theme is divided into two main themes and four sub-themes see table 2 below:

**Overarching theme one:**

*Formative assessment that detracts from student learning*

<table>
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<th>Main theme one: Feeling overloaded</th>
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<td>Sub-themes:</td>
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<td>• &quot;My brain is overloaded&quot;</td>
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<th>Main theme two: Challenges of multiple educators</th>
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<td>• &quot;Getting inside two people’s heads&quot;</td>
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Table 2. Main themes and sub-themes—Formative assessment that detracts from student learning

4.3.1 Theme one: “feeling overloaded”
The first main theme “feeling overloaded” focuses on episodes of feedback that students found were unhelpful, and ultimately detracted from their learning on placements. Participants talked about the challenges they faced when trying to process either a surfeit of feedback, feedback delivered at an inconvenient time, or in some cases a combination of both. Some educators left feedback until the end of the day when students often felt tired. This resulted in educators sometimes delivering a large amount of feedback all in one go which students found difficult to take on board. Other educators caught students in between patients, when they were in the
middle of trying to clinically reason their way through a patient case. Another form of overload, related to ill-timed feedback that was initially withheld from the student, and subsequently delivered all in one go. The final sub theme focuses on the pressure students felt from being continuously assessed.

4.3.2 Sub-theme: “My brain is overloaded”

This sub-theme relates to participants’ experience of feeling weighed down by seemingly unrelenting feedback, often delivered in large quantities. Participants talked about the challenges they faced when trying to process an excess of feedback. Due to workload pressures that placed demands on their time, some educators delivered a large amount of feedback all in one go, which students often found difficult to take on board.

![Overloaded car image](image)

**Figure 2. Image from theme board of an overloaded car**

Anna refers to the overloaded car depicted on her theme board

"that picture of the kind of car... representing my brain... yeah, overloaded, um... when you get feedback, you're taking it all in and you... um... you know, your brain... well my brain anyway, it feels quite kind of overloaded and I need to do this and I need to that and so... and then the educator asks, you know, is everything... is that OK... and if you understand all that, and you do, but I think
then you need to kind of... you need time to kind of sort it all out in your own head and then feed back to the educator " (p,4)

Anna seemed to struggle to listen to the feedback, to interpret it, and subsequently identify what she needed to do. There is repetition of the word "overloaded" and "I need to do". It seems as if she was trying hard to keep up with the feedback, to make sense of it, and to identify future action. At the same time she was trying to reply coherently to her educator's questions. She needed time to reflect on the feedback, and to take it on board. Anna was under pressure to process the feedback, and needed some space and time to do so. In one sense her educator's question "is that OK?" demonstrated concern for her as a learner, however her educator might have been constrained by time, and may well have rushed the process.

Anna's experience was also echoed by Mike who used a metaphor of a raging waterfall as an image on his theme board depicting overwhelming feedback:

"I think that to say at the start it can seem like you're getting bombarded with everything, but then, just like in the rapids, you come down off the waterfall and then you've got a more gentle slope, so like after practice you get into it and then it becomes a little easier" (p,5)

Although, Mike felt "bombarded with everything", he eventually got used to it, and it seemed to get easier with time. He appeared to adopt a holistic approach, taking a long term view of the whole learning experience by acknowledging that adjustment to feedback takes time.

I was initially surprised by these findings related to a surfeit of feedback, as decades of students have frequently and consistently complained about a lack of feedback on placements, a finding recurrently cited in the literature (Wood, 2000; Prystowsky and Da Rosa, 2003; Daelmans et al, 2006; Poulos and Mahony, 2007). My interest in formative assessment was initially prompted by students who time and again complained about a lack of feedback during practice education. Although some participants in my study talked about a lack of feedback, a number of them found that managing too much feedback at once was equally challenging. Hesketh and Laidlaw (2002) suggest that an overload of feedback may lead to a student's inability to use it successfully resulting in valuable time being wasted by both educators and
students, a philosophy supported in the education literature (Gibbs and Simpson, 2004).

Even Andrew, who appeared to have been quite confident and proactive about managing his placements, included a startling image of a face with “eyes out on stalks” on his theme board depicting the initial pressure he felt from having too much information:

“Yeah you’re just a bit like a rabbit in the headlights at the start, especially on your first placement, it does seem very scary, quite a lot of information ...all the different aspects that you’ve got to be assessed on. It’s quite daunting to start off with. And I think if you were to take all that literally you would probably end up a nervous wreck so just try to see it as a learning experience”. (p, 8)

He felt daunted by the whole experience, despite the fact that as a mature student, he was used to having feedback in a number of different work based settings and from a medley of people. He equated the pressure he was under, with the large amount of assessment criteria he had to meet. Nevertheless, he viewed the placement as a learning experience. This may have been due to the fact, that Andrew appeared to have quite a high level of self-esteem, and gave the impression of managing his own learning quite effectively.

A study in physiotherapy that explored feedback interactions between physiotherapy educators and students, highlighted the complexity faced by students when trying to process feedback in order to make changes to practice (Molloy, 2006). However, the research based on observations of formal feedback episodes, was undertaken in Australia making transference of findings questionable. Although my participants also struggled to digest, and interpret large amounts of feedback, this appeared to be due to an excess of feedback delivered all at once, as opposed to their inability to understand the feedback. It is acknowledged that feedback has the potential to facilitate and accelerate learning (Sadler, 1998; Hesketh and Laidlaw, 2002; Cross et al, 2006) and educators have a key role in helping students to understand feedback (Eraut, 2006; Hattie and Timperley, 2007; Sadler, 2010). However, data from my study suggests that for some students, an overload of feedback may in reality have slowed their learning down. As a result, valuable time may have been lost, which ultimately would have a hindered both educators and learners.
4.3.2.1 Summary of sub-theme

In summary students valued feedback they received from practice educators; however smaller amounts of feedback would make it easier for them to digest and use effectively to inform their practice development.

The next sub-theme that focuses on the impact of ill-timed feedback is closely linked to the previous sub-theme, and demonstrates how timing of feedback in practice settings is crucial to enable students to assimilate it and feed it into their work with patients.

4.3.3. Sub-theme: ill-timed feedback

This sub-theme focuses on feedback that was inopportune, and made students feel stressed as they struggled to use it effectively. There seemed to be a number of factors that contributed to ill-timed feedback. These included time constraints, conflicting roles and heavy workloads, common practice demands that senior practitioners in today's health care environment often struggle to manage.

Pam talked about some of the challenges she faced when her educators provided her with feedback between patients:

"Sometimes they can catch you in between patients and you just can't be bothered, feeling stressed you just think oh can't we have it a bit later on when I'm less stressed. Some days you've got problem patients that you've got to think about more and it's easier for the clinical educators they obviously got that experience behind them but you're sort of wracking your brains thinking oh what am I going to do with that patient. Sometimes there are days when you just think oh I don't want to be assessed. So it's difficult but I don't know maybe put up a sign in a bad mood no assessment today! Needing a break! " (p, 8)

Pam's experience illustrates the pressure students are often under in a busy department. She was on placement in a specialist rehabilitation unit, where she often saw patients who had complex physical and psychological needs resulting from traumatic injury. She talked with enthusiasm about the placement, and the support she got from her educators. However, as her words suggest there were times when she needed space to think through ways of managing the complex needs of her patients.
Pam was frustrated, when she was interrupted by an educator who wanted to give her feedback just when she was trying to “wrack her brains”, and was in the middle of thinking about another patient. She was trying to clinically reason her way through a complex case, which even more senior practitioners may have found challenging. In addition as a novice practitioner, she was expected to take her educator’s feedback on board, and to act upon it even though it related to an entirely different patient.

Linda an experienced practice educator immediately related to Pam’s predicament:

“If you’re dealing with something complex it could be inappropriate at that particular time, but shortly afterwards, can be very valuable, and not necessarily overwhelming they can get themselves in a bit of a tizz and it just spirals and that sort of feeling of being overwhelmed and that sense of pressure, that sense of pressure, that feeling of expectation, wanting to perform as well as possible, to do their best” (pe, 4)

As an experienced educator, Linda appreciated the impact that inappropriately timed feedback could have on a student in a busy practice setting. She recognised the pressure Pam felt under, as it resonated with her own experience of supervising students on placement.

Whilst opportunistic feedback episodes, that enable educators and learners to benefit from immediate feedback are known to be beneficial (Clynes and Raftery, 2008), ill-timed feedback can also have a detrimental effect. Participants found that the timing of feedback was crucial. If feedback was suddenly sprung on them, when they were in the middle of trying to plan for their next patient, as is often the case in a busy ward or outpatient department, they had particular difficulty taking it on board and subsequently processing it. Further analysis suggests, that this could have detrimental effects not only on their ability to use feedback effectively, but ultimately on the quality of patient care, as a student’s clinical reasoning may be impaired leading to interruptions in delivery of care.

Another factor that needs to be taken into consideration, and may have influenced participants’ response to ill-timed feedback, was the fact that students in practice are moving along a continuum of learning that involves several stages (Anderson, 1998;
Cross et al, 2006). Student progress is influenced by a number of factors and is halted or may even regress, when they are faced with a patient who has complex problems (Cross et al, 2006). Pam’s experience illustrated how progress along the continuum may be arrested albeit temporarily. She found it difficult to listen to feedback that was completely detached from a patient she was thinking about who had complex needs.

A study by Skoien et al (2009:260) of physiotherapy students learning in clinical environments, highlighted the importance of students having “enough time and space” to think about complex issues of practice. Although the study provided insight into the way students deal with complex issues in practice, the research was not based in the UK. In addition participants were drawn from a mixed sample of both students and interns, making transference of findings to this study more difficult. Students need to learn how to manage complex situations, in order to be competent in their future role as practitioners. However, I feel that practice educators need to be aware of the stages of student learning, and the effect that complex situations may have on a student’s ability to assimilate information and to use it effectively to improve their management of patients.

Although stages of learning development (Perry, 1970) and taxonomies of skill development (Bloom, 1956; Krathwohl et al, 1973) form part of postgraduate practice education curricula, there is currently little emphasis on them in practice educator role development days. An increased focus on these key aspects of learning may increase educators’ awareness of the complexity of learning in practice. It will also emphasise, how relatively small adjustments to the timing of feedback could support students’ ability to manage complex situations.

Another example of how ill-timed feedback can be difficult for students to assimilate was described by Sally, whose educators in a busy outpatient department had little time for feedback during the day as they all had a full caseload. Sally found herself alone, working in a department with a group of senior physiotherapists:

“then very much being thrown in and I just I don’t know I didn’t feel like I was coping with it as such and very much like everyone was amazing and knew what they were doing and I was just sort of the student stuck in the corner like not really knowing what she’s doing” (p,2)
"I didn't have an awful lot of time with my educator because she had a full caseload at the same time it was very difficult and it was all left to the end of the day the feedback when I was tired and just wanted to go home and escape and sort of getting told oh you didn't do this right or didn't do that right I felt quite negative" (p, 2)

Feedback was often left until the end of the day, and this time lapse although relatively small in practitioner terms, must have seemed much longer to a student. As a result, Sally had difficulty in making connections between patients she had seen earlier in the day, and the feedback she was receiving from her educator. There was a sense that feedback was out of context, Sally found it difficult to relate to and subsequently to digest in order to use it to improve her practice. There is consistent evidence suggesting that feedback delivered out of context is difficult for learners to take in (Hattie and Timperley, 2007).

In this case we not only have an example of ill-timed, and feedback overload, but also negative feedback that lowered Sally's self esteem. Learners have particular difficulty taking feedback on board, when their already lowered self esteem declines even further (Eraut, 2006). This significant lack of confidence made Sally anxious about her health, "I was really quite worried about it", and left her feeling very small. Sally depicted this period on her theme board as a dark area, a "secret hell" that left her feeling "desperate" and "small". A small plasticine figure with a glum face on her theme board illustrated Sally's lack of self esteem.

As her confidence plummeted she seemed to be showing signs of "emotional exhaustion" (Gibbons, 2010; 1035), "I was tired and just wanted to go home and escape" and seemed to be avoiding the feedback. Sally may have been using an avoidance coping strategy, “whatever feedback they'd given me would build up in my head”, and there was evidence that she was feeling cut off from the team. Research by Gibbons (2010:1305) found that when nursing students on placement used avoidance as a coping mechanism, emotional exhaustion and isolation increased, ultimately affecting their performance. In Sally's case her educator recognised that she was losing confidence, and took steps at the half way placement stage to remedy the situation. However initial provision of adequate support, in the form of induction and protected feedback time could have prevented the situation from
escalating as students with low self-esteem benefit from clear and more regular feedback (Knight and Yorke, 2003).

Another explanation for the difficulties students faced when feedback was ill-timed was that novice practitioners find clinical reasoning challenging. Due to their lack of practice experience they do not have the ability to draw on prior experience in the form of "pattern recognition", a skill used by more senior practitioners that enables them to readily access knowledge from prior experience (Higgs 2003; 2008). This may account for the fact that students found it difficult to visualise the actual patient their educator was referring to. This situation was made worse when feedback was left until later in the week or even at the end of a day, when students were exhausted and could not take any more information on board.

Another form of ill-timed feedback was feedback that was withheld until halfway through a placement or even until the final summative assessment stage as Mike and Andrew recall:

"because they were going on and saying everything was fine, I took that on board and thought everything was fine, so I kept doing what I was doing and then they brought it up on the last day when I didn't have a chance to change it" (p,5)

"because I'd been on placement before where I was told I was doing very, very well, halfway high 2:1, nothing else, just carry on as you are, and then I ended up not progressing, I ended up with the same grade, so that was very frustrating" (p,8)

Both participants' voices echo the disempowerment caused by this combination of feedback, "I didn't have a chance" (p, 5) “so that was very frustrating" (p, 8). Not only was the feedback ill-timed, as it was left until the end of the placement, it was also non specific, making it impossible for Mike and Andrew to use it effectively to improve their practice. Ende (1983) and Wood (2000), advocates of feedback in medical education, highlight the challenges faced by students when educators either withhold feedback, or provide feedback that is too general. Both approaches are of little value to learners as they lead to uncertainty and may ultimately perpetuate poor practice.
It is recognised that power relationships are inevitably present in educator / student relationships (Leach et al, 2001; Hattie and Timperley, 2007) and some evidence suggests that some educators deliberately withhold feedback from students (Westburg and Jason, 1993). It is beyond the scope of my study, to determine if Mike and Andrew's educators were exerting power on them by adopting this form of practice. What is more concerning is that by withholding feedback, educators prevented them from making adjustments to their practice. “So I kept doing what I was doing”. As a result this could have affected the treatment outcome for their patients and the quality of care they received.

Although practitioners are usually aware of the importance of providing feedback to students, constraints including staff shortages, together with changes in practice delivery, increasing patient waiting lists and rapid discharge planning, inevitably impact on their ability to find adequate time for feedback (Daelmans et al, 2006). This may encourage practitioners who are educators to seize opportunities to ensure that they provide their learners with some feedback. As a result too much feedback is delivered at inconvenient times. This is difficult for the novice practitioner to take on board and assimilate, rendering it almost worthless. Even though the literature on feedback identifies that it should be delivered in a timely way and in quantities that students can digest easily (Hesketh and Laidlaw, 2002; Poulos and Mahony, 2007; Clynes and Raftery, 2008), it is hardly surprising that in an effort to ensure they provide sufficient feedback, educators may fall into the trap of providing a surfeit of feedback at inopportune times.

Jo, one of the practice educators, suggested that it was a student’s responsibility to make an educator aware if feedback was ill-timed:

“it would have been so nice if she could have had the skills, or he, to have had the skills to say to that educator, I’m feeling really overwhelmed right now, I could do with a little bit of time just to reflect on that patient and just to concentrate on it” (pe,1)

Although Jo’s suggestion highlights the need for students to take responsibility for their learning needs, participants inevitably found it difficult to challenge practice educators who were responsible for their final mark. However if educators and students make time for feedback conversations that enable them to identify optimal
timing of feedback, and feedback preferences, some of the issues raised by students may be addressed (Molloy, 2009).

Participants also felt disempowered by ill-timed nonverbal feedback delivered by educators when students were in the middle of treating a patient. Although students sought affirmation from educators to ensure they were on the "right track", careless nonverbal communication was disconcerting and disrupted a student's therapeutic relationship with a patient.

I was initially surprised by the importance participants placed on ill-timed nonverbal communication as most of the literature focuses on verbal feedback, and the language of feedback. However, as I listened to participants talking about their experiences, I became aware of the emphasis they placed on nonverbal communication, and its importance within formative assessment.

Claire included an image on her theme board of a line of smiling faces labelled "Am I getting enough smiles per gallon?" She talks about the importance of educators being aware of their nonverbal communication:

"so that's what those are... Am I getting enough smiles per gallon? Am I getting enough positive feedback or am I just getting a half hearted feedback" (p, 1)

and the impact that an educator's blank expression might have on a learner's confidence:

"rather than standing there blank faced, and you don't really know am I saying the right thing or am I not? So non verbal communication is very important" (p, 1)

Nonverbal communication played an important part in the whole feedback process, especially when students were seeking reassurance that their practice was going along the right lines. Discouraging facial expressions, delivered at an inappropriate time could seriously undermine a student's confidence, disrupting their communication with patients. This loss of rapport between student and patient could ultimately affect the quality of patient care if an assessment or treatment is interrupted by a student focussing on their educator's expressions as opposed to their patient.
Practice educators in my study suggested that ill-timed “blank faced” expressions may result from educators being distracted by other priorities in their working day. For example they may be thinking about their own caseload. However, they acknowledged that educators should be mindful of the effect that unfocussed, ill-timed nonverbal communication has on student learning (Hesketh and Laidlaw, 2002). This has implications for educator preparation as the focus is primarily on verbal or written feedback.

Participants were unsettled by another form of ill-timed feedback; this took the form of post it notes. These were sometimes left by part time educators in a multiple educator model, or educators who were too busy to provide face-to-face feedback. This disconcerting form of feedback, nicknamed the “post it phenomenon” by Pam (p,6) left students trying to decipher written messages as they struggled to link it to their patients:

“So she’ll probably use the post it phenomenon and then I’m like what do you really mean by that? You don’t now what they’re getting at?” (p,7)

Post it notes left by educators in a community setting left her feeling confused, and uncertain about whether she was on the right track. This form of feedback that was often indecipherable seemed to be worse than no feedback at all. Students were left feeling confused and uncertain about whether their clinical reasoning was accurate or not. Educators may adopt this strategy for managing time constraints within a team when practitioners are job sharing. Indeed, it may be an effective form of communication for senior practitioners who are confident within their scope of practice; however for novice practitioners it remains a challenge. This concurs with recent research by Gibbons (2010), which found that students became frustrated when perceived levels of support offered by mentors were deemed inadequate.

In contrast to acute hospitals, community based settings offered potential for more timely feedback, as educators and students debriefed together in the car between patients. In addition neurology or amputee rehabilitation settings were often more open environments, enabling educators and learners to spend time together in an environment where the pace of practice was more measured. This gave students and educators time for reflection that intrinsically formed a key part of the feedback process. An earlier study by Clouder, (2000a) that investigated reflective practice in
clinical settings also found that opportunities for reflection were facilitated in slower paced practice settings, remaining harder to achieve in busy outpatient settings and acute ward environments. However, to date little research exists that has explored the impact that different contexts have on formative assessment in health professional practice education. This is an area that is worthy of further exploration that may provide examples of good practice that could be used in a range of different learning environments.

There is a sharp contrast in all the prior examples of feedback, between academic learning environments, where the quality of the student experience is a priority, and practice settings where patient primacy is paramount (Moore et al, 1997; Cross et al, 2006). Although students are seen as supernumerary members of the workforce, they inevitably adopt a “service provider role” in practice settings which makes it more difficult for student centred approaches to learning to be sustained (Ernstzen et al, 2009:103).

The challenges students encountered may have been exacerbated by a number of factors, and I feel it is important for me to place these findings against the backdrop of the wider practice education context (Smith et al, 2009). Most placements took place in hectic practice settings for example outpatients, and acute ward environments. In these settings educators are constantly attempting to juggle their own busy caseloads as well as their role as facilitators and assessors of student learning (Cross et al, 2006; Mooney et al, 2008). Practice educators face numerous challenges when trying to balance their different roles within an ever changing practice environment (Williams, 2004; Higgs and Mc Allister, 2007; Clynes and Raftery, 2008).

4.3.3.1 Summary of sub-theme

Timing of feedback is crucial in order for students to benefit from their educators’ experience. In busy practice settings where educators face increasing pressure on their own time it is difficult to find an optimum time for feedback. The many factors impacting on placement settings, together with learner preferences, make it difficult to ascertain a “best time” for feedback. Nonetheless, as the needs of students will undoubtedly vary, flexibility in the timing of feedback could prove beneficial for both educators and learners, preventing valuable time from being wasted. Reciprocal
feedback conversations could form a key part of the process of negotiating a learning contract. Educators also need to consider the impact that careless non verbal communication has on a student's confidence.

4.3.4 Sub-theme—“It's always about testing”

In addition to feeling overloaded, by mistimed or a surplus of feedback, students also felt under the pressure of constant assessment during placements, and formative assessment often contributed to their stress. This sub-theme reflects the preoccupation with assessment of competence that exists in practice learning environments. Participants saw feedback as an integral part of the whole assessment process, and images on their theme boards, depicted assessment as a relentless feature of the whole placement. This was an interesting finding as participants were used to a problem - based approach on campus where the focus is on assessment for learning as opposed to learning for assessment.

As I reviewed participants' theme boards I became aware of a common theme emerging that initially surprised me. Although I am mindful of the pre-placement anxiety that students experience, the stress generated by formative assessment was very evident. Participants used a variety of powerful images in their theme boards to illustrate the stressful nature of formative assessment on placements. Images ranged from hot coals, eyes out on stalks, vulnerable figures and monsters. Examples of theme board images are contained in appendix seven. Further exploration of these images during participant interviews, highlighted the stressful effect that formative assessment has on students, leaving them feeling vulnerable, isolated and tense.

It is acknowledged that most students experience some form of stress on placements that makes them feel anxious, uncertain and under pressure (Cupit, 1988; Gibbons, 2010). Nonetheless, stress on placements may actually have a positive effect on learning, (Gibbons, 2010). This positive effect of stress, a phenomenon known as “Eustress" emanating from research by Hans Selye in 1950, promotes learning as opposed to inhibiting it. However, in order for learners to benefit from Eustress, their initial appraisal of a situation must be a positive one (Lazerus and Folkmann, 1984). In contrast the images on participants' theme
boards, suggest that their initial appraisal of formative assessment on placements was a negative one, making it unlikely that they experienced Eustress.

An optimum level of stress is one that has the effect of providing a balance between support and challenge to learners (Neville and French, 1999). However, educators need to be aware that a surfeit of stress in students on placement is unhealthy and detracts from their ability to make the most of the rich learning that should be gained from working with patients (Gibbons, 2010).

My interpretation suggests that pressure was worse on a student's first placement or at the start of subsequent placements concurring with findings in nurse education (Jack, 1992; Gibbons, 2010). Students seemed to be experiencing a form of anticipatory stress due to uncertainty or a poor previous experience. Even students, who appeared quite confident in managing their placement learning, seemed to experience some form of stress during this transitional period. This concurs with similar findings by Delany and Bragge (2009) whose students reported a decrease in self-belief during their early placements. The "rabbit in the headlights" metaphor described by Andrew was also identified by a practice educator, who observed that students were often more anxious during the first week of a placement. Although, most participants felt that problem-based learning prepared them in some way for feedback, on placements the reality was often different and they found formative assessment stressful.

Participants also talked about the constant pressure they felt from continuous assessment, feedback was inextricably linked to summative assessment. At times the whole focus seemed to be on assessment of competence as opposed to feedback that should, in essence, be non-evaluative (Henry, 1985; Molloy, 2006). Students reflected on the constant monitoring they experienced in the practice setting. Both Anna and Peter had images of binoculars on their theme boards depicting the "tools" used by practice educators to keep them under constant surveillance (Best and Rose, 1996).

Simon's theme board depicted a barbecue with hot coals and included the words "going through hell", which he interpreted during his interview as his fear of assessment:
"You're put into the environment and you've got to do it and justify everything that you do. Um so in that respect it's always about testing ...you're constantly being tested which, I don't know, testing kind of scares me a bit,...my next placement is outpatients and um for me I think that's going to ...it's the one where you're constantly being tested" (p,6)

He viewed the practice environment, as an area where he was under close scrutiny. Repetition of the words “constantly” and “tested”, emphasise his perception of an almost unrelenting focus on assessment, and the need for him to “justify everything you do”. Simon felt he was being constantly tested “it's always about testing”, and reflected his fear of being tested, “testing kind of scares me”. There seems to be dissonance here between students’ experience of constant assessment, and experiential learning enhanced by reflection, feedback and dialogue with others (Owen and Stupas, 2009). If students feel under constant scrutiny, the potential for capturing learning through experience may well be reduced.

Anna talked about the frustration she felt from being constantly monitored:

"I felt like everyone was assessing me, not just my educator so it kind of brought it highlighted the fact that no matter who I was out with I was being assessed" (p,4)

She could not escape being assessed, "I felt like everyone was assessing me”. On her theme board she included an image of a person with a pair of binoculars labelled “undercover agents”, depicting her feeling of being constantly assessed by other team members when she was out on community home visits.

Claire made an insightful and clear distinction between the concept of a watched assessment (her own terminology), and a peer learning experience. She viewed the former “watched assessment” as one in which her educator focused very much on assessment of her as a learner, making her feel “hot and flustered”. In contrast a “peer learning experience” was perceived to be much more collaborative, where the educator adopted a more relaxed approach, and used observation as a form of facilitation:

"It felt less like a watched assessment and more just more of a peer learning experience ...whereas I think in other situations on placement if you're having a
watched assessment it can feel like a watched assessment and you get very hot and flustered and it's not a nice situation to be in, um... a bit more pressure” (p, 1)

There is repetition of the term “watched assessment”, which may indicate Claire's dislike of this observation approach, she found a relaxed approach more acceptable. Claire distinguished between a “watched assessment” and a “peer learning experience”. Although both types of assessment were undertaken by her educators, their approaches were very different. Some educators adopted a more powerful position, whilst others were less hierarchical adopting a more collaborative approach. The term “watched assessment” related to a form of observation where the educator held the power, and feedback was in the form of a “diagnostic model” proposed by Molloy (2009:135) where the student is the passive recipient. In sharp contrast the “peer learning experience”, described a more collaborative form of observation, facilitated by an open more social constructivist approach, which made the student feel more at ease, and ultimately a more active participant (Leach et al, 2001). Further analysis of the term “watched assessment”, suggests that this was a type of formative assessment where Claire felt anxious and “felt hot and flustered”. This ultimately may have had an impact on Claire's relationship with her patient, as she lost confidence and felt “a bit more pressure”.

Linda an experienced practice educator suggested that educators need to be clear about the focus of observation:

“that may be again clarity saying I'm going to be observing you do this but I'm not going to be marking you on it. This is an opportunity for me to give you some feedback and either we do it during or we do if afterwards it's the sense of the student needing to know if it's actually a formal assessment and it's going to go towards their summative assessment or it's simply an opportunity to get some feedback that's going to help them” (pe, 4)

Linda emphasised the need for educators to distinguish between formative and summative assessment, and to make that distinction clear to students. For her the purpose of feedback is clear “to give some feedback that's going to help them”.

A study by Tiwari et al (2005), also found that nursing students had similar anxieties related to practice based assessment. Learning was essentially assessment driven, leading to more superficial approaches, and students' preoccupation with single
tasks and summative tests. However, as the research was conducted in Hong Kong, there may be cultural and practice differences that decrease the transferability of the findings. Although students in my study felt under pressure from constant assessment, the themes discussed later in this chapter, suggest that a number of participants were developing a holistic approach to practice as opposed to one that was purely driven by performance (Tiwari et al., 2005; Torrance, 2007).

This sharp focus on assessment continues throughout the sub theme; students talked about their reluctance to talk openly to “someone who’s giving you grades” and their concern for “impressing the educator”. These findings indicate that drivers were primarily external ones and learning was being driven by performance goals as opposed to learning goals (Eraut, 2006; Torrance, 2007). In reality this preoccupation with assessment is hardly surprising; as students are increasingly concerned about achieving excellent placement grades to boost their overall profile, as they strive to secure future employment in an ever decreasing health professional employment market.

4.3.4.1 Promoting a focus on the purpose of formative assessment
In order to support and develop their role as educators in practice, educators normally attend study days that incorporate learning, teaching and assessment approaches. During these study days there is often limited opportunity to explore issues of formative assessment in depth. Even though feedback is touched upon, the prime focus is on marking schemes and assessment criteria to ensure educators are prepared for their summative assessment role. It is therefore unsurprising that educators may appear to be carrying out constant surveillance, as they attempt to gather evidence to support their summative assessment decisions as well as meeting the numerous demands of practice. Unlike physiotherapy educators, colleagues in nursing and midwifery are required to complete a mandatory programme of study to support their role as practice based assessors. Nonetheless in nurse education formative assessment remains an area that is inadequately covered (Clynes and Raftery, 2008).

Students’ perception of their educators’ approach to feedback, did not equate with a PBL philosophy, as the majority of educators showed a preference for learning that was assessment driven. Indeed such an approach does not sit comfortably with the
philosophy of PBL that promotes assessment for learning as opposed to learning for assessment, and seeks to encourage learners to be autonomous practitioners capable of self-evaluation (Williams, 2004). Practice educators interviewed confirmed that most educators have little understanding of PBL and its philosophy so it is unsurprising that the PBL approach was not adopted in practice education. There is potential for increasing the focus on problem based learning as a way of facilitating learning in practice settings within curricular for postgraduate practice education.

4.3.4.2 Emotional impact of formative assessment

Findings in this sub theme suggest that the emotional impact of formative assessment caused by anxiety had an influence on student learning. There is currently a dearth of research that has investigated links between emotion and assessment. The limited evidence that exists, suggests that students who are anxious about assessment, exhibit decreased cognition, low self esteem and memory impairment, factors that severely impact on their ability to learn (Falchikov and Boud, 2007).

These effects may be long lasting, impacting on students' future practice and their ability to use feedback effectively. We see this quite regularly when students have had a stressful assessment experience on a placement; they often carry their concerns forward to future placements. This subsequently results in future educators often spending an inordinate amount of time, trying to deal with the consequences. On the other hand, as educators we must also recognise that a balance is required as anxiety is a normal part of learning with students often sustaining the will to learn despite anxiety and uncertainty (Barnett, 2007:1). Course teams should consider the potential for including more effective strategies for managing stress on placements, when preparing health professional students for placements. Recent research by Stew (2010) has explored the use of mindfulness meditation as an approach to support health professional students in managing stress.

Another aspect of findings within this sub theme related to students' perceived need to “mirror” educators' practice.
4.3.4.3 Mirroring educators’ practice

Participants reflected on their need to mirror or mimic their educator’s practice, in order to be successful, and get a good mark. This form of practice seemed to be driven by performance goals. Both Andrew and Claire illustrated the concept of “mirroring” on their theme boards. Claire’s theme board depicted her educators as flamingos on a lake with a solitary “student flamingo” standing in the foreground mimicking the exact pose of the educators:

“Looking at this picture here of the flamingos, that you’re kind of the student and your educators are standing in the background and you aspire to be like them, and your almost in some placements you’re moulded into that educator ... it was almost mimicking your educator .... and maybe that’s a reflection that you just want to be like your educator so that they’ll give you a good mark” (p, 1)

Andrew talks about mirroring his educator:

“I think you need to mirror you need to get inside your educator’s head quite early on and work out how they operate and what they expect and mirroring what they do is an easy route to being successful. So I’m mirroring what she does now you could clinically reason both approaches but probably the best way might be just to do what they do” (p, 8)

Despite the fact, that Andrew recognised that “both approaches” were based on current evidence, he made a strategic decision to copy his practice educator’s approach in order “to be successful”. In doing so, he rejected the evidence based approach adopted by peers, and tutors within the problem-based learning curriculum. It seems as if success was assessment driven, based on his need for a good grade and not necessarily a successful treatment outcome. So, although he was unfamiliar with the type of treatment advocated by his educator, and indeed had never tried it before, he decided to replicate it on a patient, in order to be “successful”.

This finding is not unexpected, as students frequently deem practice educators’ treatment approaches to be more authentic than campus based tutors’ practice. However, it is disappointing, that students who followed a problem-based learning approach, which is shown to promote critical thinking and student autonomy,
reverted to “mimicking” their educators. Although evidence from nursing research suggests, that students who followed a PBL approach, appeared more confident in challenging their educators, their practice remained driven by assessment (Smith and Coleman, 2008).

4.3.4.4 Summary of sub-theme
There was evidence throughout the sub-theme, that students found formative assessment stressful. Student stress was exacerbated by feedback equated with summative assessment and grades. The preparation of educators and students could include an increased focus on formative assessment as a tool for facilitating learning as opposed to a focus on judgement linked to grades. Implementation of strategies such as mindfulness may help students to manage stress on placement.

4.4 Peter’s experience—“a volcanic eruption”
In the next section, I have included a short extract of an individual participant’s experience. My chosen research methodology IPA, suggests that researchers should achieve a balance, between sharing findings from the participant group as a whole, and from individual participants. I felt Peter’s experience was appropriate to include, as it illustrates how all three influencing factors: amount, style and timing of feedback contributed to formative assessment that was particularly disempowering for him as a student on placement.

One of the most powerful examples of disempowering feedback emerged from an interview with Peter who had a particularly daunting feedback experience during his inpatient placement on an acute hospital ward. Peter’s theme board contained some poignant images of some of the challenges he faced. The initial images reflect his optimistic mood at the start of his placement. He initially felt welcomed by a close knit team, this boosted his confidence, and he later felt encouraged by his halfway assessment. This positive start is illustrated by an image of a smiling person holding two thumbs up. However, his optimism was relatively short lived, as he experienced what he described vividly as “a volcanic eruption” illustrated on the theme board by a picture of a person being pushed off a cliff.

During his interview Peter talked openly about his complete surprise at receiving relatively positive feedback at his midway assessment, only to be followed shortly after
by a torrent of negative feedback from his main educator. He felt encouraged by his halfway feedback, and there was no indication that his educator was concerned about his practice. However, shortly after his halfway feedback the climate changed:

"the mistakes that have been building up after that started to be picked up and right after the midway and sort of came back to me as a volcanic eruption and at that point I felt that every point I made even the smallest mistake I wanted to have feedback every time I made that mistake at the time instead of being piled up piled up and then build up all of a sudden everything well actually the things you've been doing for the past three weeks wasn't so great these these these" (p,3)

Peter described feeling very small "I felt very small". He illustrated this on his theme board with a picture of a large hand plucking a very small person from the ground and another figure looking humiliated clothed merely in a small towel. The feedback that Peter perceived to be withheld is depicted as a “closely guarded secret”, one which Peter remained unaware of until the volcanic eruption occurred.

Further analysis suggests that Peter may have had some awareness of the mistakes he is alleged to have made. He talked about them starting to be picked up, and later on in the interview made reference to the fact that he may have missed some cues. However, he was adamant that none of the points raised in the later feedback session had been identified at
halfway, suggesting some withholding of feedback. Peter felt debilitated by the one-way negative feedback that he received from his educator and described feeling overwhelmed by the amount of feedback that was delivered during one session:

"to take everything over to look back at what I've actually done and because there were negative points it sort of debilitated my feeling" (p,3)

Peter's attempts to talk to his educator were fruitless:

"it felt that it sort of felt that the method for the educator to make me feel overwhelmed and it's a bit hard to explain but if it was because the feedback was all the feedback regarding the minor mistakes the minor points was carried out at the same time in a large amount so I found it quite difficult to digest the feedback and to express my opinion and it was more of a one way direction conversation" (p, 3)

He felt that his educator deliberately adopted a feedback approach that made him feel weighed down to "make me feel overwhelmed". Like other participants he found the large amount of feedback "difficult to digest" and to make sense of. Peter appeared to have been in a vulnerable position, as the feedback he received was predominantly negative criticism. Peter paused during the interview and sighed deeply as he reflected on the difficulty he had trying to express his feelings to his educator. There was despondency in his voice as talked about abandoning his attempt to tell his educator how he felt, acknowledging that the conversation was going in "a one way direction" (Wood, 2000).

He initially felt welcomed within the team, and this helped to boost his self confidence. However, images on Peter's theme board changed from being positive to ones that represented humiliation and vulnerability. Peter became more isolated from the team as the situation got worse. Recent research by Gibbons (2010) into nursing student stress on campus and placement, suggests that students on placement feel more isolated if they perceive the level of support from educators, and other team members to be unhelpful. This may explain why Peter felt part of the team to begin with, and then grew apart as the situation grew worse.

Peter's midway assessment indicated that he was reaching the standard of practice expected to pass, but shortly after the situation changed, and he received feedback
indicating there were concerns regarding his performance. Whilst his midway assessment cannot be strictly seen as formative assessment because of its judgemental nature (Henry, 1985; Molloy, 2009), Peter's unfortunate experience clearly demonstrates how feedback that is withheld and subsequently poorly delivered has a significant effect on a learner's self esteem (Ende, 1983; Prystowsky and Da Rosa, 2003; Gibbs and Simpson, 2004; Eraut, 2006; Clynes and Raftery, 2008). Not only did his educator appear to withhold feedback, the feedback Peter eventually received was negative, and delivered in one sitting making it impossible for him to "digest" (Hesketh and Laidlaw, 2002).

Further analysis of Peter's interview, suggests that there may have been an earlier informal open feedback session on a ward, where general feedback was given by his educator. This type of feedback is used by educators who may be reluctant to tackle a difficult feedback message, the message remains unclear to the learner, or as Peter suggested it remained a "closely guarded secret". This form of feedback identified by Ende (1983) as "vanishing feedback" is a term that has now entered the feedback glossary, referring to feedback that is too general or is withheld.

In a review of the literature relating to ethical issues in practice education, King et al (2009:139) explore the vulnerability of students as novice practitioners, highlighting the importance of educators recognising both their "technical and moral fragility". In Peter's case his educator may have recognised Peter's fragility and initially tried to protect him by withholding feedback in order to preserve his confidence. However, the result was ultimately more damaging for him as a learner. He describes feeling as if he had been "pushed off a cliff" an indication that his confidence suddenly plummeted. The negative feelings he exhibited following the formal feedback session, together with his inability to digest and use the large amount of negative feedback, severely hindered his learning (Ohrling and Hallberg, 2001).

An alternative explanation may have been that Peter's educator adopted a position of power over him by withholding feedback and delivering it in a "one way direction" a hierarchical stance used by some educators to retain control over learners (Wood, 2000; Leach et al, 2001). His educator's later reluctance to discuss feedback with him may also be interpreted as a hierarchical one, behaviour akin to a parent child relationship. However, it is important to recognise the vulnerability of the practice educator, who
having delivered feedback to Peter may have felt concerned about its effect and its possible future outcome on him as a learner (Ende, 1983; Chur-Hansen and McLean, 2006).

Evidence suggests that students, whose self esteem has been knocked, often withdraw from seeking further feedback (Eraut, 2006). This was not the case in Peter’s situation, after the “volcanic eruption” he wanted regular feedback even though it might have been negative, to ensure his practice improved. Negative feedback related to something that is mandatory, for example a placement that must be passed, places learners in a stressful position. This may increase their resolve to succeed, a concept known as prevention focus, which in Peter’s case may have related to his fear of failure (Kluger and Dijk, 2010: 1168).

Research by Lazerus and Folkmann (1984) who developed the cognitive theory of psychological stress and coping, suggests that people whose self esteem is threatened sometimes respond by taking on more responsibility, developing coping strategies for dealing with a stressful situation. If this is applied to Peter’s case, despite initially feeling debilitated, his determination to succeed may well have been fuelled by the criticism he received from his educator that threatened his self-esteem. I acknowledge that their research was not related to health professional students or placement learning, nonetheless it increases our understanding of how stressors may have a positive, Eustress effect (Selye, 1950; Gibbons, 2010).

Further interpretation of Peter’s experience enables links to be made with factors supporting wellbeing in learning identified by Krapp in 2005. These include: relatedness, competence and autonomy (Krapp, 2005:294). In order to feel part of a team or be “related” students must feel accepted. In Peter’s case he initially felt welcomed by the team however, when he received a torrent of negative feedback from his educator, the “volcanic eruption”, communication broke down. As a result his feeling of relatedness was short lived and he subsequently felt very isolated.

The second factor supporting wellbeing focussed on the need for learners to feel competent (Krapp, 2005). In Peter’s example, his educator judged him to be incompetent, and provided him with negative feedback identifying his mistakes. This in turn made him feel “debilitated”. Peter subsequently became more dependent on his
educator as he strove to ensure that he was getting immediate and regular feedback on his performance to improve his competence. As a result of this dependency, he lacked autonomy; the third factor that Krapp proposes enhances support and wellbeing in learning.

Peter's example relates to all three sub themes in the main theme: Feeling overloaded. It illustrates how an overload of feedback coupled with ill-timed feedback and the pressure of constant monitoring detracted from Peter's learning on placement. In the next section the key issues arising from Peter's example are applied to practice.

4.4.1 Application of Peter's example to practice

I believe there are a number of key learning points from this example that may be used to inform the preparation of practice educators, to illustrate how a negative feedback experience may impact on a student's learning in practice. For example if Peter's educator had addressed the feedback issue earlier, she may have avoided the "build up of mistakes", by helping Peter to close the gap between his current performance and future improvement in his practice (Sadler, 1998; Nicol and MacFarlane-Dick, 2006). If Peter was having difficulty in identifying the gap between his practice and what was expected of him, his educator could have shared some examples from her own observation of his practice, or encouraged him to self-evaluate, a skill essential for ongoing self monitoring and employability (Boud, 2000). However, as Sadler accurately observed, students often need help to recognise how to adjust their practice, as their lack of experience limits their ability to pinpoint the necessary action required (Sadler, 1998; 2010; Nicol and MacFarlane-Dick, 2006).

There are numerous examples in the literature on formative assessment that highlight the value of dialogue between educators and learners in promoting self-monitoring skills (Nicol and Macfarlane-Dick, 2006; Boud and Falchikov, 2007; Nicol, 2010), helping students to share any concerns within an open and trusting relationship (Rozsa and Lincoln, 2005; 230). Early open dialogue may also have made his educator aware that he had misinterpreted her informal feedback "hints of maybe I'm not doing and maybe I'm not going in the right direction" (p, 2). There is evidence suggesting that feedback addressing misinterpretations related to
performance is one of the most powerful forms, (Hattie and Timperley, 2007). Consequently by exploring Peter's understanding of her initial feedback, as opposed to waiting until later before delivering a large amount of negative criticism, his educator would have saved valuable time and may have achieved a more positive outcome. Although Hattie and Timperley's evidence was based on research undertaken in schools I feel it provides insight into the importance of educators checking a learner's interpretation of feedback, a process that could be linked to Peter's experience.

In Peter's case, the lack of communication aptly described as a "one way direction conversation," seems to have exacerbated the problems that occurred. The relationship between Peter and his educator appeared to lack trust, a situation made worse by an initial lack of feedback, subsequently followed by ongoing confusion from the sudden receipt of conflicting feedback. Feedback conversations could form an integral part of a student's learning contract, which should be developed at the start of each placement, and reviewed on a regular basis.

Although, this is just one example of feedback that disempowered a learner, I feel it provides insight into how formative assessment delivered in a way that decreases a student's feeling of wellbeing, can ultimately have a significant impact on learning and practice development. It is essential that educators address issues related to student competence by providing constructive feedback (Clynes and Raftery, 2008). This has implications for the preparation of educators who may be unaware of the factors affecting wellbeing in learning or stressors that impact on student learning in practice and how these may be exacerbated by feedback.

4.4.2. Summary of key learning points from Peter's example:

- Promote early feedback
- Encourage self-evaluation to identify learning needs
- Encourage feedback conversations to develop trust, reciprocal feedback and explore students' understanding of feedback
- Feeding forward so students know how to improve
- Ensure student feels integrated within team
4.5 Theme two: challenges of multiple educators

The second main theme, within this overarching theme, focussed on feedback that students found challenging, within a multiple educator model of practice education. I have frequently promoted these models of practice, as I feel they have the potential for making students less dependent on an individual educator and enable them to benefit from a variety of assessment and treatment approaches. However, reflecting on the findings, I realised I have failed to consider the effect that conflicting feedback within this model has on student learning.

Most participants found multiple educator models of practice education challenging. In this placement model, two or more educators take responsibility for facilitating and assessing student learning, although there maybe one named lead educator (Stiller et al, 2004). This form of delivery is becoming more prevalent in today's practice context where part time practitioners frequently job share, and due to changes in service delivery educators have a number of different roles and are often working across different geographical sites, which may be some distance apart.

Although participants recognised the benefits of having more than one educator, their experience of a multiple educator model was less positive. They highlighted the importance of effective communication within this model of practice education in order for feedback to be of any value.

4.5.1 Sub-theme: “getting inside two people’s heads”

The following sub-theme “getting inside two people’s heads”, refers to the difficulties students faced when trying to interpret feedback when their learning was being facilitated and assessed by more than one educator. A lack of communication between educators within this multiple educator model, made formative assessment more challenging for learners. This was particularly evident when feedback they received was conflicting, and students were left trying to work out which approach to follow in order to achieve their learning outcomes. They therefore spent time and energy trying to work out the best approach, “getting inside two people’s heads”, to ensure they were achieving the standard of practice expected in order to pass the placement.

Andrew reflects on the benefits and challenges of having more than one educator:
"I think that if I'd had one educator I wouldn't have learnt so much ... having two, I had twice the amount of resource, to learn and to pull from, so I learnt probably twice as much information which is fantastic. If you have two educators it's almost like two placements, because you have to get inside two peoples' heads, so I found that initially quite a challenge and sometimes things are in contradiction as well, so you have to balance that off" (p,8)

He saw the value of having more than one educator. However, he recognised that conflicting opinions can be difficult to manage. Andrew ended his reflection about multiple educator models with some thoughts for both educators and students:

"from the perspective of the educators, just everything about communication and what you're doing and what they expect of you is ...is doubly important and from your own perspective, from a student, I would say that it's patience, just hang in there, and if it feels difficult just it will get easier"(p,8)

Sally found her educators' conflicting opinions confusing:

"I had multiple educators on two of my placements. I think one educator would say one thing and the other would say something different and then you do something and your main educator would say "Oh why are you doing that?" (p, 2)

Anna also recognised the challenges when educators had different expectations:

"I just found it a little bit confusing really, if one day I'm with a different physio and she just had different expectations" (p,4)

In contrast she was able to share an example of a multiple educator model that had worked well:

"they worked really well together I think because they were both on the same kind of wavelength ... I'd go and kind of set up my day, tell her what I was doing, where I'd feed forward, and then ... at the end of the day I'd feed back to the other educator and then they were able to communicate with each other throughout the day, because if they're not communicating as well I think, just from... you don't get as much out of the placement" (p,4)

In the above example Anna acted as a "go between" between her educators. She adopted the role of a link person facilitating communication between both educators.
"I'd feed forward" and "I'd give feedback to the other". This approach seemed to work well, the placement was well structured and her educators' expectations were clear. By making Anna the link person in the feedback process, her educators made her feel more empowered (Leach et al, 2001). There also seems to be evidence that Anna felt part of the team and was taking responsibility for her own learning, examples of good practice that support learning (Wenger, 1998; Boud, 2000) and by promoting self-evaluation develop a sense of agency (Molloy, 2009). There is potential for developing this model of good practice within multiple models of practice education, by adopting a form of feedback log to encourage consistency between educators and support student self-direction.

Practice educators who explored my themes also acknowledged the challenges of multiple educator models of practice education. This was a surprising finding as it is not an issue raised at educators' study days.

Jo agreed with other participants:

"it's a real challenge to keep... to keep the educators coming up with a consistent approach really, when they've got very different styles as well. I find that hard to oversee because I struggle to know what the educators want "(pe,1)

Her experiences resonated with the challenges identified by student participants "it's a real challenge". As a lead educator Jo had worked with her team to address some of the difficulties and was convinced there was more work to be done:

"I did some teaching with our team about um... sort of good practice for facilitating um... formative assessments and summative assessment work but they still come up with the same, you know, worries and cons to those, you know, we don't have time to meet up" (pe,1)

Jo's concerns are also shared by Helen another experienced practice educator who has some useful suggestions for how it could be managed:

"I do think that can be a really big problem. Particularly if the educators are not talking to each other, um... I think that's where maybe documenting the feedback can be quite useful because then even if they're not getting a chance to discuss it fully, if the student can take something written along to the other educator, to make sure that they're not going to contradict them or um...other problems" (pe,2)
These concerns are also shared by David, a practice educator leading a team of less experienced educators. He also highlighted the problems he faced trying to delegate responsibility for students to educators who were still “learning the ropes”:

“Well I think... the multiple educator model is a reality of the situation we’re in, that it is a service, it’s that um... people are... educators are being pushed from pillar to post, they don’t have one specific role that they do all day and every day, they’re all over the place, um... I’ve seen the problems if the feedback doesn’t happen... you have problems but I’ve got practice educators who are good but they are learning the ropes”(pe,3)

In the above quotation, David places the challenges he faces, firmly in the context of today’s increasingly demanding practice environment. In his role as a line manager and lead educator he is struggling to support his team of educators who are new to the role and are being “pushed from pillar to post”.

Models of practice education involving the whole team are felt to have a number of advantages these include: decreased student dependency; opportunities for students to experience different practice approaches; increased resources; more objective assessment; and team integration (Baldry Currens, 2000; Bennett, 2003; 2008). However, in contrast my findings suggest that there a number of issues that need to be addressed. These include a clear structure, good organisation and effective communication between educators. Consistent feedback is also essential to prevent students getting confused by differing opinions and feeling uncertain about their progress. Students who were inevitably worried about their final grade found it particularly challenging to “get inside two peoples’ heads” in order to assess their progress.

Bennett suggested that a model of practice education involving the whole team including juniors and peers was well received by students (Bennett, 2008). In contrast, findings from my study suggest that participants found feedback from more than one educator challenging. However, it must be noted that the multiple educator model my participants referred to, consisted mainly of part time practitioners, or senior clinicians working across different sites. In contrast the “learning team model” proposed by Bennett, consisted of a range of team members including juniors and peers (Bennett, 2008:116).
As practice educators confirmed, a consistent feedback approach between educators, is often difficult to achieve due to a number of factors including personalities, learning styles of educators and difficulties in communication due to working patterns and geographical distances between sites. Nonetheless, as practice continues to evolve, multiple educator models will become increasingly more prevalent as service delivery is changing and teams are restructuring and merging.

4.5.1.1 Summary of sub-theme
Participants’ experiences identified that there is an urgent need for communication within this placement model to be improved, to ensure that the quality of feedback is enhanced. However, as an educator in higher education I need to recognize the increasing demands placed on educators in practice, and to ensure that they are supported in their role. There is potential for working with experienced educators who have a lead role in practice education to develop strategies for supporting new educators within multiple educator models. For example the experienced educators I interviewed all acknowledged the difficulties that both educators and students were experiencing.

4.5.1.2 Summary of overarching theme
Throughout the overarching theme “formative assessment that detracts from student learning”, findings indicate that students experienced formative assessment where feedback was delivered to them by educators. Students generally experienced an IRF model (Pryor and Crossouard, 2008) that focussed on deficiencies in their practice (Molloy, 2009). This form of practice equates with convergent formative assessment positioned at the “concrete/procedural” end of the formative assessment continuum as described by Pryor and Crossouard (2010:270). Educators appeared to focus on transmission of feedback as opposed to drawing on pedagogic approaches that actively engage students as part of the broader richer concept of formative assessment (Pryor and Crossouard, 2001).

Interpretation of the findings within the initial main theme “feeling overloaded” suggests that students experienced formative assessment that equates more with the “letter” or “mechanisitic” approach described by Davies and Ecclestone in their research into vocational education (2008:73). Formative assessment was often
viewed as a “means to a summative end” by both educators and students, as opposed to a concept that promotes dynamic student participation in learning and assessment, and reciprocal feedback between educator and students so that both parties learn from each other (Davies and Ecclestone, 2008: 73; Nicol and Macfarlane-Dick, 2006; Torrance, 2007). The increased focus on summative assessment may have been reinforced by a focus on the assessment tool at educators’ study days where time is often limited (Clynes and Raftery, 2008). In addition, as research into education suggests, educators may need to gain further insight into the role of formative assessment and pedagogic approaches that support learning in practice (Davies and Ecclestone, 2008). Whilst it is also acknowledged that an increased focus on criteria and grades may be placing too much emphasis on “assessment as learning” as opposed to “assessment for learning” (Torrance, 2007: 281).

My intention in presenting the findings within the two overarching themes “formative assessment that enhances student learning” and “formative assessment that detracts from student learning” was to provide examples of practice that facilitated student learning, and practice that should be avoided. However I fully acknowledge that this presentation of the themes fails to take into account the fact that participants’ overall experiences of formative assessment during placements will not fit neatly into those themes.

I recognise that practice and experience will undoubtedly vary and is dependent on a number of complex variables including the practice context in which learning occurs (Davies and Ecclestone, 2008) and the quality of the educator/student relationship (Cross et al, 2006). It is therefore important to be aware that students’ experience of formative assessment will vary along the continuum and across convergent and divergent approaches to formative assessment proposed by Pryor and Crossouard (2010) and this should be taken into consideration when links are made between the data and other practice education learning contexts.
4.6 Overarching Theme two

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**Main theme one: Problem based learning influences**

- **Sub-theme** "Taking stock and looking ahead"

**Main theme two: Fulfilling experiences**

- **Sub-theme** "brings it all together & gels it"
- **Sub-theme** "Tangible goals and nothing woolly"

**Main theme three: Learning through relationships**

- **Sub-theme** "in tune and parallel"
- **Sub-theme** collaborating with others

Table 3. Themes and sub-themes: formative assessment that enhances student learning.

4.6.1 Theme one: Problem-based learning influences

This main theme relates to students’ perceptions of how problem-based learning prepared them for feedback and supported their engagement with formative assessment during their placement. Participants talked about the ways in which...
problem-based learning and teaching approaches on campus helped them to identify their learning needs, and to prepare them for formative assessment on placement.

4.6.2 Sub-theme: “Taking stock and looking ahead”

Andrew had clear expectations of formative assessment:

“I see it as a problem that I’ve got to tackle from the start some of the strategies that I’ve employed in terms of communication and in terms of working out how my educator is going to assess me and what they’re looking for. I’ll do that very early on and that comes from problem based learning” (p, 8)

Andrew took a proactive approach to managing his placement learning and identifying his educator’s expectation. It seems as if problem-based learning strategies developed on campus helped him to identify his own learning needs as well as his educators’ expectations. Andrew used this approach to enable him to take an active part in the assessment process as a whole.

Other participants also found that approaches developed through PBL tutorials on campus helped them to manage their learning on placement:

“breaking up any problems that I was having or... or um... basically what I needed to work on and being able to break that down into smaller goals... I think that kind of came from PBL as well because that’s what we did every time we were given a problem at the start of every module when we were given a problem we had to break it down and work through it that way ...and we got that idea of having more specific feedback from PBL as well” (p, 4)

As Anna talked about her experiences of formative assessment she reflected on the learning strategies adopted from PBL that she used during practice based learning. PBL helped her to break her learning goals down into smaller “more specific ones” and to identify “specific feedback” which made feedback more useful and accessible to her as a learner.

Mike also found that regular twice weekly feedback sessions with peers during PBL tutorials helped him to accept feedback, to “take all the advice on board” and subsequently use it to develop his practice:
"The way that they give feedback on how you presented yourself, like your mannerisms, professionalism, I think it can help with all that because you have to be quite quick and sharp when you’re... when you’re discussing anything with a fellow professional. So that it helps in that way because you’re usually fielding all the questions and things like that on a PBL question so it helped with that ..... maybe the taking stock and looking ahead, so taking all the advice on board, kind of assimilating it and... and looking ahead to the next one” (p,5)

The skills he learnt from "fielding questions" and "taking all the advice on board" helped to prepare him for professional practice on placements, and to respond to other professionals. PBL tutorials helped Mike to develop an effective strategy, initially accepting all the feedback, later sifting though it “assimilating it”, and taking ownership, before using it to support his professional development. It is recognized that self-evaluation may help minimize emotional effects of feedback (Molloy, 2009:129). In this example there is evidence that peer evaluation in PBL tutorials helped Mike to accept feedback on placements.

This view is also supported by Sally:

"I suppose being PBL taught you to do a lot off your own back and in our pb/s you tend to give each other feedback on your presentations so perhaps your used to having feedback more than at undergraduate level” (p,2)

She appreciated that PBL helped her to use her initiative “taught you to do a lot off your own back”. As Sally reflected she contrasted the regular peer feedback promoted during PBL, with the different learning and teaching approaches on a pre-registration BSc course where students are not used to getting regular direct feedback from their peers.

Problem-based learning approaches that promote a more social constructivist approach to learning, where learners interact with peers in small groups, are felt to facilitate more self-directed learning that helps students to use their initiative (Connolly and Donovan, 2002; Tiwari et al, 2006). I was encouraged by the above examples where students highlighted the value of problem-based learning in supporting a more active involvement in formative assessment. As an educator who has facilitated PBL tutorials I was aware of students’ active engagement in learning, but had failed to recognise its value as a tool for preparing students for feedback.
There is potential benefit in exploring how a PBL approach may support students in managing feedback challenges on placement.

4.7 Theme two: Fulfilling experiences

This main theme focused on episodes of feedback that students found particularly helpful during their placements and formative assessment experiences that students felt really facilitated their learning in practice. Once again there is a clear focus throughout the main theme on the timing, quantity and style of feedback. Two sub themes emerged from the data and each are explored and discussed in turn.

4.7.1 Sub-themes emerging:

- "brings it all together and gels it"
- "tangible goals and nothing woolly"

4.7.2 Sub-theme: "brings it all together and gels it"

A number of participants talked about the importance of feedback that was delivered close to a practice event. In order for feedback to be useful on placements, it had to be accessible, enabling students to make connections between the feedback they received, and the patient to whom it related so students could subsequently make changes to their practice. This form of immediate feedback was provided by educators after a practice event. It helped students to reflect on their practice, and to place feedback in context. Timing of feedback was crucial as it enabled students to adjust their practice before their next patient, helping them to improve the quality of patient care.

Simon valued feedback that was delivered immediately after he had seen a patient, this helped him to put everything into context:

"I found that feedback after the incident was more beneficial for me, as opposed to at the end of the week, because by the end of the week you've forgotten the situation or scenario. It gives you that chance to discuss it while it's fresh and work on it. I think patients are so sort of complex and individual, they need to be discussed ..on their own ....I think it [immediate feedback] just brings it all into context ....brings it all together and gels it .. when it comes at the end of the week..."
In the above extract, Simon contrasts immediate feedback with delayed feedback that left him struggling to make links between his practice and the feedback. Feedback delivered close to the event was useful on two accounts; it helped Simon to put the feedback into context, which he felt was particularly important when he was working with patients who had complex needs. In addition by “bouncing ideas off” his educator he could explore and develop his own clinical reasoning. This more collaborative approach helped him to retain information about a patient, allowing him to use if more effectively during a follow up meeting with his patient. The words “brings it together and gels it” suggest that immediate feedback helped him to develop a deeper understanding, and gave him a clearer picture of an individual patient case, facilitating his clinical reasoning and decision making.

Claire also found immediate feedback useful as it helped her to relate her educator’s comments to “the specific event”, giving a focus to feedback. If there was a time lapse between feedback and practice, students appeared to have more difficulty in making connections between the actual feedback provided by their educator, and episodes of practice feedback referred to, this often left them feeling uncertain, resulting in decreased confidence:

“I liked to have immediate feedback after I’d been in a session, so it was more tangible to what you were doing, and you’d know the specific event that the educator might have been talking about” (p,1)

Once again Claire is referring to immediate feedback that helped her to make links between her own practice, and the feedback delivered by her educator “so it was more tangible”. This helped her to recognise the practice episode her educator was referring to “you know the specific event”. Recognition of that “specific event” seemed to be a crucial factor in the whole learning process. It appears that if that link was missing, students had difficulty relating feedback to their practice. This could potentially limit their ability to use the feedback for best effect. In contrast with this finding Knight and Yorke (2003) disagree, suggesting that detailed feedback may actually prevent students improving. However, their research focussed on campus
based assignments as opposed to practice based learning, where students need to make subtle changes to their practice on a regular basis.

The above examples of good practice focused predominantly on immediate feedback that was delivered after an event, for example a patient assessment or treatment session. In addition, participants also appreciated having feedback from their educator at the point of practice when they were with a patient.

Although, most of the literature on feedback suggests that it should take place in a private area away from the mainstream of practice, to avoid damaging a student's self esteem (Nicol and Macfarlane-Dick, 2006) my findings suggest this is not always essential. Participants valued a form of feedback described poignantly by Mike (p, 6) as “feedback in the moment”. When it was undertaken judiciously and in a supportive way, it facilitated practice development, as opposed to undermining student confidence. Participants talked enthusiastically about examples of “on the spot” feedback, a form of coaching, that enabled them to adjust their clinical reasoning and or “fine tune” their psychomotor skills. Mike really valued “in the moment feedback”, as it allowed him to make instant adjustments to his practice. He saw feedback as a way of improving his practice, and valued suggestions made by his educator:

“But this way I could do it straight away, take their views on board and then you could really see improvements straight away because from the first patient there was always an improvement to the second one and continuous just improving I think and just like a cycle...so I prefer to have it in the moment to maybe take it on board and use it for the next patient almost straight away” (p, 5)

He could take his educators' opinions on board, and subsequently feed them into his next practice cycle. He was keen to act on feedback without delay so he could make immediate changes to his practice. For him this instantaneous feedback had direct links with adjustments that he needed to make to his practice to improve the quality of patient care. There is a sense that he is taking responsibility for his own practice “I could do it straight away” and the immediate feedback helped him to achieve his goal. Sadler's seminal work states that we cannot guarantee that feedback has been effective, unless there is evidence that students have used it to develop their practice (Sadler, 1998; Boud and Falchikov, 2007). Although Sadler's review of formative assessment focussed mainly on research in schools, I believe the issue regarding
students' ability to effectively use feedback remains the same for students in any learning context.

Pam also valued "on the spot" feedback she got from an educator in the community that helped her to make an adjustment to her practice:

"I was testing muscle strength and they'd say oh you could actually just do this so they stepped in... it was helpful because it was an easier way to do something and I was all tangled up .....they would just not take over but they'd show me and then they'd say ok carry on so again it would be the stepping in but not correcting me" (p.7)

She welcomed the fact that on a community placement her educators spent a lot of time observing her practice. This allowed Pam's educators to help her adjust her handling during a treatment session. Pam emphasised the fact that she did not perceive her educators to be taking over, and differentiated between "stepping in", which she saw as a form of coaching as opposed to "correction" where an educator would take over the whole treatment.

Instinctive spontaneous formative assessment has close links with reflection in action (Schon, 1983; Cross et al, 2006) as opposed to feedback after the event that is similar to reflection on action (Schon, 1983; Cross et al, 2006). Participants reflected on the benefits of on the spot or "in the moment" feedback that helped them to make immediate changes to their practice ultimately improving the quality of patient care. This form of feedback seemed to be more frequent on placements where educators were in regular contact with students and therefore could freely observe their practice.

For example, on community placements an educator and learner are usually together in a patient's home, and in rehabilitation settings which are more open practice environments, a number of practitioners often work closely together as patients with complex needs are usually treated by more than one person. The success of this feedback "in the moment", analogous with a form of on-the-spot coaching, was dependent on educators carefully assessing the situation to prevent a student's confidence being undermined in front of a patient (Scully and Shephard, 1988).
Linda, one of the practice educators, who explored my emergent themes, had worked in a rehabilitation unit for patients who had undergone amputation, where the team's philosophy was based on a holistic approach to patient management. She recognised the very sensitive nature of feedback, and the impact it can have on students:

"I think ground rules to start off with are terribly important... Are you happy for me to interject in front of a patient? It has to be handled very sensitively [emphasis here on very sensitively] having clear boundaries as to when and how feedback should be given or should the student be given permission by the educator to ask am I going along the right way to reassure the patient as well" (pe, 4)

She was very clear that educators and learners had to set ground rules at the start of a placement in order for both parties to benefit from the feedback process. This was deemed vital to ensure that students are happy with educators giving them feedback in front of patients. Linda also stressed the importance of taking into account the patient's needs, so they felt "reassured" during treatment sessions.

If everyone involved has clear boundaries this will help to avoid an educator adopting a dominant role that could damage the trust between student and patient, ultimately impacting on the quality of patient care (Ramani and Leinster, 2008). I feel this form of feedback is particularly beneficial for students at the early stage of practice, as it can promote adjustments to motor skill development, as well as encouraging reflection in action, a form of reflection which novice practitioners initially find challenging (Clouder, 2000b).

4.7.2.1 Summary of sub-theme

Immediate feedback is highly valued; it helps students place it in context and an essential factor in effective formative assessment (Ernstzen et al, 2009; Brugnolli et al, 2011). This approach gives students something to "hang their hat on", increasing their understanding of the feedback message and supporting their clinical reasoning through discussion and sharing ideas. Open feedback discussions between educators and learners helped students to gain a deeper understanding of a complex case, an approach which drew on a social constructivist approach to learning (Rust et al, 2005) as opposed to a transmission model (Kell and Jones, 2007).
There was consensus in most participant interviews, and in the theme board data about the value of immediate feedback in supporting and facilitating learning on placement. Feedback that was provided soon after students had seen a patient was felt to be the most useful. They found it easier to assimilate; they could relate to it and put it in context, making links with their patients. As a result they were more likely to be able to use it effectively to feed into their clinical reasoning and subsequently make changes to their practice.

From my own experience as a practice educator and as a visiting tutor, I am increasingly aware that students are continually trying to meet the demands and complexity of practice, as well as being concerned about their performance, a situation that is particularly acute in the early stages of practice education. This inevitably affects their ability to retain information and to relate feedback to individual patients with the result that valuable time and feedback may be lost. In addition students do not have experience to draw on to inform their clinical reasoning and although participants in my study had all followed a problem based learning approach, that promotes clinical reasoning (Tiwari et al, 2005), their patient mileage remained limited. So feedback that is more accessible to learners is inevitably considered to be of a higher quality.

In the sub-theme that follows, and is closely linked to the previous sub theme participants highlight the value of a more formal type of feedback linked clearly to their placement goals.

4.7.3 Sub-theme: “tangible goals and nothing woolly”

In this sub-theme, participants talked about a form of feedback that was closely linked to supervision, a model of feedback that is standard practice in occupational therapy practice education, also termed “deliberative formative assessment” (Cross et al, 2006:158). This more formal structured feedback enabled students and educators to review progress together.

Although, participants felt this form of good practice was valuable, it was not a regular occurrence on all physiotherapy placements. Whilst weekly protected feedback time is an expectation, and indeed a requirement on occupational therapy placements, it is currently not an expectation on physiotherapy placements. This
example of good practice could be integrated into the proposed new guidelines for physiotherapy practice education, and future HPC standards for practice education. It is interesting to note that HPC placement standards focus solely on assessment and students who are failing to achieve, paying scant reference to learning and teaching approaches that support good feedback practice (HPC, 2009).

As they reflected on their experiences participants talked about the importance of regular protected feedback time during placements. In addition to immediate feedback that often focussed on specific patients, many of them valued the opportunity of some form of weekly protected feedback meeting with their educator, where they were able to review and discuss their overall performance and to set tangible goals for the following week. Although, this may be regarded by some as a form of summative assessment, students saw it as a way of feeding forward into the future (Molloy, 2010).

Claire valued specific weekly feedback in a community setting:

"Because otherwise...it's not really very focused you probably don't develop yourself as much...as well as you could do if you had specific feedback to focus on.....I was made to make objectives every week and then they would feed back to me and I would feed back about how I'd feel if I've achieved those objectives, and if I haven't, why haven't I?...I feel that was a much better way to focus you throughout your placement so you feel you're hitting goals as you go along"(p,1)

She benefited from protected time "to have a summary" of the positive and negative aspects of her practice during the week, this enabled her to plan for the following week. Claire contrasts this with an acute ward setting:

"at the end of every week to have a summary of what's been good and what's been bad about that week to have a set time to feed back, whereas on a ward setting, there's not as much of that kind of regimented timing. Therefore feedback always gets pushed back and pushed back, whereas actually it always should be brought forward I feel, it's really important " (p,1)

"Why ask my preference when it is not going to be implemented?" (excerpt reflective log p,1)
She was frustrated in a ward environment, where feedback time was not set aside and her request appeared to be ignored. Claire’s irritation when feedback failed to be the main focus in an acute setting may have been due to a conflict of interest between Claire’s needs and those of her educator. Whilst students are keen to have immediate feedback to develop their practice and to improve their mark, their educators’ prime focus will inevitably be on prioritising patients’ needs (Scully and Shephard, 1983), whilst trying to balance other practice demands (Skoien et al, 2009). However, participants expressed concern that a paucity of feedback, linked to a lack of observed practice, not only affects their own development, but also impacts on the quality of patient care if mistakes in their practice remain undetected.

Both Andrew and Mike valued having specific feedback related to clear goals:

"when I actually had the formative assessment I was given very constructive feedback, some very tangible goals and aspects of how I could do it. Yeah, the fact that’s measurable really” (p,8)

"we always had our set goals in mind so the feedback might have been specific towards the set goals” (p,5)

Here Andrew and Mike echo the value of feedback linked to clear achievable goals and a way of feeding forward “aspects of how I could do it”.

4.7.3.1 Anna’s experience

I have included the following example from Anna’s interview as I feel that it provides a rich example of how feedback that is well structured and forms part of a reflective cycle of learning is very valuable for students on placement. This is in sharp contrast with Peter’s experience on page 106.

Anna found that weekly supervision time enabled her to combine her own reflection with joint goal setting in preparation for the following week. This more formal form of feedback took place in a community setting, where she and her educators had protected time to discuss her progress and set weekly goals together:

“There was a weekly kind of supervision kind of more of a formal feedback every week which was really good, because you don’t get that on all placements and I thought it was good because you don’t have to wait until you’re halfway and then discover that in that
formal supervision, every Friday um er actually I did a reflection for that every Friday as well, so working on that and then setting goals for the next week on what I wanted to do and what I wanted to do better or differently” (p,4)

Here Anna emphasised the benefits of regular feedback. The weekly feedback is seen as good practice, and Anna recognised that this was not common practice “because you don’t get that on all placements”. She disliked having to wait until halfway through the placement for her feedback, and had an apprehensive tone in her voice as she reflected on one experience, “and then discover that” where feedback had been withheld. Anna was worried about any possible surprises that may lie in wait and remain undetected until the halfway stage. The weekly supervision feedback helped to build her confidence:

“it can build up scores every week which is what we did within that formal supervision, every Friday actually I did a reflection for that every Friday as well, so working on that and then setting goals for the next week on what I wanted to do and what I wanted to do better or differently, and if there was any other areas I hadn’t looked into in the other weeks that I wanted to look into in the following week.......I wasn’t waiting ‘til my halfway to see if I was doing everything right ”(p,4)

Anna’s use of words “it can build up scores” seems to refer to marks on the placement assessment form. She saw this formal feedback as a way of augmenting her performance and an incremental part of the final assessment.

The weekly feedback sessions acted like steps towards a final goal, the summative assessment. By incorporating reflection into cycles of feedback her educators helped Anna to self-evaluate. Throughout this whole section of the interview Anna repeatedly used the word “I. The focus here was on Anna as both a learner, and practitioner. She appeared to be an integral part of the whole feedback process using words such as “they were set by both of us” and “it was what I wanted”. This latter phrase is repeated three times indicating that Anna was taking responsibility for her own learning, and appeared to be playing an active part in monitoring her learning.

Active involvement of students in formative assessment is seen as an essential, all too often neglected, part of the feedback process (Juwah et al, 2004; Rust et al, 2005). By engaging Anna in a more social constructivist approach to feedback, where she actively
participated in self-evaluation and goal setting, her educators facilitated her learning more effectively. Self-directed learning was fostered and practice development promoted. In addition by encouraging Anna to self-evaluate, and reflect on her practice they were also encouraging the development of her metacognitive skills; essential skills deemed to be essential for preparing students for future employment and life long learning (Reid and Fitzgerald, 2010).

Anna found the holistic and evidence based approach adopted by her educators enabled both parties to achieve successful and meaningful feedback that incorporated two way reciprocal feedback: “they were keen to get my opinions as well”. Anna’s educators helped her to set goals that met her needs as a learner. They also ensured that the weekly feedback session enabled them to review a range of her professional activities. By incorporating her written reflective piece into the whole process, Anna was able to discuss what she had learnt, providing further evidence to support her professional development and to develop her skills of critical reflection.

Anna’s experience links to the main themes: fulfilling experiences and learning through relationships. It demonstrates how the core interconnecting factors of style, amount and timing of feedback are crucial and demonstrates the importance of reflection in promoting active student participation.

Helen acknowledged the benefits of weekly feedback:

“I found it really helpful, um... and it always made me go away feeling more relaxed at the weekend, because I felt that if I had got any problems, they would have come out then and had been discussed, so you don’t then spend the weekend mulling over what’s gone on um as an educator it also helps with um... when you have to do the summative assessment it... it gives you kind of evidence for where that student’s at and what you’ve said to them, because obviously at the end of six weeks it’s hard to remember what’s gone on in the earlier weeks, um...” (pe,3)

She could identify with the pressure students are often under. As a student Helen had also spent time “mulling over” problems, and could relate to their concerns. She also recognised the benefits of weekly feedback for educators, who often find it hard to remember key aspects of a student’s performance when making a final summative
assessment judgement. This more holistic approach informed by ongoing dialogue between educator and learner should potentially result in more authentic and accurate assessment (Vu and Dall' Alba, 2008).

The opportunity for educators and students to review goals that students had set the previous week was felt to be beneficial making feedback more specific (Clynes and Raftery, 2008). Protected feedback time linked to tangible goals was viewed as essential, enabling participants to achieve goals they had set the week before. This prevented them from getting "woolly" feedback that was vague and lacked clarity ultimately stunting practice development (Ende, 1983; Wood, 2000). There was a clear focus on the student's learning needs preventing crucial time for improvement being lost.

Participants talked with enthusiasm about examples of good practice, where they were encouraged to reflect on their practice, identifying examples of success and areas for development. This enabled educators to provide supplementary feedback augmenting students' initial analysis of their performance. This form of practice promoting self-evaluation and ownership is thought to make students less defensive about feedback, consequently leading to a sense of agency allowing the learner to retain some control over the whole process as opposed to being a 'passive recipient' of the feedback message (Molloy, 2010: 1157).

In contrast with my findings, students in Molloy's study in 2006 were reluctant to engage in self-evaluation, despite limited attempts by educators to promote it. I feel this finding is noteworthy, as Molloy's study is one of the few research studies in physiotherapy education that has specifically focussed on placement feedback. Of note is the fact that student participants in both studies had followed a problem-based learning approach that promotes self critique. However, there was evidence in this study that a number of educators were encouraging self-evaluation.

The image of an optical lens came into my mind as I thought about the positive examples of feedback that students shared. These reflective models of feedback seemed to provide a sharper focus as feedback was delivered incrementally, preventing it from being overwhelming, in sharp contrast to the previous examples identified in the theme "my brain is overloaded". In these recent positive examples students were an integral part of the whole process and were actively involved in
goal setting "they were set by both of us". This reflective process seemed to make feedback more accessible, ultimately reducing the pressure of formative assessment. These examples have close links with models of reflective practice that promote collaborative analysis between learners and educators leading to a deeper understanding (Brookfield, 1998; Best and Rose 2005; Delaney and Molloy, 2009).

This largely student led model of good practice incorporated a cycle of reflection, where self evaluation was promoted ensuring the student needs were taken into account. Exchange of feedback between educator and learners was encouraged enabling adjustments to be made to meet the learner's needs. Research evidence suggests that students need adequate time to reflect on their practice in order to make appropriate changes informing their practice development (Donaghy and Morss, 2000; Skoien et al, 2010). Examples of feedback where educators encouraged students to focus on successful aspects of their practice were encouraging, and in sharp contrast with evidence that suggests that health professional educators have a tendency to focus on negative aspects of performance (Cross et al, 2006) promoting a "diagnostic tendency" (Molloy, 2009:129). When students were encouraged to reflect on their learning and evaluate their practice a more holistic approach to formative assessment was promoted.

I was encouraged by this example of good practice that provides evidence that some educators in practice are adopting approaches that promote more sustainable feedback by encouraging students to take responsibility for monitoring their own practice (Boud, 2000; Hounsell, 2007; Boud and Falchikov; 2007). This more egalitarian approach is distinct from an earlier example of hidden feedback or feedback arriving "out of the blue" that may constitute a form of power exerted by educators over learners (Ende, 1983). Consequently if educators are encouraged to adopt a weekly more reflective model of "supervision" there is less likelihood for feedback to be withheld.

There was also evidence in this sub theme that although educators were delivering feedback, transmission was more balanced, as they also promoted student self-evaluation, using reflective prompt questions which participants found helpful. This was an encouraging finding as physiotherapy practice educators have sometimes struggled to facilitate reflection due to limited understanding of the concept (Clouder,
2000b; Kell and Jones, 2007; Morris and Stew, 2007). However, I note these examples of good practice were exceptions and not the rule “you don’t get that on all placements” (Anna) and students were reliant on educators finding time for meaningful discussion. In contrast with my findings an earlier study of physiotherapy students, Molloy, (2006) found students were reluctant to engage in self-evaluation, despite practice educators’ attempts to promote it. Findings from Molloy’s study also indicate that time constraints prevented educators from persevering in their efforts to facilitate student self-evaluation.

4.7.3.2 Summary of sub-theme
As the above examples of good practice illustrate students benefited from formative assessment that was closely related to a practice event making it more accessible, enabling them to place it in context and relate it to individual patients. In addition when feedback formed part of a cycle of reflection, promoting self-evaluation, and enabling educators and students to review weekly goals more collaboratively the whole process seemed more incremental and formative assessment appeared to be less pressurised. There is potential for incorporating a form of weekly feedback that is similar to supervision adopted by other health professional groups, for example occupational therapists, as a mandatory placement component. This may encourage educators to set time aside and prevent feedback being an ad hoc occurrence and more of an integral part of the whole learning experience.

4.8. Theme four-Learning through relationships
One main theme emerging from the data related to students’ engagement in learning relationships during formative assessment. The variety of learning relationships relate closely to the style of feedback, a factor forming one of the overarching factors that influence feedback. There was evidence that students engaged in learning relationships with a range of people in addition to their primary educators on placement. However, as the data suggests some of the learning relationships could be developed further to enable them to make the most of feedback opportunities. This main theme is divided into the following sub themes:

- “in tune and parallel”
- collaborating with others
4.8.1 Sub-theme: “in tune and parallel”

The sub-theme “in tune and parallel” contained a number of examples that illustrated how an open relationship between educator and student promoted two way exchange of feedback, as opposed to one way delivery evident in earlier examples where educators transmitted feedback in a more didactic way (Wood, 2000; Molloy, 2009). It draws on participants' experiences of open formative assessment relationships where students felt comfortable talking to their educator, and as a result appeared to engage more collaboratively within the feedback process. There were opportunities for students and educators to problem-solve together. Participants talked about the importance of having an open and honest relationship with their educator. Such a relationship built on trust, and facilitated by effective communication skills of an approachable and committed practice educator, was viewed as an essential ingredient for successful formative assessment. These more open and relaxed learning relationships made formative assessment a more egalitarian process. This in turn seemed to encourage learners and educators to adopt a reflective form of briefing and debriefing, entering into a form of feedback conversation.

Opportunities for reflective approaches to formative assessment that promoted self-evaluation, and open discussion, were easier to achieve in certain practice contexts. These included rehabilitation units, stroke units or community settings where the pace of practice was somewhat slower. In these settings students and educators often spent more time together. Nonetheless, there were opportunities in some outpatient placements for students and educators to work collaboratively problem solving and bouncing ideas off each other. Students also identified perceived benefits for the educator when feedback was more collaborative; recognising that an educator could easily become bored if they were purely observing a student for six weeks and there was little exchange of ideas.

Mike found feedback conversations helpful:

"I think it was because we were quite open with each other. I knew um the feedback was really like truthful and direct, we both knew how we wanted it to happen so we both knew where we stood if I hadn't have had the conversation with him, ... ... he mightn't have known exactly how I wanted to take it, whether I'd
take it well or I'd take it badly. We both knew where we stood, so I think that helped" (p. 5)

Feedback preferences were clarified and self-evaluation promoted:

"We'll usually went for five minutes into our little physio gym, had a sit down, talked through what went well, what I could have improved on uhm and future ideas then he would give me his feedback on what I had said and what he had witnessed as well. So he gave me both sides of it and I thought that was really, really good" (p. 5)

Mike particularly valued feedback from his educator about his ability to self-evaluate. His educator initially encouraged Mike to self-evaluate, and then validated Mike's self-evaluation "he would give me feedback on what I said". Initial feedback was followed by a second wave of feedback that focussed on his educator's observation of Mike's practice. He found this double validation very constructive "so he gave me both sides and I thought that was really, really good".

Opportunities for reflection were greatly valued by students, who were encouraged to self-evaluate during debriefing sessions, and to openly share their clinical reasoning. This sense of agency promoted by active student participation is often lacking in practice education (Molloy, 2009). Further analysis suggests that some educators took the process a step further by validating students' ability to self-evaluate as Mike's example illustrated. This is felt to be an important factor in developing skills of critical reflection, as students are more likely to feel comfortable in engaging in self-evaluation if educators support them in developing self-critical skills (Molloy, 2009). Validation of practice through effective feedback is also felt to promote self-esteem (Gibbons, 2010), which may account for Mike's enthusiastic support of his educator's approach. This form of good practice may be key in supporting students who have low self-esteem and could be adopted following practical examinations on campus and developed in practice settings.

Andrew also valued his educators' open approach:

I'd say openness, honesty and openness. Er they're approachable, friendly, those sort of things. Not authoritative, not judgemental... when you realise they're
approachable, and they’re not that scary person you imagine you can ask about how you’re going to be assessed in a very open ...open way ... (p,8)

Andrew saw an open and honest relationship with his educator as an essential part of formative assessment. When educators were “approachable” and “friendly”, he felt more comfortable talking to them about how he was going to be assessed.

He particularly valued the “big opportunity” to debrief in the car:


  she actually prompted me to say how did that go, how did you feel that went? And then it became natural for me to... to disseminate the treatment session and what I thought and... by the end of the placement we were just singing from the same hymn sheet because our thinking was so in tune and parallel, that it... it was, you know, it was almost perfect (p,8)

In the above extract, Andrew’s educator adopted a reflective approach, promoting self-evaluation, which encouraged him to “disseminate what I thought”. He described feeling “in tune and parallel” with his educator, and “singing from the same hymn sheet”. The debriefing that went on in the car following a patient visit was a form of reflective conversation.

Although, time constraints have been consistently identified as prohibiting factors that deter reflective discussion, participants found that even a few minutes were beneficial. Here educators and students captured time between patients whilst travelling in the car, or walking to another ward. It is interesting to note that these short periods although often impromptu, were acceptable as there was collaboration between learner and educator. In contrast feedback that was delivered in a one way fashion by an educator at impromptu moments was less helpful.

David a practice educator also concurred with student participants who welcomed an open relationship. He felt this was crucial if educators expected students to provide them with honest feedback:

“it’s not just your responsibility, which when I first started, I thought maybe, you know, you... all the responsibility was on your... you to deliver this perfect learning experience, but, you know, it’s certainly a sort of more equal relationship, and so their feedback to you is very important and you have to invite that. They have to
feel comfortable for that, so... um... you know... so getting that feedback is very important" (pe,3)

As an experienced educator working in the community David also valued the chance to have feedback conversations in the car between placements and was committed to promoting a reciprocal approach, acknowledging that students have a key role to play.

Within a supportive and open relationship, students felt more comfortable identifying how they wanted to receive feedback, establishing clear channels of communication so both parties “knew where we stood” and timing of feedback could be optimised. One participant in my study reflecting on the potential benefits of discussing feedback preferences was subsequently able to feed the idea into her future placements as well as identifying its potential for forming the basis of pre-placement preparation (Kelly, 2007b).

Simon also valued the approach adopted by his educator in a neurology setting who provided feedback in a relaxed way when he was struggling to assess a stroke patient who had complex needs:

“She was quite relaxed, quite easy, she was quite friendly,...she would break it down and make it almost seem easy to understand [feedback] you know, just sitting on a plinth and just sort of chatting about it...off to the side, so that was quite easy sort of feedback ... I mean you didn’t have to hold anything back you could just sort of tell her why you did everything you did so it was quite good and she seemed quite intent to listen unlike some educators who sort of ... I’m sure they listen, but not actually take it on board whereas she seemed to take it in quite a lot and really come back with positive feedback and adaptations to your practice” (p,6)

This relationship helped Simon to take feedback on board “so it was all quite easy to understand” as his educator broke it down into manageable pieces and Simon felt free to share his thoughts openly. As Simon talks about his experience, you almost have a vision of the two of them sitting together, talking things through, “just sort of chatting off to the side”. His educator seemed to actively listen to him. Her feedback was useful and related to his needs, as opposed to other educators who seem to pay lip service to the whole process.
When educators demonstrated commitment, students were more willing to share their clinical reasoning, knowing that their needs were being heard "she seemed intent to listen" (p, 6) and subsequently addressed. These effective teaching behaviours are identified in medical education (Ramani et al, 2006); nurse education literature (Gilmartin, 2001; Tang et al, 2005); occupational therapy education (Mulholland et al, 2006) and in physiotherapy education (Bennett, 2003; Kelly, 2007b; Ernstzen et al, 2009; 2010). Participants contrasted the value of having an active listener with one who appeared to listen, but failed to take their views on board, demonstrating insincerity and a lack of commitment to meeting their needs as learners.

Jo one of the practice educators confirms the importance of an equal partnership, one where educators are committed to facilitating learning and empowering students:

"Because I think, you know, this... it comes back to this sense of disempowerment doesn't it? The student needs to feel empowered that they have control of their placement and that they can trust their educator to actually have an equal relationship and an understanding and want to facilitate their learning. They need to be able to feel that if they're setting goals, they're going to achieve them so... you know, it's crucial" (pe, 1)

Jo recognised the difficulties that arise if educators lack commitment to supporting student learning, highlighting challenges educators face in understanding the purpose of learning contracts. This was an interesting observation highlighting a potential gap that needs to be addressed in practice educators' role development.

Participants placed particular emphasis on the value of establishing an open and honest relationship with their educator that was based on trust (Hughes, 1999). Within this relationship it was important for educators to be truthful and clear in their feedback to prevent essential information about students' practice remaining undetected (Ende, 1983; Kelly, 2007b). Students responded well to a more egalitarian relationship facilitated by open and effective communication as they could share their thoughts without fear of criticism from their educator leading to a more collaborative relationship that ultimately facilitated rich discussion informing the whole learning process (Emery, 1984; Neville and French, 1991; Kelly, 2007a).
importance of successful communication within a practice educator-student relationship is well recognised (Emery, 1984; Cross, 1995; Kelly, 2007b; Morris 2007), nonetheless most health professional studies have focussed on the learning experience as a whole and few studies have explored student and educator relationships within the context of formative assessment.

Students appreciated educators who seem more relaxed, friendly and approachable (Bennett, 2003). These were qualities that built trust, making students more confident in the quality of feedback they received, and also increasing student belief in an assessment process which appeared to be more transparent. Evidence suggests that students remain concerned about assessment on placements due to its perceived subjectivity, and increased transparency can only enhance collaboration in that process (Cross et al, 2006).

One key feature identified by participants was the need for mutual respect for each other, placing emphasis on educators’ acknowledgement that students are learning on placement, and that expectations and subsequent feedback should be realistic and related to their stage of learning (Morris, 2007; Skoien et al, 2010).

Claire recognised the need for mutual respect:

"so you respect them as they're elders, but they have to respect that you are a student and you are learning, rather than someone who is practising and you did this wrong, you did that wrong, you did that wrong, rather... you know, they have to be constructive with that, you know, feedback, um... and but you know, I think you can... you can have authority over someone without being in your face. And I think that's a really important balance to have", (p, 1)

Skoien et al (2009) highlight the importance of educators recognising that competency develops "over time" and students need time to develop as practitioners. However, in today's health professional environment, educators who are under pressure to assess student competency and fitness to practice within a relatively short period of time, may unintentionally disregard that effective learning in practice takes time, a commodity in short supply within practice contexts.
4.8.2 Promoting transparency in relationships

Participants also felt comfortable with educators who remembered what it was like to be a student and shared their experiences:

"I think both of those that told me about bad experiences they had as a student, how they didn't want to repeat those on someone else" (p, 8)

Andrew felt reassured that his educators did not want him to have a poor experience on placement "they didn't want to repeat those on someone else" and this in turn helped him to trust his educators.

Learning relationships between educator and student were enhanced when educators shared their individual experience with students, openly talking through their clinical reasoning or their experience of being a student on placement (Clouder, 2000a). This example of good practice is felt to enhance the trust between educator and learner as the educator is viewed in a more human light and one who can remember the challenges students face in practice settings (Bennett, 2003; McAllister and Lincoln, 2004). However, this may be a skill that needs to be developed, as some educators particularly those who are new to practice education, may feel less confident sharing their thoughts with students. They may be concerned about appearing incompetent, and placing themselves in a vulnerable position (King et al, 2009). This is a skill that could be incorporated into practice education role development as it has benefits for both educators and students. For example educators who adopt this practice appear to develop a more successful relationship with their students (Molloy, 2009) and students may feel under less pressure to impress an educator who can identify with their position as a student.

Sally and her neurology educator engaged in a form of collaborative discussion feeding back to each other while assessing a patient:

"I just think it was the way it was done it was she talking to me like an equal rather than like I was a student which I think made a huge difference, and made me feel better about myself and you know she didn't put me down in front of the patient because we'd just be discussing what we'd felt in the limbs and then we'd say to the patient this is what we think is going on", (p, 2)
Repetitive use of we suggests that educator and learner worked together during a neurology assessment of a patient's tone. Sally feels she is treated as "an equal" and for her this made "a huge difference". This positive mood is also reflected in Sally's theme board where it moves from initial pessimistic tone to a larger plasticine image with a smiling face.

Although, Sally and her educator worked together her words suggest information is transmitted to the patient "this is what we think is going on". There appears to be little involvement of the patient in the process.

4.8.3. Patient involvement in formative assessment

Of note from the findings is the lack of involvement of patients in the feedback process. Despite the fact that some students found feedback from patients and relatives useful, and at times a boost to their confidence, especially when they were working with patients who had complex needs, it appeared to be ad hoc. As current Department of Health policy places increasing emphasis on the quality of the patient experience, and the importance of patient centred approaches to health care provision (DH, 2008). I feel there is potential for promoting more active participation of patients in the feedback process. For example, students could be encouraged to seek feedback from patients about their communication and interpersonal skills as an integral part of their professional development. Such an approach could be used to help them develop their patient education skills, as well as enhancing their active involvement in collaborative feedback.

4.8.4. Summary of sub-theme

In today's practice education environment where time is of the essence, early conversations about feedback may have benefits from an educator's perspective, preventing valuable time from being lost by educators who continually grapple with the conundrum of how to address feedback issues. A conclusion that may also be drawn from the data is that feedback conversations may deter educators from engaging in vanishing feedback and failing to address feedback issues, a common and persistent issue identified in the literature (Ende, 1983; Molloy, 2009).

Recent research into physiotherapy practice education found that feedback conversations were lacking, and recommended an exchange of feedback that
promotes a less didactic relationship between learner and educator (Molloy, 2009). However, Molloy's research focussed on more formal episodes of feedback while my study explored students' experience of both instinctive (spontaneous) and deliberative (planned in advance) feedback (Cross et al, 2006). Findings from my study also suggest that real opportunities exist on placement for participants to engage in meaningful feedback conversations with their educators, helping them to develop their self-evaluation skills, to address feedback preferences and subsequently use those skills to support their future practice. Nonetheless I believe this is an area of formative assessment that could be explored in more depth and should form a focus for the preparation of both learners and educators.

4.8.5 Sub-theme: collaborating with others-learning from other disciplines

In this sub-theme participants talked about the value of learning and working with other health professionals who helped them to view their practice from a different perspective. This enabled them to explore different ways of working with patients, and ultimately to develop a more holistic approach to their practice. In today's health and social care context, where patient care is delivered by a range of health and social care practitioners working in integrated teams, it is essential that students have the opportunity to gain feedback from other team members. There is currently a paucity of evidence supporting interprofessional learning in physiotherapy practice settings despite the fact that "the clinical setting is an ideal learning environment for the development of skills conducive to collaborative practice" (Hilton and Morris, 2001:171).

Students valued the opportunity of learning in an interprofessional team where they were encouraged to think more holistically about their practice. Feedback from a variety of team members including social workers, occupational therapists and nurses enabled them to consider alternative ways of working and provided them with an increased awareness of professional role identity. These interprofessional team members included qualified practitioners, rehabilitation assistants and in some cases students. Students benefited from "getting their take on things" (p, 2), it helped them to learn more about treatment and management approaches that other professionals used. This made them think more creatively about their own assessment and
treatments. In addition the range of different feedback approaches adopted by interprofessional team members promoted a more holistic approach to practice.

Some participants received feedback either indirectly or directly from other team members, enabling them to adopt a more holistic approach to their work with patients. However, they also felt that there is potential for developing interprofessional feedback through a more focussed use of other team members.

Research into problem based learning in nursing (Smith and Coleman, 2008) and occupational therapy (Connolly and Donovan, 2002) demonstrates that PBL promotes a more holistic approach, preparing students for future team working. As Sally reflected on her experience she made links between PBL and interprofessional learning in practice:

"we’d be able to discuss what I’d found about the home situation and it was very holistic it was very holistic adopting a holistic approach and we worked in a big team as well OTs and nurses and social workers uhm so it was quite nice you had to think very holistically, and they encouraged that so I found that a very positive experience" (p,2)

Her repeated use of the word holistic suggests that for Sally this was a valuable experience. Later in the interview she explored the potential benefits of having feedback from other team members:

"uhmm [hesitates] I think working more very much more in a team and having a lot of time with people rather than your educator because everyone give you feedback in a different way and I think that would be quite nice and I think quite good at developing yourself holistically which I think is important more and more to these days think about everything and I think if you’ve got time with other professionals like the occupational therapy staff they can give you their take on things and say well if that were me I’d have done this way" (p,2)

Sally felt that feedback from other professionals may help students to experience alternative feedback approaches, and welcomed the fact that other professionals “can give you their take on things”, leading to a more holistic approach. This finding is in contrast to an earlier finding, where team members were likened by Anna to “under cover agents".
My interpretation is that a subtle distinction exists between students who are actively involved as members of a team within a “community of practice” (Wenger, 1998; Green, 2005), where feedback forms an integral part of the interprofessional team’s role, and indirect somewhat covert feedback from team members that is “recycled” to students via their educator. Linda, one of the practice educators suggested that team members may be unsure of their role in the feedback process:

“do other professions feel that they might be treading on people’s toes by saying something, um...? that’s a professional boundary issue”(pe,4),

This is an area that I feel needs further exploration. If interprofessional team members are encouraged to provide feedback, students should feel more comfortable and accepted as part of the team. This should support a more authentic form of formative assessment and facilitate their professional development (Vu and Dall’Alba, 2008). It seems essential in today’s health care environment, where practitioners are increasingly managed by professionals from outside their own professional group that students are used to receiving feedback directly from other team members.

Participants also had the opportunity of learning and working together with occupational therapy students on placements benefiting from immediate exchange of feedback following joint assessment and treatment of patients. Simon talks about his positive experience of working with an occupational therapy student on one of his placements:

“Recently I got some feedback off an OT student which was quite interesting. I think maybe in terms of like a confidence boost to me....we were actually working together on one or two patients...it worked quite well and just trying to get the most out of our patients ...I think uhm for me [peer feedback] it’s given me sort of more like understanding of other people’s roles um how other people perceive your work as well, very much so,

... I mean I got a lot more respect for what they did I understand more what they’re doing and stuff and the goals they need to meet and the goals we need to meet and how to work together” (p,6)
Although, Simon had been in contact with OT students on his course, opportunities for interprofessional learning were limited, and there had been few occasions for interprofessional working in practice:

"Uhm and I think in terms of feedback they can give maybe just different stuff that you wouldn't have thought of..they may just have a different idea that you haven't considered so it was quite good" (p,6)

As Simon reflected on his experience with the occupational therapy student he recognised there may also be efficiency savings for the service and benefits from a patient perspective:

"....maybe combining assessments and bringing it together so you get two sessions in one.... if you do a joint assessment I found lots of times I would do my physio assessment and then have to go and speak to the OTs and feedback whereas if we did it together we'd just discuss it straight away that was it done. You kind of end up chasing people forever you're on the phone....it got a bit frustrating because one of my patients was capable to go home but we were waiting for equipment. It (joint working) sort of brings it together and at the end of the day it would have saved time ....it would have made it more alert". (p,6)

By engaging in feedback with a student from a different profession, Simon was able to view his practice from a different perspective, and also to look at the wider context by exploring issues of service delivery and quality of patient care. Interprofessional peer feedback helped Simon to identify an area of service development that could inform discharge planning and ultimately impact on the quality of patient care. Both Simon and his occupational therapy colleague recognised the potential benefit that joint student assessments provide to patients; these include: 1. helping to prevent patients from enduring two lots of assessment; 2. improvement in the quality of discharge planning by earlier identification of a patient's functional needs and 3. more efficient use of resources. The recent White Paper (DH, 2010a) highlights the need for sustained improvement of patient care, and there is potential for interprofessional peer feedback on placements to facilitate changes in practice delivery leading to innovation and improvement in the patient experience.

Through engagement in interprofessional peer feedback students reported increased confidence, deeper understanding of each others' roles (Stew, 2005; Ponzer et al,
2004; Hylin et al, 2007; Steven et al, 2007) and valued discussion with their interprofessional peers that helped them to view their own practice from a different perspective. Most research into interprofessional learning on placement has explored learning opportunities that were organised in advance, for example interprofessional training wards (Freeth et al, 2002; Ponzer et al, 2004; Hylin et al, 2007; Mackenzie et al, 2007; Smith and Seeley, 2010) and there was no focus on interprofessional peer feedback.

The successful interprofessional peer feedback opportunities identified in this study were mostly opportunistic. This demonstrates that potential exists for students to gain from small initiatives that were relatively easy to arrange in both acute and community settings, reducing organisational constraints that have been reported in acute settings (Jackson and Bluteau, 2007). However, it must be noted that pre-arranged interprofessional education programmes involve a range of health professional students, more closely replicating multidisciplinary teams (Ponzer et al, 2004; Hylin et al, 2007). In comparison, interprofessional feedback opportunities in this study were usually confined to students from two health professional groups.

Data from this study provides evidence of IPE opportunities related to feedback “where professions learn about each from and about each other to improve collaboration and the quality of care” (CAIPE, 1997:2). Nonetheless IPE seemed to be occurring on an ad hoc basis (Stew, 2005). There is potential for developing more prearranged student-led IPE feedback opportunities in practice education.

Of some concern, was the lack of opportunity for interprofessional peer learning on campus with occupational therapy students. Despite the fact that physiotherapy students were on a PBL course that is a mirror image of the occupational therapy course, students' paths rarely crossed and opportunities for interprofessional modules were lost. Findings from this study could inform future curriculum development across campus and practice. If students were engaged in more interprofessional feedback opportunities on campus there may be potential for further collaborative opportunities in practice settings.

Mike reflected on the benefits of feedback he received from interprofessional assistant practitioners:
"Yeah, um... a couple of the... the OTs and the physio assistants gave me really good um... really good reviews at the end. Because some of them had been there for twenty years, so they had excellent like practice knowledge so... they gave me some really good feedback on things that they... they felt I'd done really well, um... things that I might bring up with educator and things I might be able to improve on, that they thought, just from... from another perspective, because they wouldn't really be looking at it from um... an educator's perspective, as in an exam model, they'd be looking at it as how can you improve your practice kind of... a little bit more, rather than a grading..

I think they... they might perhaps be able to see it a little bit more objectively they're trying to get you to do something, they're trying to help you improve, um... but they're not concerned about any... any marks you might be getting or anything. They're just looking at um... as kind of almost a friendly help if that makes any sense" (p5)

He distinguished between his educator's feedback and that from assistant practitioners. They [assistants] helped him to identify "things that I might bring up with my educator", adding an alternative dimension to his learning, that enabled him to explore aspects of his practice further. Feedback from "friendly help" was perceived to be more objective, focussing on practice improvement as opposed to grades; this in turn helped him to identify questions to take to his educators. Moore et al (2003) reported similar findings in a model of peer learning where students initially explored issues with a supportive peer. As a result, the questions they took to their educator were at a higher cognitive level. There appears to be a clear distinction here between supportive others and educators in their role as assessors.

Although other studies have identified beneficial interprofessional learning opportunities for students in practice settings (Hilton and Morris, 2001; Ponzer et al, 2004; Bennett; 2008) there is currently no data related to interprofessional feedback opportunities on placement.

A new finding that emerged from the data was the option of adopting an interprofessional mentor, who was not directly involved in summative assessment. Participants talked about potential benefits of using interprofessional mentors or
another physiotherapy team member, someone who was detached from direct involvement in student assessment to give feedback:

"Someone else other than your educator giving feedback as well might be quite helpful or someone separate you could talk to if it wasn't going well.... I think if someone's giving grades you don't want to voice things" (p.2)

Sally suggested that students may be encouraged to speak more freely about their experience with someone who was not involved in assessing them.

Students are often reluctant to share concerns with educators who are marking them (Molloy, 2009). Use of an interprofessional "critical friend" may decrease students' stress levels. There are also other potential benefits of using an impartial mentor. For example if students are struggling to achieve their learning goals, and are receiving inadequate support, this could be dealt with tactfully by an impartial mentor to prevent issues from building up. There are some findings emerging from current occupational therapy literature on role emerging placements that demonstrate the value of an educator from another professional group facilitating placement learning (Clarke, 2010). Nonetheless, there appears to be no research to date that has explored the adoption of an interprofessional mentor that supports formative assessment.

4.8.6 Collaborating with others-peer feedback relationships

Of particular interest to me as an educator and researcher who has previously investigated 2:1 models of practice education and published in the area, were the findings related to peer feedback in practice education. In the 2:1 model of practice education peer assisted learning opportunities promoting peer coaching, including peer feedback, have been shown to support reflection, critical thinking skills, develop clinical reasoning (Ladyshewsky, 2000; Ladyshewsky, 2002; Martin et al, 2004; Ladyshewsky, 2006) and develop more sustainable assessment skills (Boud, 2000). Peer feedback is felt to benefit the receiver, the provider and has potential for improving the quality of patient care (Ladyshewsky and Gardner, 2008:248).

Nevertheless, I was surprised by the lack of peer feedback opportunities that existed for participants during placements. Although, one participant engaged in peer feedback on a couple of placements for most students it was a scarce commodity as
students were often alone on placements. Even if fellow students were in the same Trust, they were segregated and as a result, peer feedback opportunities were lost. I feel this is an interesting phenomenon, as participants in my study were used to a problem-based learning approach that inherently promotes collaboration and peer feedback. Consequently rich opportunities for building on learning approaches nurtured on campus and essential for promoting support and critically evaluative skills for future practice are being lost. In addition, peer assisted models of practice education have been shown to decrease student dependency on their practice educator with resultant benefits for students, educators and ultimately service delivery (Baldry Currens, 2003; Moore et al, 2003; Ladyshewsky, 2006).

Mike and Sally had both been alone for most of their placements and lacked an opportunity for engaging in peer feedback:

"No I’ve been on my own really on all of the placements" (p, 5)

"I haven’t had any placements where I've been in the same department as peers so they’ve been on placement [in the same trust] but they’ve been completely separate........I think on the course we very much work together and very much help each other and tell each other what we think and introduce feedback for next time so I think there is potential for that” (p, 2)

Sally saw the potential of peer feedback despite having been segregated on placement. She valued peer feedback skills that were developed on her problem based learning course.

Even if students were on placement together, and there were opportunities to reflect and discuss patients together, more constructive use of peer feedback remained an untapped source. Claire saw the potential value of peer feedback:

"Uhmm we did work together occasionally, but not giving each other feedback, no if they’re at the same level and if they are constructive with it I think that would probably be a very good method of feedback and get you to really reflect on your practice. If students are of different levels of ability, then it probably doesn’t work as well”, (p, 1)

However she remained unconvinced that feedback from someone who she perceived to be at a different level of competence would be useful. She may have
been concerned about the accuracy of peer feedback which might ultimately impact on her final mark. Previous research into peer learning, suggests that concerns raised by educators about students of different abilities engaging in peer assisted learning remain groundless (Ladyshewsky, 2000; Moore et al, 2003).

However, where peer learning opportunities existed they were valued by students:

"Yeah we generally came to discuss ... so we worked really closely together I suppose a general chat we had the same problems and the same advantages I found that useful anyway" (p, 4)

Well a couple of my placements I have had with other students ......one of us would take the lead with a patient and the other one would just be there as a second pair of hands, and also just the chance to sort of give feedback maybe I would have done it like this or something like that ...so it was quite good to bounce ideas off each other that way..you probably don't mind gaps in your knowledge to them (p,6)

Both Anna and Simon benefited from opportunities to engage in peer practice, peer discussion and problem solve together (Ladyshewsky, 2000; Baldry Currens, 2003; Moore et al, 2003).

A possible explanation for the lack of peer feedback opportunities emerged from interviews with the experienced practice educators, who remained sceptical about the opportunities for peer feedback on placements:

"Yes, OK, but I think that’s an area it would be really good to explore further because I think a lot of educators still struggle with how to facilitate peer learning I really do. I did some work with the team not so long ago about it and came up with, you know, ideas and suggestions I'd say about 50% of the team just could not come up with ideas and people really struggled with it and there were people coming out still saying I still just can’t... I need to separate the students, I can't get them together to do things and... even the peer, you know, working, let alone the peer learning... yeah, that’s interesting” (pe,1)

Jo’s thoughts were also echoed by David:

“Yeah, I think there’s a lot of skill involved from the practice educator’s point of view and a lot of organisation in getting these peer learning relationships really
working well. Unless you've got two students that really know each other, who have worked together before, there's a lot to facilitate that sort of... that feedback and that sort of sense of trust in each other sometimes rather than a level of competition" (pe,3)

As Jo suggested, the problem may be exacerbated by educators struggling to facilitate peer working, "let alone peer learning". This may be due to the increased organisation required, and the fact that the majority of practice educators remain unaware of educational principles underpinning problem based, and peer assisted learning. Indeed, educators may be more comfortable adopting a transmission model of practice education, related more closely to clinical supervision than education (Kell and Jones, 2007). This makes the transfer of pedagogic constructs to practice more difficult. Research by Kinchin et al (2008) highlighted the challenges that educators in higher education face when attempting to keep pace with pedagogical changes. It is hardly surprising that educators in practice, whose primary role is that of a clinician, and the majority of whom have no teaching qualifications struggle to keep pace with different learning and teaching approaches emanating from higher education. Further exploratory research, would enable us to gain insight into the support educators need to promote peer feedback within the 2:1 model. Changes also need to be made to the preparation of educators to support them in facilitating this model of practice.

The above interprofessional and peer learning opportunities are closely linked with learning relationships that student participants engaged in with junior colleagues. These are explored in the next sub theme that presents findings from student engagement with newly qualified physiotherapists.

4.8.7 Collaborating with others - learning from “juniors” - qualified physiotherapists

During their practice education most participants spent time with newly qualified practitioners, either shadowing them or actively assessing and treating patients together. Participants talked about the importance of these opportunities, which for some were too infrequent. For example students used recently qualified practitioners to gauge their own level of competence, as the "juniors" logical approach was more
accessible to their level of learning. This was in sharp contrast to educators' expert practice, which often left them feeling bewildered.

Pam found that she benefited from an opportunity to work with a junior physiotherapist:

"I shadowed one of the juniors...It helps because when you watch your clinical educator they're obviously a band up there and they've got 10-20 years of experience and they fly through things and I think.. How did you get from that to that? But watching a junior it was quite helpful because it's almost that's what you're aspiring to that's what you're heading towards rather than all this skipping things out... but no I didn't get any feedback from the junior, when I watch the juniors they're still good but they do it more logically so by having them watching you and them saying oh that's what I would have done it's almost reinforcement I think" (p, 7)

The logical approach adopted by band five (more junior colleagues) seemed more accessible to Pam. They were on a level she could relate to, in contrast with her educators, whose practice was more advanced. Although the "junior" did not provide Pam with feedback, she saw the potential for incorporating feedback from newly qualified practitioners as an integral part of formative assessment.

Linda, a practice educator identifies with Pam's experience acknowledging the gap that may exist between experienced educators and students:

"I think there's always... and there's always, always danger of the educator forgetting that, because you know what to do, how to change something if it doesn't work, um"... (pe,4)

The professional judgement of their educators was frequently rapid, leaving students unable to follow their clinical reasoning or their psychomotor skills. When they compared their knowledge and skills with that of a junior, they had a useful point of reference, which for some students was motivating "something to aspire to" and for others a real confidence boost. Ladyshewksy and Gardner (2008) highlight the value of peers who use more accessible language thereby increasing student understanding. Although "juniors" were not peers, their proximity in terms of professional development made students feel supported.
Claire also valued the support of "juniors":

"In only one placement did I spend any time with a junior physio and that was just a morning. Um... and I think it is important to spend that time with a junior because at the end of the day you're going to be at their level and you can see... am I hitting that level or am I not, and you then know if you've got work to do you could probably integrate them into the feedback process so that they could... because it's probably quite important to get feedback from every band level, um... so yeah I think it is important to have a Band 5 maybe sit and watch you do an assessment or a treatment" (p, 1)

She saw the potential for developing band five practitioners' education role linked to continuing professional development and career progression:

"I suppose it would be a career kind of progression for them maybe as well, kind of thinking could they... you have that experience with a student to know they would be able to take that student on, maybe at a later stage of their career on an also um... highlight to them maybe what level they were at as a student and now where they're at as a Band 5 maybe" (p, 1)

Traditionally physiotherapy practice education was the responsibility of senior practitioners, however in recent years due to changes in service delivery and potential placement shortages other members of the team including band five physiotherapists (juniors) engage in practice education (Baldry Currens, 2000; Bennett, 2003; CSP; 2003). This team model is felt to have educational benefits as students get used to working within a team modelling current practice and service delivery. In addition more purposeful engagement in feedback has the potential for developing junior practitioners' future role as educators. Recent research by Bennett (2008) highlighted the value of developing a more structured role for juniors within a "learning team model" of practice education facilitating their future role as educators in practice.

4.8.8 Summary of theme—learning through relationships

Learning relationships on placements offered rich feedback opportunities for students on placement. Educators who were committed to developing an open and trusting relationship promoted more collaboration encouraging students to self-
evaluate. Interprofessional feedback and relationships were valued, and have the potential for further development including the use of interprofessional mentors. Further research into peer assisted learning models of practice is needed to ensure that practice educators feel confident in facilitating peer learning opportunities including peer feedback. This has implications for the preparation of practice educators. There is also a need to increase the role of band fives within formative assessment and to support practice educators in facilitating learning within peer learning models.

4.8.9 Summary of overarching theme

Throughout the overarching theme “formative assessment that enhances student learning” there was some evidence that educators and students were engaged in episodes of feedback that embraced the richer and broader notions of formative assessment. Students talked about strategies gained through a problem-based learning curriculum that enabled them to participate more confidently in formative assessment. This did not appear to be solely focused on feedback that they received from their educator. By “taking stock and looked ahead” they were embracing the wider concept of formative assessment including self-evaluation and preparation for future practice.

Within the main themes “fulfilling experiences” there were examples of formative assessment where feedback was immediate, and closely linked to criteria and learning goals. Examples of formative assessment were generally at the “concrete/procedural” end of the formative assessment continuum (Pryor and Crossouard, 2010:267), with some examples of student and educator engagement in reflection related to criteria. If criteria and standards are made more explicit and visible it is likely that more active student engagement in formative assessment will prevail as they will have more insight into the standards required (Taras, 2009). Once again convergent formative assessment, where feedback was mainly delivered by the educator, appeared to be more prevalent, although there were some examples of divergent approaches where students were encouraged to engage in reflective discussion with their educators and to self-evaluate.
In addition to formative assessment that focussed on the "concrete/procedural" end of the continuum there were some examples of educators and students also engaging in a type of "reflective/discursive" formative assessment (Pryor and Crossouard, 2010: 267). In the themes relating to "fulfilling experiences" participants talked about examples of formative assessment related to goals and criteria, where there were opportunities to reflect with their educator. Formative assessment varied between the convergent type that was primarily practice educator led and divergent forms where educators and students had a more open relationship (Pryor and Crossouard, 2008). During the latter more divergent approaches students were encouraged to self-assess with educators providing feedback that validated their assessment (Molloy, 2009). This combination of self-assessment and validation helped students to make sense of the standard required and enabled them to see how they could improve their performance (Molloy, 2009), an essential part of the process especially for students who are novice practitioners with no experience to draw on (Sadler, 2010).

It was encouraging to note that in the main theme "learning through relationships" there were examples where richer and broader notions of formative assessment were starting to emerge from the shadows of a much narrower focus. Participants benefited from more open relationships with their educators where they could express and discuss ideas together. This in turn appeared to lead to deeper learning as students were encouraged to reflect on their practice and identify their strengths and weaknesses. By facilitating, and then validating students' self-evaluation, educators enabled learners to explore their understanding of feedback as part of the wider formative assessment process promoting deeper learning (Molloy, 2009) and creating "a shared forum of assessment" (Taras, 2009: 58). This in turn encouraged students to use the learning gained to feed forward into their future practice (Kluger and Dick, 2010). The relationship between educator and learner was a more collaborative one and feedback took the form of a more reflective discussion (Cross et al, 2006). This form has close links with the more "reflective/discursive" part of the continuum of formative assessment (Pryor and Crossouard, 2010: 267).

It was also encouraging to find examples of feedback that were occurring on the "periphery of communities of practice", within a more sociocultural formative assessment context (Wenger, 1998:117). Students valued feedback they received
from other professionals; however it was often in the form of convergent formative assessment at the “concrete/procedural” end of the continuum (Pryor and Crossouard, 2010:267). Nonetheless there were some encouraging examples of formative assessment from interprofessional peers and junior colleagues that helped students to explore their professional identities.

4.9 Making links between my findings and a theoretical framework

In this section I have attempted to make links between my findings and set them within a theoretical framework, and to introduce a model of formative assessment that might provide a framework for facilitating students' active participation as part of the feedback process.

There is an expectation that students on placement participate in learning experiences where they receive high quality feedback, facilitating their future practice development and preparing them for managing effectively as future practitioners. Health professional education should assess student “ways of becoming” as professionals as well as their knowledge and skills. This can be achieved by adopting more authentic holistic approaches to assessment (Vu & Dall’ Alba, 2008:1). If this principle is extended to formative assessment it is essential that educators adopt feedback approaches that encourage students to be active participants in the process, facilitating their professional development, as well as providing feedback on their knowledge and skills (Pryor and Crossouard, 2010).

As I have developed my themes and discussed my findings, I have continued to interpret the range of formative assessment experiences so openly shared by my participants, making links with the literature and theoretical concepts. This has helped me to embed my study within a theoretical framework that I believe has links to social constructivist (Rust et al, 2005; Nicol and Macfarlane-Dick,2006) and socio cultural approaches (Pryor and Crossouard, 2008) to formative assessment and concepts of sustainable (Boud, 2000; Hounsell, 2007) and authentic formative assessment (Vu and Dall’Alba,2008).

Within a social constructivist model of formative assessment the student is viewed as an active participant in the feedback process. As part of this process students are encouraged to contribute to goal setting, engaging in critical reflection and self-
evaluation, whilst seeking feedback from peers and tutors (Juwah et al, 2004; Nicol and Macfarlane-Dick, 2006). This approach makes formative assessment more of an integral and seamless part of the whole learning experience. There are inextricable links between social constructivist and sociocultural approaches to formative assessment; concepts of authentic assessment (Vu and Dall’ Alba, 2008) and ongoing sustainable formative assessment (Boud, 2000; Hounsell, 2007). These pedagogic constructs support students' development as professionals, highlighting the importance of students actively monitoring their own performance and engaging with peers and others in a more holistic approach to feedback (Nicol and Macfarlane-Dick, 2006).

In the initial theme, "feeling overloaded", feedback was often delivered in a didactic, ill timed way leaving little opportunity for students to take an active role in feedback process (Nicol and Macfarlane-Dick, 2006). The stress of "constant" assessment may also have detracted from a social constructivist approach, as students were concerned about feedback that was withheld (Ende, 1983) or the stress of continuous monitoring (Best and Rose, 1996:17). In addition focus on a performance model of assessment linked to grades, as opposed to a more sustainable approach to feedback linked to learning and professional development (Boud, 2000; Hounsell, 2007) did little to promote active student participation.

The other main theme focussed on challenges faced by students within a multiple educator model. This model failed to promote a social constructivist approach to learning, as students struggled to cope with conflicting feedback and poor communication between educators. As a result students' engagement within a "community of practice" (Lave and Wenger, 1991:29) was hindered by conflicting opinions and a lack of communication. In addition it must be acknowledged, that practice educators who were attempting to provide feedback against the many constraints of practice, had little time to adopt a more student-centred approach to formative assessment.

Nonetheless, despite the many constraints that impacted on both educators and students within practice environments, I remain encouraged by the examples of good practice emerging from the themes that formed the concept of empowering formative assessment, demonstrating a more social constructivist approach to feedback.
Within the theme "fulfilling experiences", timely and regular feedback enabled students to make links with their patients placing the feedback in the context of their practice. Feedback was often linked to weekly and specific goals and although some educators were still adopting a transmission model of feedback there were examples of reflective discussion, promoting self-evaluation and a feed forward approach that enabled students to play a more active part in the process (Molloy, 2009; 2010).

The final main theme "learning through relationships" identified a number of positive learning relationships where students were active participants within formative assessment. Open relationships based on trust between educator and learner promoted a more active and collaborative feedback process encouraging students to identify their needs and exchange feedback (Nicol and Macfarlane-Dick, 2006). Whilst there were opportunities for students to participate with other health professionals, peers and patients on placement there is undoubtedly potential for increasing these opportunities, making them a more integral part of feedback (Ladyshewsky and Gardner, 2008).

There is evidence that students were experiencing some form of authentic and sustainable formative assessment as they were encouraged to reflect on their practice and identify future learning needs. This practice promotes more autonomous practice, and ultimately develops the skills needed for self monitoring as future health professionals (Boud, 2000; Nicol and Macfarlane-Dick, 2006). However, to be considered truly authentic, formative assessment should encourage students to participate in feedback activities with a range of other team members, to explore their practice from different perspectives within a positive "community of practice" (Lave and Wenger, 1991) and to develop a range of skills deemed essential for becoming an autonomous practitioner in the 21st century.

I have drawn on examples of formative assessment from my study that enhanced student learning and created a model of formative assessment Fig.4 page155 underpinned by evidence from the literature that could be adopted by educators and students in practice to facilitate a more holistic approach to formative assessment.
4.9.1 Integrating formative assessment, research findings and professional knowledge into a model of formative assessment

I have included a model of formative assessment Fig 4 that could be used by practice educators and students during placements to facilitate formative assessment. In the development of this model I have moved beyond the initial interpretative phenomenological analysis of the data. The model of formative assessment on page 164 integrates the broader richer notion of formative assessment drawn from educational research (Nicol and Macfarlane- Dick, 2006; Davies and Ecclestone, 2008; Pryor and Crossouard, 2008; Taras, 2009) with research findings from this small-scale study and my own professional knowledge of physiotherapy education.

Data from the emergent themes have been used to inform the development of the model. The model follows a cycle that promotes more active student involvement in the feedback process encouraging a more holistic approach. I have drawn on data from the main themes that make up the overarching theme:

- Formative assessment that enhances student learning.

Stage 1 of the model draws on each of the main themes: Problem based influences; Fulfilling experiences and Learning through relationships. All three themes contained data that identified the need for feedback preferences to be addressed and for both students and educators to establish open communication and ground rules regarding the timing, style and amount of feedback. Such practice should enable the core interconnecting factors that influence formative assessment to be addressed early on. Participants talked about the value of discussing feedback preferences at the early stage of their placements.

My own knowledge of physiotherapy education suggest that students value the opportunity of establishing ground rules and having learning conversations with their educators as part of a learning agreement (Cross et al ,2006; Molloy,2009) so that both parties know where they stand. In addition research evidence from education highlights the importance of educators and students adopting a more holistic approach embracing all aspects of the formative assessment process including exploration of criteria; strategies that promote reflection and feedback conversations
Stage 2 of the model is informed by the main themes: Problem-based learning influences; Fulfilling experiences and Learning from relationships. It highlights the importance of regular feedback sessions that provide opportunities for educators and students to review progress within a collaborative relationship where open dialogue and reflection is promoted.

Findings from this study indicate that students valued relationships built on trust that encouraged them to share feedback with their educators. Participants talked about the value of weekly feedback sessions where educators encouraged them to reflect on their practice, an approach that promoted self-evaluation and reciprocal exchange of feedback. My own knowledge of physiotherapy practice education suggests that regular feedback sessions where joint feedback is promoted and integrated into placements are valued. This demonstrates commitment by the educator to supporting the student's needs and facilitating independence by promoting students' ability to monitor their own practice. Students also appreciate educators who are willing to take their feedback on board. These views are supported in the education literature where mutual feedback is encouraged as a key part of "assessment for leaning" and active engagement of the learner supports sustainable formative assessment (Boud and Falchilov, 2007:4).

Stage 3 of the model draws mainly on the theme: Learning through relationships and focuses on a range of people who could enhance student learning within formative assessment. These include: peers; interprofessional team members; assistant practitioners; newly qualified practitioners and patients. Participants in the study talked about the benefits of engaging in formative assessment activities with a range of other professionals and indicated that this practice could be developed further.

The literature suggests that engagement of others in formative assessment using a range of pedagogic approaches including peer feedback and assessment helps to promote learning within a "community of practice" an approach that moves learners from the "periphery" to become more integrated team members (Lave and Wenger, 1991:30). There is also evidence suggesting that by adopting a more sociocultural
model of formative assessment learning is both richer and deeper (Pryor and Crossouard, 2008; Crossouard, 2010). My own professional knowledge of physiotherapy education suggests that it is essential for students to engage in formative assessment that promotes interprofessional practice education opportunities. This more authentic practice will support their transition into fully functional health professional team members (Hilton and Morris, 2001).

In stage 4 of the model I have drawn on participants’ experiences from the themes: fulfilling experiences and learning relationships. The theme fulfilling experiences contained examples of good practice promoting links with future professional practice through a feed forward approach and identified ways that students found helpful for managing communication within multiple educator models. In addition within the theme: learning from relationships, there were examples demonstrating how a range of supportive professionals and peers moved participants’ practice forward.

At this stage of the model the focus is on moving practice forward. Previous research evidence highlights the importance of educators and students considering the broader and richer notions of formative assessment that transcend a formative assessment continuum (Pryor and Crossouard, 2010). At one stage of the continuum there is a focus on “concrete/procedural” aspects of formative assessment, whilst at the other end formative assessment has a “discursive/existential purpose” (Pryor and Crossouard, 2010:267). By adoption of a range of flexible pedagogic approaches that focus not only on assessment of knowledge and skills but also on promoting the development of students’ current and future identities educators will more fully prepare students for future practice (Vu and Dall’Alba, 2008; Dall’Alba, 2009; Pryor and Crossouard, 2010).

Adoption of a feed forward approach once again drew on the richer notion of formative assessment moving the focus away from a deficit model of feedback to a “feed forward model” that supports a more positive approach to practice development enabling students to build on their strengths (Molloy, 2010:1157; Kluger and Van Dijk, 2010).

The concept of reciprocal feedback is once again utilised to support communication within a multiple educator model of practice education. My own professional
experience of physiotherapy practice education together with findings from this research suggests that where students can engage in active communication between educators it facilitates more effective formative assessment.

The model is illustrated in Fig 4 below on page 164 and further explanation is provided on page 165.
Weekly feedback conversations:
- promoting active engagement through reflection, self evaluation, reciprocal exchange of feedback

Establish ground rules
- identify feedback preferences
- explore a range of feedback opportunities
- identify time for feedback
- promote reciprocal feedback

Encourage students to elicit feedback from a range of others including:
- Peers,
- interprofessional team members
- "juniors"
- patients

FORMATIVE ASSESSMENT

Feeding forward:
- Focus on practice development

Fig 4. Promoting a holistic model of formative assessment in practice education
- At the early stage of the placement educators and students are encouraged to establish "ground rules" in relation to feedback so that both parties know where they stand.

- Students are encouraged to take an active part in the process and to talk about the feedback approach that works best for them.

- Feedback opportunities are explored and time for exchange of feedback is identified as part of an ongoing negotiated learning agreement.

- Weekly feedback conversations become a part of "normal practice" where students and their educator review progress, adopting a process of reflection and self evaluation that encourages students to be active partners in the whole process. During these weekly sessions reciprocal exchange of feedback is encouraged.

- Students are encouraged to elicit feedback from a range of others that may include peers, interprofessional team members, juniors and patients. This active engagement supports a social constructivist approach to learning and prepares students their future as health professionals. They may also choose to elect an impartial mentor to their share progress with.

- The final stage of the model focuses on feeding forward to encourage students to build on areas of their practice in a positive way as opposed to focussing on a deficit model of feedback and to think about the professional they are becoming.

- Students are encouraged to be an active participant within a multiple educator placement model, feeding back and forward to the team of educators, promoting participation within a community of practice as opposed to being seen as someone who adopts a peripheral role.
5. Chapter five – Conclusions and summary

Findings from this study provide a rich description of the phenomenon of formative assessment in physiotherapy practice education as experienced by physiotherapy students. This study set out to investigate physiotherapy students’ experience of formative assessment during practice education.

5.1 The research questions were:

How do physiotherapy students experience formative assessment during practice education?

What are the implications of this for developing the practice of practice educators?

5.2 The aims of the study were to:

- explore physiotherapy students’ experience of formative assessment during practice education
- explore their preparedness for formative assessment
- identify factors that influence students’ experience of formative assessment
- inform the future preparation of practice educators and students
- identify future research opportunities

By actively listening to participants’ reflection during face to face interviews, and through analysis and interpretation of the data I was able to explore participants’ experience of feedback in the current placement context. A reflective approach to data collection prompted through a theme board activity, and elicited during face to face interviews, encouraged students to talk openly about negative and positive experiences. By returning to images depicted on individual participant theme boards, I was able to explore student experiences of formative assessment in greater depth than would have been achieved by interviews alone. Participants openly shared examples of formative assessment that had either detracted from or enhanced their learning during placements.

This collaborative approach enabled me to explore aspects of formative assessment including feedback relationships, contexts and the feedback process from different perspectives. I have achieved the first aim of my study which was to explore...
physiotherapy students' experience of formative assessment during practice education.

The second aim was to explore students' preparedness for formative assessment. My research enabled me to gain insight into how active engagement in peer feedback during campus based PBL tutorials prepared students for participating in formative assessment on placement. Further exploration of my findings with experienced practice educators identified that most practice educators have limited understanding of PBL approaches (Williams and Beattie, 2008). This highlights a gap in the preparation of educators and is identified in recommendation 3.

The third aim, which was to identify factors that influenced students' experience of formative assessment has been achieved. Findings from the study provide insight into factors that either enhanced or detracted from students' experience of formative assessment on placement. The two overarching themes draw on "real life" exemplars that will be used to inform future preparation of educators and students. Interpretation of the findings suggests that formative assessment is a highly complex, and continually evolving process, one that is influenced by a number of interrelated factors including timing, style and amount of feedback. It can be either a facilitative process, that students greatly value, or one that hinders their overall learning experience, leaving them lacking confidence and disheartened.

Factors that influence formative assessment in a negative way include: badly timed feedback; unmanageable amounts of feedback; focus on a deficit feedback model and poor communication within formative assessment. In contrast open relationships where collaborative dialogue and reflection between students and educators is promoted, made formative assessment a more positive and enriching experience. Within these constructive relationships, self-evaluation was facilitated and feedback was co-constructed as opposed to being transmitted. Feedback from a range of team members helped to make students feel part of a community of practice, facilitating their ongoing professional development.

There are a number of examples of good practice emerging from the data, which provide a framework on which formative assessment in physiotherapy placements can be developed. These include: learning relationships that promote active student participation within a reflective self-evaluative and collaborative feedback model.

There are clear messages from both student and practice educator participants, suggesting there is scope for enhancing current practice. There is convincing
potential for using learning relationships within practice education to better effect. This could be achieved by actively involving newly qualified practitioners, peers, interprofessional colleagues and patients in feedback.

The study has shown that there are a number of challenges and constraints that currently impact on formative assessment which can also be addressed, by making changes to the preparation of students and practice educators. These include an increased focus on feedback, as opposed to a preoccupation with summative assessment and grades. Communication within multiple models of practice education is an area that needs further investigation.

The final aims of the study were: to inform the preparation of practice educators and students and to identify future research. My achievement of those aims will be explored in the next sections of this chapter.

5.3 Contribution to knowledge relating to practice

A model of formative assessment has been developed, drawing on additional knowledge about feedback emerging from the data and existing models of formative assessment (such as those of Nicol and Macfarlane-Dick, 2006 and Molloy, 2009). Within the cycle of feedback an active partnership between student and educator is encouraged (as Rust et al, 2005 have shown); ground rules are established and structure provided (Scully and Shepherd, 1983). An open relationship is promoted allowing feedback preferences to be explored and reciprocal feedback facilitated (Nicol and Macfarlane-Dick, 2006). A reflective approach to weekly feedback sessions is promoted where self - evaluation is seen as an integral part of the process (Brookfield, 1998; Hattie and Timperley, 2007) and students are encouraged to actively seek feedback from a range of health professionals and patients. The model focuses on students' ontological development feeding forward into future practice (following D'All Alba, 2009) and using the concept of feed forward (as suggested by Kluger and Dijk, 2010) as a strategy for improving communication within a multiple educator model.

This study adds to the body of formative assessment knowledge by providing insight into factors that either enhance or detract from students' experience of feedback within current healthcare contexts. It provides an increased understanding of the stress students are often under in practice, and the challenges they face, within a multiple educator model of practice education. It identifies learning relationships that facilitate student participation in feedback partnerships, placing emphasis on peer and interprofessional feedback.
There has been no previous research that has investigated formative assessment within multiple educator models of health professional practice education. By identifying factors that hinder or facilitate feedback within this model, findings from this study provide a novel contribution to knowledge informing practice. This study adds to the body of knowledge by providing in depth examples of feedback challenges. Earlier research into these models focussed either on educators' opinions (Stiller et al, 2004); or the quality of experience (Bennett, 2003; 2008); as opposed to feedback.

One major finding identified by students and experienced educators was the lack of communication and conflicting feedback that exists within multiple educator models. In 2000 Baldry Currens highlighted a lack of communication as being a potential problem of this model. However this study confirms that poor communication and inconsistent opinions amongst educators decreases the quality of the feedback that students receive. Practice educators' accurate judgement of a student's performance may also be affected, as their disagreement may extend to assessment of student competence. In addition mixed messages from educators may adversely influence a student's professional decision making. These factors may ultimately have a negative impact on the quality of patient care. This finding concerns me as a principal lecturer who has responsibility for the quality assurance of placements across three professional groups.

Experienced practice educators described the challenges they faced, when trying to support colleagues, who struggled to facilitate learning in multiple educator models. This situation is exacerbated in today's frenetic practice environment, where roles are constantly changing (Mooney et al, 2008). King et al (2009) suggested that when practice educators are feeling vulnerable their relationship with students is affected. Findings from this study provide important knowledge about the additional support educators need when trying to implement this model in hectic environments. They demonstrate how constraints in practice settings influence learning and teaching relationships, highlighting the model's limitations, and the need for future research.

It is evident that multiple educator models are becoming increasingly prevalent across health and social care environments. Changes in service delivery result in student placements being shared by a number of different educators, who often work on a part time basis across different practice sites. It is acknowledged that this model has positive benefits as students experience a range of approaches. By working with different team members they develop a more authentic approach to practice (as Bennett, 2008 proposed). Nonetheless, it is essential that students are more fully
prepared and educators gain additional support in facilitating learning within this model of practice education.

Another important finding to emerge from the study was the fact that students on placement are often overwhelmed by an overload of ill-timed feedback, delivered in a didactic way. Guidance on “good” practice has previously identified that an excess of mistimed, negative feedback is unhelpful (Ende, 1983; Wood, 2000; Hesketh and Laidlaw, 2002; Barnett, 2007). This study adds depth to our understanding of the adverse affect of poor quality feedback on student learning in practice.

This study provides real examples drawn from practice that demonstrate how formative assessment influences a student’s ability to clinically reason. For example feedback that was withheld; a surfeit of feedback; or feedback that was ill-timed, affected participants’ ability to process information, and to use it effectively to inform their clinical decision making. Whilst the importance of feedback in supporting clinical reasoning is well rehearsed (Higgs, 2003; 2008), no previous research has demonstrated how timing, style and amount of feedback influences a student’s clinical reasoning process. In education Hattie and Timperley (2007) highlight the importance of students being able to relate feedback to their performance. This study demonstrates how poor practice makes it difficult for students to place feedback in context and limits their ability to use it effectively to inform their clinical reasoning. This will inevitably have a detrimental influence on the quality of patient care.

In addition these findings provide unique insight into how contextual differences in practice settings influence the feedback process. The problem appeared to be worse in outpatient and acute ward settings. In these environments rapid discharge of patients was prevalent, and time constraints affected the quality of feedback. In contrast rehabilitation and community settings offered more opportunities for a mutual exchange of feedback. Earlier research by Clouder (2000b) highlighted the effect that different practice environments had on reflective practice. However, no previous research has identified the impact of different practice environments on formative assessment and clinical reasoning.

The findings have implications for educator and student preparation to avoid valuable time being wasted, potentially improving the experience for students and their patients. An increased awareness of the constraints of different settings will enable educators and students to make adjustments to optimise feedback opportunities.
This study adds to the body of knowledge in physiotherapy practice education by identifying a combination of factors that increase the emotional impact of formative assessment on student learning. Factors include: feedback that is withheld (Ende, 1983); an over load of negative feedback (Delany and Bragge, 2009); an unhelpful focus on summative assessment; and poor communication. As a result student levels of stress are increased and their confidence is reduced which may ultimately influence patient safety and quality of care. This research builds on earlier work in education Barnett (2007) and Falchikov and Boud (2007) which highlighted the need for additional research to increase our understanding of the relationship between feedback, assessment and emotion.

A key and important finding was the increase in stress caused by students’ perception that feedback is inextricably linked to constant assessment on placement. Previous research has identified examples of good practice related to content, and delivery of formal feedback (Molloy, 2006; 2009), however there has been little research highlighting physiotherapy students’ perceptions of feedback in the context of the whole learning process. It is crucial that stress on placements is managed effectively as anxiety expends needless emotional energy (as Gibbons, 2010 has shown), reducing students’ ability to learn. This eventually leads to a decrease in confidence, inevitably affecting their therapeutic relationship with patients.

The second research question focussed on the implications of physiotherapy students’ experience of formative assessment during practice education for developing the practice of educators. There are opportunities for improving the education of physiotherapists through developing a richer view of formative assessment. This study adds to the body of knowledge by identifying the need for physiotherapy educators and students to view formative assessment as a tool for guiding learning (Nicol and Macfarlane-Dick, 2007) as opposed to a means of judging performance within a deficit model (Molloy, 2006; 2009).

As the research findings identify some practice educators have a limited notion of formative assessment. This is perpetuated by an increased focus on feedback and its transmission as opposed to an opportunity to engage students in active learning (Molloy, 2009). If physiotherapists are encouraged to explore learning and assessment approaches within a sociocultural model of formative assessment where reflection and dialogue are encouraged, and reciprocal feedback promoted (Crossouard, 2009; Nicol, 2010), this should have benefits for both educators and students.
The learning culture of practice education could be changed if physiotherapists are encouraged to adopt flexible pedagogic approaches that promote active student engagement in "assessment for learning" (Torrance, 2007:281) as opposed to viewing formative assessment solely as delivery of feedback linked to grades. By changing physiotherapists' perceptions of formative assessment both educators and students should benefit from a more rewarding placement experience. Such an approach would not prohibit educators from engaging in convergent approaches to formative assessment if the need arose. However it would ensure that opportunities for enriching the student learning experience through engagement in divergent approaches to formative assessment would promoting a more holistic approach to practice education, and prepare them more fully for future practice.

Findings from the study add to the body of knowledge about feedback relationships between educators and students. The study provides in depth examples of feedback relationships valued by students that were built on trust and where opportunities for openly sharing their practice were encouraged. It also identifies relationships that detracted from student learning.

The study shows that students particularly valued the help of band five practitioners (juniors) on placement. Previous research has identified the contribution made by band five practitioners (Bennett, 2003; 2008). However, this study demonstrates the added potential for enhancing the role of newly qualified physiotherapists by actively engaging them in providing feedback to students on placement. As formative assessment should be a facilitative as opposed to a judgemental process, newly qualified practitioners should feel more comfortable in adopting this role. It may also have additional implications for patient benefit as there is added potential for improving the educational skills of new practitioners.

The results from this study provide new knowledge about the value of interprofessional education (IPE) and in particular interprofessional peer feedback on placements. Previous studies have focussed on the benefits of IPE (Stew, 2005; Hylin et al, 2007), but there has been little focus on interprofessional formative assessment including its potential benefits for patients.

Findings indicate that students valued a range of learning relationships that enhanced their experience. Previous research has recognized the value of engaging a range of health professionals in facilitating placement learning (Bennett 2003: 172).
2008), and has identified the benefits of interprofessional feedback (Ponzer et al., 2004). These benefits have included the use of audio feedback (Gibbon and Dearnley 2010) and peer feedback (Ladyshewsky, 2006). However this research provides evidence that potential opportunities are not being used to best effect.

In Chapter Four I discussed the need for practice education to focus on a student's ontological journey with particular emphasis on what becoming a professional actually means in an increasingly uncertain practice environment. An increased focus on interprofessional formative assessment will support students' integration within teams, helping them to participate in authentic feedback with other health professionals in preparation for future team working. Although, some occupational therapy and physiotherapy IPE placements already exist, there is potential for a significant increase in IPE placements. In addition there are rich opportunities for developing interprofessional feedback in conjunction with role emerging placements that are currently being explored in occupational therapy research (Clarke, 2010). However, IPE feedback opportunities need to be addressed in the curricula, as the lack of IPE campus based opportunities between occupational therapy and physiotherapy PBL programmes within the institution remains an area for concern.

This research provides important knowledge about reflection and self-evaluation during formative assessment, highlighting the value of dialogical reflection in promoting transparency between educator and student and enhancing professional development (Clouder, 2000a; Clouder and Sellars, 2004; Delany and Molloy, 2009). It adds to our understanding of the value students place on educators openly sharing significant examples from their own practice with students (Molloy, 2009). There has been limited research in physiotherapy education that has provided examples demonstrating how reflection can enhance feedback. It also adds to our knowledge of the way in which different practice contexts, for example community and rehabilitation settings which promote holistic patient care, support reflective formative assessment.

Examples of good practice included feedback episodes where educators facilitated reflection and self-evaluation enabling students to feed forward into the next cycle of practice. This was a new finding as previous research into physiotherapy practice education indicated that time constraints, coupled with students' reluctance to
engage in self-evaluation, often deter educators from developing it (Clouder, 2000a; Molloy, 2009).

The value students placed on PBL tutorials in preparing them for engaging in feedback on placement, highlighted the way PBL approaches could be used more effectively to support the transition of learning from campus to practice (Tiwari et al, 2006). Although students valued peer learning on campus (Connolly and Donovan, 2002), the lack of peer feedback opportunities on placement was of particular concern to me as I have been actively engaged in research into peer assisted models of placement learning and their implementation in practice (Moore et al, 2003; Morris and Stew, 2007).

By sharing my findings with experienced practice educators I was able to determine a reason for a lack of peer learning opportunities. They identified that practice educators find peer learning inherently challenging to facilitate. This situation may be exacerbated as educators struggle to manage contemporary learning and teaching approaches (Delany and Bragge, 2009) as well as current practice demands (Mooney et al, 2008) and need to be more fully prepared for facilitating peer learning (Ladyshewsky, 2006).

There is a small body of research in physiotherapy education that has identified qualities and characteristics of educators that support placement learning (Cross, 1995; Bennett, 2003; Kelly, 2007; Ernstzen, 2009). However the research focus was broader and did not provide in depth knowledge of qualities that support feedback relationships. This research adds new knowledge by providing exemplars of qualities that enhance and detract from feedback. These examples will be used to provide case examples at role development days.

In light of these findings I now make suggestions for practice (including some that have already been implemented).

5.4 Recommendation 1.

I recommend that course teams review how students are prepared for learning within a multiple educator model. This will support their active involvement in the feedback process, facilitating communication with and between educators.
There is potential for using networks of experienced educators (Higgs and McAllister, 2005) who have undertaken postgraduate study in practice education to inform the development of this model.

An example of good practice of feedback within a multiple educator model identified by Anna paragraph 4.7 page 124 could be implemented and evaluated. If students are actively engaged as a “feedback link” between educators, communication may be improved facilitating a sociocultural team approach to formative assessment (Crossouard, 2009) within a community of practice (Wenger, 1998). In addition the introduction of a feedback log would enable students to gather feedback, reflect on it, and share it with their educators. This may facilitate reflective dialogue feeding forward into future professional development (Delany and Molloy, 2009; Molloy, 2010).

I have introduced new workshops into preparatory sessions for both students and educators to enable them to explore strategies for managing formative assessment within multiple educator placements.

A weekly feedback log is being developed that could be incorporated into the current placement assessment form enabling feedback from a range of educators to be shared more openly.

I am supervising two postgraduate Master’s students who are practice educators. They are currently undertaking research into multiple models of practice education and are exploring the experiences of students and educators. Findings from this study have informed the development of their research.

In order to influence national policy, I have contacted the Education Officer at the Chartered Society of Physiotherapy, to allow me to share my findings and recommendations at the National Practice Education Forum. This will enable my research to inform the development of new guidelines, contributing to the wider context of physiotherapy practice education on a national level.

5.5 Recommendation 2.

I recommend that the future preparation of educators and students needs to include an increased focus on feedback as a tool for facilitating learning, and its contribution to moving practice forward, as opposed to viewing formative assessment as judgement of competence.
As a result of this research the curriculum for educator study days and the Postgraduate Certificate has been developed to include: more focus on formative assessment as a facilitative and collaborative process. The model of formative assessment figure 4 page 164 has been introduced into practice education workshops. Within the new curriculum educators are encouraged to discuss the debilitating effect that stress has on learning in practice, and to explore how more collaborative feedback approaches will support students in managing complex practice issues.

In addition students will benefit from stress management workshops, for example the inclusion of mindfulness training as part of their preparation for placements. It is important to recognise that changes in health and social care may well increase stress within practice environments and I believe it is essential that students have strategies to draw on to effectively manage their learning. Mindfulness training is now being introduced into the PBL physiotherapy curriculum to provide students with an additional strategy for managing stressful situations on placement and to support preparation for assessments on campus.

5.6 Recommendation 3.

I recommend that the preparation of practice educators should be developed to support them in facilitating peer assisted learning and problem based learning approaches.

New scenarios drawing on findings from this study will be used to enable educators to explore ways of facilitating peer feedback on placements. In addition students will be invited to contribute to practice educator workshops to talk about the way peer feedback skills developed through PBL could be harnessed, to facilitate more active engagement in peer feedback on placement. This will enable educators to explore the benefits of peer assisted learning drawing on research based student examples.

There should be an increased focus on the adoption of PBL approaches in practice education (Tiwari et al, 2006). Changes have been introduced to the Postgraduate Certificate in Clinical Education curriculum to enable practice educators to develop an increased understanding of PBL and to facilitate PBL approaches in practice. A new postgraduate interprofessional module has been developed by colleagues within the school to improve practitioners' understanding of the philosophy of PBL and to support them in adopting PBL learning and teaching approaches. Findings from this study provide evidence to promote practitioners' engagement in the new module.
5.7 Recommendation 4.

I recommend that course teams review the curriculum to explore how campus and practice based IPE opportunities could be developed. This could facilitate interprofessional feedback in practice settings in preparation for future professional learning and working. Interprofessional formative assessment should form an integral component of professional and regulatory body placement guidelines and standards. This would influence National Policy and facilitate more focussed IPE opportunities.

I am currently working with practice education tutors and pre-registration course leaders across the school to identify potential campus based and placement IPE opportunities. I am due to present my findings at interprofessional network meetings and an interprofessional national conference in order to inform the wider health professional context.

5.8 Recommendation 5.

I recommend that band five practitioners are encouraged to provide feedback to students on placement. This will have educational benefits for both students and newly qualified practitioners.

Since undertaking this study and sharing my findings at practice education study days, two NHS Trusts have invited me to contribute to the role development of band five practitioners. I have facilitated interprofessional workshops that have focussed on their facilitation role in practice, with emphasis on their contribution to formative assessment.

As previously indicated findings from this study will be used to inform the development of new practice education guidelines. There is potential for identifying a feedback role for band five practitioners within the new guidelines.

5.9 Recommendation 6.

I recommend that educators and students should be encouraged to adopt a feedback model that promotes reflection and self-evaluation feeding forward into future practice and developing the skills necessary for employment as autonomous health professionals.

Feedback preferences should be addressed at the start of each placement. The results of this study indicate that students and educator would benefit from open
discussion about the way students prefer feedback to be delivered and also the optimum timing of feedback. The learning contract on the practice education form will be changed to incorporate a section that will enable students to identify feedback preferences at the start of each placement including the preferred timing, style and amount of feedback.

The holistic model of formative assessment Figure 4 page 164 has been developed to promote reflection within formative assessment. It draws on new knowledge and examples from practice originating from the data, whilst building on previous models of formative assessment. It provides a framework which will be used to inform the practice education curricula for student and educator study days.

I am lead author of a book that has been commissioned to support the role development of novice practice educators. The holistic model along with “real life” practice examples from the data will be incorporated into the chapter on feedback and facilitation within the book. This will enable findings from the study to inform practice on a national and international level.

5.10 Recommendation 7.

I recommend that educators and students explore the potential for promoting more active participation of service users in the feedback process.

For example students could be encouraged to seek feedback from patients as part of their professional development. National Policy (DH, 2008; NQB, 2011) highlights the importance of patient involvement in decision making and feedback. As a result more focussed engagement of patients in formative assessment could provide students with valuable guidance about their communication and feedback skills.

5.11 Reflections on my study design

One of the main limitations of my study was the way I prepared students for using reflective logs on placement. I presumed that participants, who were used to writing reflective assignments, would need little guidance on completing reflective logs on placement. I was therefore initially surprised when a number of the reflective logs focussed on a descriptive day to day account of their practice on placement and not on feedback incidents. I now acknowledge that as a researcher I failed to provide my participants with clear instructions. In effect I had fallen into the inevitable feedback trap and failed to check their understanding of my request when I set the task.
Although, I was able to generate some themes from the reflective logs to inform my face-to-face interviews I relied on data from participants’ theme boards as an elicitation tool. Butler-Kisber and Poldma (2009) suggested that although reflective memos or logs aid reflection, thinking tends to be linear which might also account for participants’ accounts in their logs being more descriptive. As theme boards also promote reflection, another criticism of my research design is that my data elicitation methods were duplicated. On reflection I could have removed the reflective logs from my research design, to prevent placing an additional burden on participants.

Prior to undertaking this study I had limited experience of undertaking IPA. Although I found the step by step analysis suggested by Fade (2004) and Smith et al (2009) a useful framework that enabled me to approach the analysis in a logical way, I felt constrained at times by its linear approach. Although the table of evidence I produced for each theme enabled me to map my data, at times my analysis seemed quite mechanistic. On reflection I could have drawn on my experience of using visual techniques to facilitate my data analysis. This approach may have enabled me to explore the data from different perspectives adding richness to my themes.

Although, the sample size is deemed acceptable for a phenomenological study, this was a small-scale study, and findings are not transferable to a larger population. Interviews with participants from another cohort or a different institution might have provided deeper insight into students’ experiences of feedback.

I chose to interview experienced practice educators, however my study design could have been improved if I had interviewed a range of practice educators. For example those who had limited experience of providing feedback to students on placement or educators who had experience of formative assessment within a range of different placement models.

By focussing on the student voice and a small number of experienced educators I left out the patient voice within the study. In order to develop a more holistic approach a future study could explore the role of the patient within formative assessment and provide valuable insight that would inform practice education.

My research design would have been improved if I had interviewed student participants at the beginning of their practice placements, and then undertaken follow up interviews at the end enabling me to ascertain if their experiences changed over time. This would have provided me with more in depth data along a continuum of practice. I could have explored students’ experiences, from an initial novice stage
through an intermediate stage of practice development, and towards graduate practitioner status. In addition I could have enhanced my research design, by including an additional stage of data collection enabling me to explore the transitional stage as participants moved from graduate stage to that of a new practitioner.

As I became immersed in the literature and during the analysis phase I was more aware of the impact that students' self-esteem has on their learning experiences. A methodological approach that explored the relationship between students' self-esteem and their perceptions of feedback may have provided more detailed insight into formative assessment strategies that they found most effective on placement.

The adoption of the theme board as a method of elicitation during individual interviews was a successful addition to my study design that enabled me to explore students' experiences in more depth and from different perspectives. My participants appeared to visibly relax when talking through their theme boards making the interview process more collaborative. I feel that I may not have gained as much insight into the stressful aspects of formative assessment if I had relied solely on my interview skills.

I recognize that the findings from this study are a result of my own interpretation. They may indeed resonate with other people's understanding and experience of formative assessment, and provide additional knowledge that informs practice. It is acknowledged that phenomenological analysis is open to a variety of interpretations (Finlay, 2006: 197).

5.12 Reflection on my own journey through the Ed D

My own experience as an Ed D student has been beneficial and has made me more aware of the challenges pre-registration and post-registration students face as they struggle to balance the complexities of practice with study and research.

As a mature student who accepted the challenge of undertaking doctoral study towards the end of my academic career, I have had to adjust to being a student again as well as holding a senior professional role within an academic department. Although at times I found it challenging to maintain a balance between the two contrasting roles, I now think that over the course of the Ed D my "two hats" have complemented each other and have enabled me to develop new professional and personal skills. These include an increased ability to accept new ideas and adoption of a more flexible and sustained approach to my work despite increasing time constraints and other demands. As a result I have found myself being able to work
more effectively with change, as opposed to being daunted by it and seeing it as an obstacle.

My experience as an Ed D student and a researcher has made me much more aware of the adjustments students, and in particular postgraduate students have to make as part of the formative assessment process. As a student I have had to accept feedback from a range of people during the course of the Ed D, and have at times experienced the vulnerability that students in my study talked about both in anticipation and receipt of feedback. However, I think this has made me more receptive to formative assessment and appreciative of its value in moving my own practice forward.

During the initial stage of my research I struggled to see the advantage of exploring my ontological and epistemological stance. I now recognise that by grappling with concepts that I initially found challenging, I have changed my perspective. This has helped me to understand the benefits of educational approaches that promote an ontological as well as an epistemological focus. I now view these approaches as essential for preparing students for a changing professional environment. I believe this change in my thinking supported and may even have enhanced the analysis of my data. It allowed me to view my findings from a more holistic perspective and has changed the way I view the preparation of both educators and students.

As I began to write up my findings, I found myself in a position aptly described in a quotation by Gertrude Stein “and now I am trying to do it again to say everything about everything” (1937:80). I became so immersed in my data that initially I found it impossible to take a step back from the vast quantity of participant quotations. This prevented me from discarding any item that I deemed essential to my interpretation and discussion of my findings. As a researcher I also acknowledged the vital part my participants played and was reluctant to disregard key aspects of the rich experiences they so generously shared with me.

Another factor that may have made it more difficult for me to tighten up my initial draft was the fact that I sometimes lack confidence as a writer and my natural writing style is somewhat verbose. Nonetheless the challenges I faced made me appreciate the value of openly sharing my concerns with my supervisors and peers and using their feedback to move me forward. In a way my own journey as an Ed D student has many parallels with the students who were my research participants.
5.13 Recommendations for further research

As health and social care environments continue to rapidly change, practice education models must continue to adapt. There is potential for developing a national research project to investigate student and practice educators' perceptions of learning and teaching within a multiple educator model. If the project was extended to include an interprofessional perspective it may identify examples of innovative practice that could benefit a range of health professional students and educators.

Additional research could be undertaken into the role of newly qualified practitioners in practice education with particular focus on their role in formative assessment. This could inform pre-registration curricula and preceptorship programmes undertaken by all health professionals during their first year in practice.

5.14 Plans for dissemination and implementation of findings

It is important for me to disseminate my findings on a local, national and international level. I have presented my findings at a local pedagogic research group which I found invaluable. The peer feedback I received made me revisit the way I had structured my initial themes and enabled me to explore my interpretation of the data from a different perspective. I have also presented my research at a university wide pedagogic research conference and will be presenting my findings at the International World Congress of Physiotherapy in the summer.

As course leader for a postgraduate certificate in practice education, I intend to draw on findings from my research to inform the development of the curriculum. These changes will include implementation of a model that promotes a more holistic formative assessment culture in practice education and strategies for facilitating feedback within peer and multiple placement models.

I am currently engaged in the development of a collaborative research project that will enable practice educators and academic staff with an interest in practice education to identify "stories from practice" to inform the quality of placements. Findings from this study will be used to inform the focus of that research.

I intend to publish my findings in Physiotherapy the professional journal of physiotherapists and the Journal of Interprofessional Care to enable my research to be disseminated to a wider audience of practice educators.
5.15 Final reflection

As I conclude this thesis I return to the work of Finlay (2006; 196) who suggested that a phenomenological study should demonstrate its ability to “share its discoveries, to draw the reader ever deeper into the worlds of others”. When analysing my findings and writing up my research I have tried to let the voices of my participants come through and tell their own story. By undertaking this study and sharing my interpretation of physiotherapy students’ lived experience, I hope I have in some small way captured the student voice sufficiently to provide readers with additional insight into the complexity of formative assessment in current physiotherapy practice contexts.

This thesis builds on previous research into formative assessment in health professional education. The key messages that have emerged from the data will unquestionably inform my own practice as an educator and it is hoped will contribute to developing formative assessment within the wider practice education context.

During the course of my Doctoral studies I have had the privilege of taking a step back and exploring formative assessment from different perspectives. By taking a critical look at the process and actively listening to my participants I am now acutely aware of the need for health professionals to adopt constructive feedback approaches.

As we move into an uncertain future we need to embrace the challenges and view formative assessment in health professional education as an essential part of a student’s ontological journey where a more holistic approach to feedback is promoted. This will enable more authentic and sustainable feedback to be embedded within placement learning, promoting active student engagement within communities of practice. Such practice should support students’ transition to autonomous health professionals, equipped with the skills necessary for evaluating their own practice; and committed to delivering high quality patient care. I conclude my thesis with the words of John Dewey that underpins my philosophy of practice education:

“Education is not an affair of telling and being told, but an active and constructive process.” John Dewey (1916:38).
Glossary

ACE Scheme: The Chartered Society of Physiotherapy's scheme for accrediting clinical educators.

APPLE Scheme: The College of Occupational Therapists' scheme for accrediting practice placement educators.

Practice Educator: an experienced practitioner who takes responsibility for facilitating and assessing student learning in the practice setting.

Continuing Professional Development: refers to a range of learning activities that professionals undertake on a regular basis to update their professional knowledge and skills. This will ensure that they can continue to practice safely, legally and effectively (HPC, 2010).
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Appendices

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Appendix one

Letter of approval from FREGC

From: Warne Matthew  
Sent: 15 July 2009 16:37  
To: Morris Jane  
Subject: Ethics Proposal

Hi Jane,

I have now received confirmation from the Chair of the FREGC, that your revised proposal satisfies the requirements of the Committee and is therefore approved.

Please can you let me know the start date of the project and good luck with it all!

Regards,

Matthew Warne  
Quality Assurance Administrator  
Faculty of Education and Sport  
University of Brighton  
Alfriston House  
Falmer  
BN1 9PH

Tel: 01273 643316
Information for participants – physiotherapy students

Project title

The lived experiences of physiotherapy students – How do they experience formative assessment during practice education?

Invitation paragraph.

You are being invited to take part in this research study. Before you decide it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask me if there is anything that is not clear or if you would like any further information. Take time to decide whether or not you wish to take part.

This study forms part of the assessment of an Educational Doctorate that I am currently undertaking at the University of Brighton.

Researcher: Jane Morris – Principal Lecturer in practice education and Head of Physiotherapy Division, School of Health Professions, University of Brighton.

Project supervisors: Dr Graham Stew and Professor John Pratt

Background to the study:

I have a lead role in supporting the development of practice educators and am committed to improving the quality of practice education for health professional students. Feedback as part of formative assessment in the practice forms an essential part of practice learning. However there are few studies relating to formative assessment in physiotherapy practice education and the role of the learner within the feedback process.

The aims of this study are to:-

- explore physiotherapy students' experience of formative assessment during practice education
- explore their preparedness for formative assessment
- identify factors that influence students' experience of formative assessment
- inform the future preparation of practice educators and students
- identify future research opportunities.

Why have I been chosen?
You have been chosen to take part in this study along with several other pre-registration physiotherapy students as you have completed a number of placements and have experience of formative assessment and feedback in the practice learning environment.

Do I have to take part?
It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw from the study at any time without giving a reason. A decision to withdraw or a decision not to take part will not affect you in any way. Such a decision will not have any impact on you as a student.

What will happen if I take part?
If you choose to take part in this research study you will be asked to complete a reflective log during your placements highlighting critical incidents (for example significant episodes of formative assessment) that you have experienced during your placements and participate in one face-to-face semi-structured and a possible follow up second interview. Following completion of the interviews you will be invited to participate in a short group activity where emerging themes relating to formative assessment will be captured using a theme board technique. You will be asked to sign a consent form before the start of the study. The interview and theme board activity will be arranged at a time and date that is convenient for you. The interview will last approximately one hour and will be conducted in a private room within the campus. The interview will be recorded with your permission and will take place between September 2009 and January 2010.

What do I have to do?
You will be asked to talk about your experiences of feedback in the practice setting and will be asked to complete a reflective theme board relating to your experiences of feedback before the interview.

What are the possible disadvantages and risks of taking part?
There will no disadvantages or risks in taking part in the study as it will not interfere with your practice education and will not affect your assessment in the practice setting. It is possible that when talking about your experiences you may feel uncomfortable (although every effort will be made to minimise the chances of this happening). If this should occur the interview will be terminated immediately. You will be provided with the contact details of my supervisors who will be available to talk to you.

**What are the possible benefits of taking part?**

The information gained from this study may help us to understand more about students' experiences of formative assessment during practice education and will inform the development of the curriculum and support the ongoing preparation of both students and educators for practice education.

**Confidentiality**

Confidentiality will be given the highest priority. All information that is collected about you during the course of the research will be kept strictly confidential. Any information will have your name removed and all participants will be given a pseudonym. Audiotapes from the interview, electronic storage devices and paper copies of the data will be kept in a locked container and electronic data will be password protected. Electronic data will be kept on a data stick or stored on a password protected computer. Access to data will be restricted to either the researcher (JM) or the supervisors (GS and JP). Interviews that are taped will be transcribed and then the tapes destroyed at the end of the project. All data will be protected under the Data Protection Act 1998.

**What will happen to the results of the study?**

The results of this research will be reported but it will not be possible to identify individual participants during the project, in the report of the study or in any future publication.

**Who has reviewed the study?**

This study has been reviewed by the Faculty of Education and Sport, Faculty Research Ethics and Governance Committee.
Sample questions for student participants

Thank you for agreeing to take part in this interview.

I'm really interested in hearing your thoughts and experiences of formative assessment during your recent placements.

What do you understand by the term formative assessment?

Can you tell me about an episode of formative assessment during your placements?

Who was involved in that episode?

What happened? What did you do? How did you feel?

Could you say something more about that?

Were there any opportunities for engaging others in the feedback process during placements? How did this work?
Sample email to participants

Dear..............................

Your are invited to take part in a research study, which is being carried out to explore how physiotherapy students on an accelerated programme experience formative assessment during practice education.

I am undertaking this study as part fulfilment of my Educational Doctorate at the University of Brighton, Faculty of Education and Sport.

If you are interested in taking part in the study I will send you an information sheet, which explains the purpose of the study in more detail.

Please do not hesitate to contact me for further information.

Thank you for your time

Yours sincerely,

Jane Morris
Participant Consent form for student participants.

Physiotherapy students' lived experiences of formative assessment during practice education.

- I agree to take part in this research which aims to explore physiotherapy students' experiences of formative assessment during practice education.
- The researcher has explained to my satisfaction the purpose, principles and procedures of the study and the possible risks involved.

- I have read the information sheet and I understand the principles, procedures and possible risks involved.

- I am aware that I will be required to complete a reflective journal, take part in a group theme board activity and take part in an individual interview.

- I understand how the data collected will be used, and that any confidential information will normally be seen only by the researchers and will not be revealed to anyone else.

- I understand that I am free to withdraw from the study at any time without giving a reason and without incurring consequences from doing so.

- I agree that should I withdraw from the study, the data collected up to that point may be used by the researcher for the purposes described in the information sheet.

Name (please print) ..............................................................................................................................

Signed ..............................................................................................................................................

Date ..................................................................................................................................................

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Appendix two:

- Excerpt from student participant reflective log
- Themes from student participant reflective logs
Excerpt from reflective log participant one Claire.

Choice of feedback:

I was asked how I liked/preferred to be asked today.
I feel I gain more from being watched & then feedback/reflection at the end of the session & pt.

I have thus far not been watched as requested—my educator informs me will do appropriate listen behind the curtain but want watch.

Why ask my preference when it is not going to be implemented?

At the end of each week we will receive a formal feedback (this only happens once).
<table>
<thead>
<tr>
<th>Amount</th>
<th>Timing of feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of feedback</td>
<td>Immediate valued</td>
</tr>
<tr>
<td>Feedback with held</td>
<td>Feedback withheld</td>
</tr>
<tr>
<td>Feedback preferences ignored</td>
<td>Lack of time with educator</td>
</tr>
<tr>
<td>Pressure of constant assessment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Style</th>
<th>Feedback from others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback discussion valued</td>
<td>Peer feedback from juniors valued</td>
</tr>
<tr>
<td>especially when linked to</td>
<td>IPE feedback useful</td>
</tr>
<tr>
<td>clinical reasoning</td>
<td>Feedback from patients and family</td>
</tr>
<tr>
<td>Reflective approach to</td>
<td>reassuring</td>
</tr>
<tr>
<td>feedback useful</td>
<td></td>
</tr>
<tr>
<td>Self- evaluation promoted</td>
<td></td>
</tr>
<tr>
<td>Useful when feeding forward</td>
<td></td>
</tr>
<tr>
<td>into practice</td>
<td></td>
</tr>
<tr>
<td>Valued constructive feedback</td>
<td></td>
</tr>
<tr>
<td>and how to improve</td>
<td></td>
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</tbody>
</table>

Table. 4. Themes from student participants' reflective logs.
Appendix three

Examples of stages in the data analysis:

Participant one:

- Original transcript
- Initial notes on transcript
- Exploratory comments
- Developing emerging themes
- Clusters of themes and quotations
- Concept map of emergent themes participant one
- Initial concept map of emergent themes all student participants
Interview Participant 1

So thank you very much for coming and this is going to be a fairly open interview, but I'd like you just to talk me through initially what's your sort of interpretation of formative assessment, the feedback process. Just talk to me about what you feel that is about within placements.

"Um... it's about, oh I don't know really what to say, it's about gaining... kind of going through a process to show that you are safe and effective in the treatment that you do and make sure that you're ready for a junior position when you go out and get a job."

"Great, OK. Just think back to your placements, because you've been on, obviously quite a number now and coming towards the end, and just... talk me through any experiences of feedback on placement. They can be positive, they can be ones that weren't so positive. Just so... just talk me through any experience of feedback"

"I think that when I first started on the placement I didn't really know how I'd like to receive my feedback, whether that was kind of as and when I was doing things or at the end of a session with a patient or even at the end of a week, but I think as I kind of developed, I liked to have immediate feedback after I'd been in a session, so it was more tangible to what you were doing, and you'd know about the specific event that the educator might have been talking about. And then probably, kind of at the end of every week to have a summary of what's been good and what's been bad about that week, I think have worked quite well for me, but I think it's quite an individual thing, and only probably in the last two placements have I really felt that I've grasped that um... and I think certainly at the end of my first placement, my initial placement, one of the kind of developments that my educator said to me was to be very specific about what feedback from a certain session you would want, so if you were with a patient, to come out and say how was my handling on that, or do you think my communication with the patient was appropriate for that, so be very specific about what you want feedback for, otherwise the educator is kind of stood there, and you know, they could be very, very broad, in what they say about you."

"Oh that's interesting actually, that... and did that help you focus?"

"Yeah, yeah, very much so, um... because it's... I think for most people going into a... into that environment with an educator, I don't... you know, apart from maybe learning to drive, you're never really in that situation where you get one on one feedback in such kind of... a lot of one to one feedback, you know. You'll never have someone watch you in any kind of other aspect of life, I think anyway, um... apart from that driving situation really."
"That's a nice analogy actually. And was that something you could have perhaps have been prepared, in advance, been prepared for. Perhaps it... is it something that you could have... would it have helped if you had been prepared for that?"

"Yeah, possibly, just kind of... yeah, about kind of... yeah, how to get the best out of your feedback maybe. Because otherwise it can be a bit...it's not really very focused I don't feel, um... and you probably don't develop yourself as much... as well as you could do if you had specific feedback to focus on. I mean certainly in my last placement I was made to make objectives every week and then they would feed back to me and I would feed back about how I'd feel if I've achieved those objectives, and if I haven't, why haven't I, and that's a... I feel that was a much better way to focus you throughout your placement so you feel you're hitting goals as you go along, rather than having your objectives at the beginning and six weeks to fulfil them and you might fulfil them within the first three."

"So the objective at the beginning are part of a learning contract obviously which you fill in, but from your point of view, having... reviewing those objectives on a regular, or the skills on a regular basis was much more helpful to you..."

"Much more helpful I feel. And you can really see your progress as well, because we might not really, from week one to week six, unless you... I think unless you evaluate yourself as you go along and reflect on your practice as you go along, you may not see what a major difference that you've achieved, so I think it's really important to have a regular... regular feedback sessions."

"So for you, the feedback is part of this self-evaluation and this reflective process?"

"Yeah, I feel so, um... and then you know, the feedback also can be er.... yeah that you've passed or you've failed yeah."

"So then it forms part of the final assessment?"

"Yeah."

"OK. So that's some really interesting points there. Talk to me a little bit about your experiences of feedback and perhaps one example where you felt it was very useful. You've given me some indication where it was useful. Perhaps why was it so useful? Think about perhaps an incident."

"Er... OK there was an incident on one placement where I was watched doing an assessment and a treatment and um... immediately afterwards we... we had a little feedback session um... where the educator asked me how I think it went and so I would express what I
think I did well and what I think I did badly, kind of following that reflective practice um... guidelines. And then she also reflected on what I did well and what I did badly, um... and then where my improvements might come and specific pointers and um... in that certain patient case it was um... I adapted my communication quite well um... because of kind of um... er... learning difficulties that the patient had, um... but maybe the technique that I chose wasn't that brilliant and reasons why... why I could change... could change that, so... yeah, it... I think from that... it was good that um... it was good that I identified my needs, what I think that I did well and what I did badly, and then she had expanded on that, um... so I... you kind of led your... I led my own feedback but she was able to put her point of view across as well."

"So that ability to lead your own feedback was important?"

"Yeah, I think I work best with that and I think I'm quite aware of my own learning needs so I'm quite... I'm quite aware of where I'm not very good and where I am very good, yeah."

"So leading it was important for you at that stage and talk to me a bit about... in that particular incident, the way in which that feedback was... the sort of language the... because you said it was a good experience... the language, the type of language... the wording that the educator used in that situation."

"Hmm, that's quite difficult. Um... I suppose it wasn't... it wasn't a negative... it wasn't negative language, it was... it was er... it was very relaxed. The educator herself was a very laid back person so that helped quite a lot, so it was very informal, um..."

"Why do you think it helped by her being laid back and...very informal?"

"Um... because it felt less like it was um... it felt less like a watched assessment and more... just more a peer learning experience, um... so it was more of that sort of um... environment, whereas I think in other... in other situations on placement, if you're having a watched assessment it can feel like it is a watched assessment and you get very hot and flustered and it's not a nice situation to be in, um... a bit more pressure..."

"What did you think... you mentioned the educator was laid back, what do think can help this more of a peer learning environment?"

"Um... I'm trying to... she... yeah, I mean she was exceptionally laid back, so I think that was kind of like the extreme, um... I'm not sure... it's not... it's not necessarily being a friend... being friends with your educator, that's not the level that you're on, but it's more having a kind of respect for each other, so you respect them as they're elders, but they have to respect that you are a student and you are learning, rather than someone who is practising
and you did this wrong, you did that wrong, you did that wrong, rather... you know, they have to be constructive with that, you know, feedback, um... and but you know, I think you can... you can have authority over someone without being in your face. And I think that's a really important balance to have."

“So for you that peer approach, that respect for you was helpful in that placement?”

“Yeah, yeah.”

“Anything else about that... that episode that was useful? From the perspective as a learner.”

“Um... I think it was... I think it was really helpful when um... when your educator gives their opinion on what they may have done... what they would have done differently, having practised for however many years. Yes, you're hitting the right level as a student, but they... with their years of learning probably would have done this instead and why they would have done that, so that kind of um... you know, they're developing you as you go along as well.”

“So that why is important for you, it helps you to understand where they're coming from?”

“Yeah, definitely, yeah.”

“So that was immediately after... you'd obviously worked with a patient. Any other examples, and you might choose one that wasn't so positive on placement? Take your time.”

“Hmm, I don't know, I'm trying to think of a non-positive one or one that wasn't as helpful.”

“Well perhaps one that was slightly different in the way you experienced it.”

“Umm... oh I don't know.”

“We can come back. You mentioned in your reflective diary, that in one area you were asked to... how you wanted feedback, and then it didn’t happen at all.”

“Yeah.”

“Talk to me about that.”
Um... that particular placement I was with another student at the same time and um... and at the beginning of the placement they asked us how we felt we were best... we were most effective with our learning and how we... we liked to receive feedback, and I expressed that I preferred having um... and educator if they wanted to view what I was doing, rather than always feeding back after I'd been to see a patient, I quite liked to have the educator with me just hovering in the background while I'm treating the patient so they can actually see what I'm doing and give me feedback on that aspect, rather than just coming out and saying the patient has this and that, I'm going to do this. You know, that's fine, you know that the educator can't be with you all the time so... you know, that's perfectly reasonable that that happens, but I did specifically say that my preference was that they, at least some of the time came and watched what I was actually doing behind the curtain."

"And why is that important to you as a learner?"

"Because I feel that... I feel it gets you used to... used to people watching you which is going to happen when you are practising anyway. So I think you have to get used to that fat, um... and I think, you know, that the educator can actually view what you're doing. View your handling, view your communication that's not verbal, that they can't listen to outside of the curtain, you know, I think that's very important to get feedback on those aspects, you know. Because I could be shut behind the curtain doing a technique which I think is fine, but actually I'm doing it all wrong and they can't actually view that, so I think that's very important um... and I feel it's easier to report back to the educator when they've been there and seen the patient themselves and also the educator can pick out things in their history maybe that they've said, that you maybe as a student wouldn't have picked up on, but they would with more experience, so...and unfortunately in that placement that wasn't achieved, like they didn't... they didn't implement that... my learning wants, because the other student that I was with at the same time, expressed that they would want their feedback in different way and so we just went down that path."

"OK, so in that situation your learning needs weren't met?"

"No. No I don't feel that they were and it wasn't... it wasn't the best... I felt a little bit... on that specific placement I felt a little bit like I didn't get as much... it's not attention, but as much feedback as the other student got which I felt was a bit detrimental to that placement."

"So from that point of view you would have preferred it if you... they had been able to meet your needs and provide it in the way you wanted?"

"Yeah, yeah."
"And was there an opportunity on... you mentioned you had a peer on placement, was there an opportunity of working together in terms of the feedback process?"

"Um... we did working together occasionally, very occasionally, but not giving each other feedback, no."

"And do you see any potential for that working on placement?"

"Um... I do if the students are the... are receptive to it, if they're at the same level and if they are constructive with it. I think that it probably would be a very good um... good method of feedback and get you to really reflect on your practice. Um... but I think maybe if the students are of very different levels of ability, then it probably doesn't work as well."

"And how do you think it could be achieved if you... eventually if they um... as long as the feedback from the peer is constructive. How do you think that could be achieved? Or facilitated perhaps?"

"Um... possibly facilitated kind of using like a crib sheet maybe, to kind of almost do a SWOT analysis of that person so, you know, what the strengths are and the weaknesses, how would they develop that and what's sort of standing in their way of achieving that kind of... using that kind of like mini crib sheet or something, um... to be positive and negative, or negative and constructive and have like an action plan of how they might get better at it, yep."

"OK. So there was only that opportunity on one placement for, you know, with another... a peer, in that situation?"

"Yeah."

"OK. Talk me through who else was involved, so on this placement where you had requested feedback being delivered in a certain way and it didn't happen, was there an opportunity for talking about that to your educator?"

"Um... I probably didn't feel... I did at the very end which was probably too late, um... but in between times I just kind of got on with it, um... just didn't feel the... not... probably that there wasn't the opportunity, there wasn't the... an appropriate time to bring it up, because you were always with the other student, um... and I probably didn't feel comfortable talking maybe about it which was...it was... that wasn't the fault of the educator probably, that was just probably me, yeah."
"OK. And in terms of the... thinking in terms of providing feedback to educators, were there opportunities for you to do that about, you know, about the process and..."

"Um... there probably was, but it wasn't er... in that particular placement it wasn't forthcoming and the opportunity to do so... like they didn't provide any kind of structured time for that to happen um... my most recent placement, there was definitely every... at the end of every week we had a slot booked out to give feedback both on the actual placement as a placement and what was going on in the department, and then feedback on my performance."

"And how did you feel about that?"

"Um... I think it was really good. It was quite difficult because that was again a weekly thing, so every week you would come up with good things about yourself and the placement and bad things about yourself and the placement so it was quite difficult and certainly on the first week I don't think I mentioned anything bad about the placement and..."

"Why do you think that was?"

"It was certainly like just trying to get on the good side of the educator you know, you have to play that game, but then the educators were very... they sort of put their point of view across that if um... if at the end of the placement you don't feel that you've got the mark that reflects what you think you're capable of, then there's a reason for that and if that reason is to do with us, then we need to know, so that was made very clear which helped quite a lot, yeah."

"So the educators being open in wanting that feedback helped you to...?"

"Yes, yeah."

"And in that situation were there more... there was more than one educator?"

"Yeah, more than one educator again, yes."

"And how did that work in terms of feedback?"

"Er... yeah, it worked quite well, I mean that was an outpatient placement so it was... it was very much um... you had patients that were either educator's caseload which you would discuss with them, so it was quite separate, um... and then at the end of the week they
would talk together and then give you your feedback so that worked quite well. In other situation, maybe on a ward situation where you have two educators and you’re seeing lots of different patients, it may not... I don't know that it particularly works as well.”

“And was that your experience?”

“Yeah.”

“Why don’t you think that works if you’ve got a number of educators in that situation?”

“Because they don’t... because it might be that one day one educator is there and another day the other educator is there and they don’t... you don’t get that carry over between... of the patients’ history and what you’ve been doing with them and what... your progression is, what your aims are. Um... and it takes more time out of kind of, you know, on a ward, you... you’re... it’s go, go go with you most of the time and there's less opportunity to feed back to your educator and when they don't know the patient then it’s even more time taken out to discuss what’s been going on.”

“So in a ward situation the opportunities for feedback from your point of view when there was more than one educator weren’t so successful?”

“Yeah, yeah.”

“And I’m interested in the differences in the settings. Was there any other difference in the sort of approach to feedback or your experience of feedback in different settings?”

“Um... yeah, I think certainly um... in an outpatient setting, because there’s the opportunity to book slots out in the diary, you are timetabled to experience... to have a set time to feed back, whereas on a ward setting, there’s not as much of that kind of regimented timing. Therefore feedback always gets pushed back and pushed back, whereas actually it always should be brought forward I feel, it’s really important, whereas I know it’s important to get up onto the ward and see your patients, but um... if you’re floating around not really knowing what’s going on then it’s not going to be effective so....I think the temptation is that feedback is the kind of a secondary thing on a ward and the patients are the first thing and I think it would be very beneficial for educators to slot out a time where that is a protected time and you will have your feedback then, otherwise it went for maybe two or three weeks where I received no feedback.”

“OK, so that was... and even the feedback declined after seeing a patient?”
"Yeah, I mean that was few and far between, um... and it was, you know, that's fine when it's that immediate patient, but kind of overall, you need that overall of how am I doing as well, um... which there wasn't really any time for that."

"And how did... you mentioned you thought it could be facilitated by blocking off time and trying to stick to that?"

"Yeah, yeah, I think that would be helpful."

"You've mentioned other people involved in the process, that there was a peer, but there wasn't much opportunity for peer feedback. Talk to me about other people involved. I notice you've got other... you've got the team involved in your theme board. Talk to me about other people who were involved in the process."

"Um... I think as placements develop you get... you get more integrated into the team and feel that you can approach other people other than just your educators for feedback, um... and advice. Um... and most of the time you are accepted into the team and feel as part of it. Um... there was one placement where I didn't feel like I ever was accepted into the team, I was just the student, which I think, that's fair enough if that's the way they work, but for me I felt that there was probably a lot of knowledge in that team which I could have tapped into and I didn't really feel I had the opportunity."

"And why do you think that was the case? What sort of... made you feel that way?"

"I think the main reason was when I first arrived on my first day of the placement I never was introduced to anyone else apart from my educators. And so I just sort of... I think also because it was my first placement, um... kind of that confidence of introducing yourself, and I'm the student, I'll be around for the next six weeks and that sort of, you know, having the confidence to do that, you kind of just float around and you don't really know what's... what's the protocol here or how should I behave as a student, um... and so on that particular placement um... I didn't feel welcomed by the team. Probably it was only in the second week that I learnt who... who were the senior physios and who were the juniors and that kind of, you know..."

"And was it all a physiotherapy team or was it a multidisciplinary team?"

"It was a multidisciplinary team actually and to be honest, the occupational therapists were much better at introducing themselves and saying I'm soandso and I'm an OT and we do this here and, you know, they were so much better at doing... at playing that role, um... which was... yeah, quite a reflection on..."
"Hmm. Interesting. And what... what type of team... specialty area, was it? Don't tell me the area obviously, but tell me the type?"

"Um... it was um... neuro."

"So it was a neurological team?"

"Yep."

"And so it was important to... in order for you to get feedback form other team members for you to feel part of that team?"

"Yeah, definitely. Otherwise you feel that you'd just be pestering them and they don't have really... they don't have time for a student."

"And what about patients and their... perhaps their role in this feedback process?"

"Um... I think they probably play a minimal role really. Um... they kind of just accept that you're a student, you're going to be seeing them and that's it. Most of them... most patients are quite... I don't think I ever had... I don't think I ever has a situation where a patient has refused to see me because I'm a student, so that's good. Um... sometimes they kind of do a little, oh you're a student... oh OK, but most of the time they're quite receptive, um..."

"And were they involved in the feedback process at all?"

"No. No I don't think they were."

"What are your thoughts on that?"

"Um... I think it could be beneficial, but I'm not sure that a patient may be able to... unless they can compare it to another physio, I'm not sure that they could be able to give you that constructive kind of feedback, unless they had that comparison to make of what may be a good treatment and what's a student treatment, that kind of comparison."

"OK, thanks for that. And talk to me a little bit about this theme board of yours which is very colourful. Tell me a little bit about that."

"Yeah, it was just kind of summarising the... the um... placement kind of process and um... it's kind of yeah, like a journey almost so you've got your thirty days to impress the educator
and you could... it could be um... you have very good days or extremely bad days and kind of knowing that that's a natural thing and you can't do anything about that, so you've just got to get on with it, but you hope that your educator will take that into account. Um... and this one's kind of like you almost put a mask on um... and just play the game I suppose for some of the time. And it's a bit scary to start with, but as you get integrated into the team you get more relaxed, um..."

"And does that make the whole process of feedback easier do you feel?"

"Yeah, yeah, I think it does, so um... you kind of always have that feeling of am I impressing them? So that's what those am I getting enough smiles per gallon? Am I getting that positive feedback or am I just getting a... half hearted feedback?"

"And that's interesting, so talk to me a little bit about the... the smiles per gallon and what helps with that situation of actually not being sure what you're getting back from...?"

"Yeah, I think you kind of um... you need that encouragement, especially when you're first starting out, you need that encouragement that what you've been taught in class is right and what you are doing, you are right, carry on, that kind of... that kind of attitude, rather than standing there blank faced and you don't really know am I saying the right thing or am I not? So yeah, that kind of... that non-verbal communication is very important, and even while you're treating a patient as well, like it's still having that... you're not communicating with your educator but you kind of look... know from the look on their face, yeah they would be doing the same thing, so carry on. Yeah that's..."

"So that non-verbal communication that's really interesting, that's very important to you when you're working with...."

"Yeah, definitely. "

"And you said... talk to me about the episode you mentioned where there was a blank face."

"Well, yeah, if you're just... you're just treating a patient and they're just... and your educators just have a blank face on, you could be doing the right thing, but it's... it's almost like you need that extra confirmation that you would have the confidence to carry on. Whereas if your educator is just a blank face sitting there and just watching you and maybe not getting involved in what you're doing, then it does... it brings on that um... I'm in a watched assessment, this is... I'm... this is quite panicky, I'm quite nervous about this, whereas it's that peer relationship again of... they do have authority over you, but they are... they're still... they're still... you're still on the same level... you're still human beings so..."
"Absolutely and this peer relationship... in the peer relationship, what was the non-verbal communication like in that?"

"Um... it was... it was um... it was that encouragement, it was that smile, um... that nod of the head like yeah carry on, you're doing well, keep going, um... because I think... I think that's important when you are one to one with a patient because the patient needs to know you have confidence as well. If you don't have confidence because you're not quite sure that what you're doing is right, then that comes across and the patient won't trust you."

"OK. And so that's interesting, you've made a distinction there between feeling assessed when a non-verbal was... the blank face... I'm just checking that I'm right here, and then where there was encouragement and you felt more in a peer relationship, that helped you to get more confidence."

"Yeah, yeah."

"OK. That's really interesting. Anything else you want to tell me about the theme board? Anything that jumps up again?"

"Um... I think... I think the kind of other thing that I was trying to say is um... like looking at this picture here, of the... of the flamingos, that you're kind of the student and your educators are standing in the background and almost like you aspire to be like them, and you're almost... I think almost in some placements you're moulded into that educator..."

"Right and what are your thoughts about that? Being moulded?"

"I think it's... I think it's fine and it's a good thing um... that you kind of develop a way... a patient rapport, but almost in some placements, and I don't know if it's just my personality, but I almost as a little bit of a sponge... and just... it was almost kind of mimicking that educator, in the way that I was talking... and in the way that I would act around patients and I... and maybe that's a reflection that you just want to... you want to be like your educator so that they... they'll give you a good mark. There probably is that underlying current, but I just... I hope that throughout the six placements that that will all come together and then I'll develop my own way of doing it all and I will have taken all of my educators on board um... and then be one rounded physio rather than moulded into a certain person maybe."

"OK, so it's important you feel, you know to take... have your own way of doing things and be your own professional person?"

"Yeah, definitely."
"Nothing else... you've got this when two is a crowd here and um... I'd be very interested in that."

"Yeah that's kind of talking about when you are... when you may be on a placement with two... two students or with two educators and um... I think it's really important that um... the educators communicate with each other um... on... on their way of doing things and their opinions on certain things because otherwise you can get conflicts that... you've been told by one educator to do something in a certain way and then you do it in that certain way and then the other educator says oh why are you doing that? I think it's really important that you're on a kind of level playing field with that um..."

"And in that situation, how did that affect the feedback process?"

"Um... I think... it's a bit confusing sometimes, it can be, definitely um... er... because you don't... you almost don't know where you stand and as a student you kind of don't want to say oh well so-and-so told me to do it like that. You don't have that kind of um... yeah, role to be saying that."

"So from your point of view it was difficult to actually highlight it to them."

"Yeah."

"Yeah, OK. And just... coming back to your role within the feedback, you mentioned where you were able to play perhaps an active role, that was useful, self-evaluation. Why do you think that's... what's important about your role as a learner within the whole process?"

"Because at the end of the day, when you go out and you practise, you are... you're not going to have the... an educator with you all the time, so you need to know how to go through that process and reflect um... so that you can develop, you know, it's that whole CPD thing that... it's a really important skill to have, and I think on placements that's how... the one thing that you... on top of all your knowledge and all your hands-on skills, you have to develop the skill of being able to reflect on your practice and know when it's good and know when it's not otherwise you're never going to develop and physio is this constant learning career so, that's why I think it's really important to be involved in that feedback."

"And if you could... we've touched on areas, so if you could chance things about the whole process and perhaps have this change, what would... what would be most important to change... what would you change if you had the opportunity. Again, perhaps a blank canvas of changing the process of feedback?"

xxv
"Um... what would I change? Um... I think I would go back to my first placements and know how I wanted my feedback and get more out of the placements because of that. So maybe if I had that knowledge before going on placement then that would be of benefit. Um... I think I would express more to my educators that the feedback time is important and it should be an allotted time for that to take place. I think that's probably the two main changes that I would make."

"And you mentioned that model where you had an educator who was much more of a peer."

"Yes, yeah, that too, so you have that... that one level relationship."

"OK. I'm very interested also in PBL, because you're obviously on a PBL course. How does that sort of feed into the process of this formative assessment? Does it feed in?"

"Um... I suppose it does in the fact that with the PBL format you are... you are made aware of... you create what you want to learn, so I suppose it does mould you in that you'd maybe might be more aware of um... what your learning needs are and therefore you can set objectives easier... more easily and things like that. But I don't... I don't know that it massively feeds into the... I'm not sure that there is that carry-over into the second year of PBL."

"Hmm. OK. And is there potential for that to develop?"

"I suppose there must be, but I don't know how. I'm not sure how you would develop it into the placement, I'm not sure."

"Anything else you want to tell me about? You've given me lots of information which is great."

"Um... I think I've covered most of it, I suppose just these little bits over here is kind of um... not forgetting that the educator isn't there just to um... to say yes you've passed or no you've failed. They're also there... you're still learning so it's important that um... you get time to spend with them to discover how they might do things and I think it's important to have a balance of being able to um... watch other physios practising as well as them watching you, not to... so that you can develop your skills, I think that's an important part of placement and I think sometimes that's forgotten."

"So it's very much still a learning experience?"

"Yeah, um..."
"And what about more junior colleagues... more junior... um... did they have a role in the process at all for you?"

"In only one placement did I spend any time with a junior physio and that was just a morning. Um... and I think it is important to spend that time with a junior because at the end of the day you're going to be at their level and you can see... am I hitting that level or am I not, and you then know if you've got work to do."

"So how could they be involved in this... in this feedback process? Was that one involved at all?"

"No, not in feedback. It was just literally go and shadow them for a morning which I think worked quite well um... yeah, I mean probably, you could probably integrate them into the feedback process so that they could... because it's probably quite important to get um... throughout your... your bands, get feedback from every band level, um... so yeah I think it is important to have a Band 5 maybe sit and watch you do an assessment or a treatment maybe with a patient and say well yeah I would have done this, you know, you can certainly feed information off them as well definitely, yeah."

"And why do you think that might also be beneficial to them?"

"Er... I suppose it would be a career kind of progression for them maybe as well, kind of thinking could they... you have that experience with a student to know they would be able to take that student on, maybe at a later stage of their career on an also um... highlight to them maybe what level they were at as a student and now where they're at as a Band 5 maybe. That kind of reflection as well."

"OK. Anything else you want to add? OK. Thank you very much for taking part and for your time."
Step 2. a - Making initial notes.

Jane Morris EdD – Interview Participant 1

So thank you very much for coming and this is going to be a fairly open interview, but I'd like you just to talk me through initially what's your sort of interpretation of formative assessment, the feedback process. Just talk to me about what you feel that is about within placements.

"Um... it's about, oh I don't know really what to say, it's about gaining kind of going through a process to show that you are safe and effective in the treatment that you do and make sure that you're ready for a junior position when you go out and get a job."

"Great, OK. Just think back to your placements, because you've been on, obviously quite a number now and coming towards the end, and just... talk me through any experiences of feedback on placement. They can be positive, they can be ones that weren't so positive. Just so... just talk me through any experience of feedback."

"I think that when I first started on the placement I didn't really know how I'd like to receive my feedback, whether that was kind of as and when I was doing things or at the end of a session with a patient or even at the end of a week, but I think as I kind of developed, I liked to immediate feedback after I'd been in a session, so it was more tangible to what you were doing, and you'd know about the specific event that the educator might have been talking about. And then probably, kind of at the end of every week to have a summary of what's been good and what's been bad about that week, I think have worked quite well for me, but I think it's quite an individual thing, and only probably in the last two placements have I really felt that I've grasped that um... and I think certainly at the end of my first placement, my initial placement, one of the kind of developments that my educator said to me was to be very specific about what feedback from a certain session you would want, so if you were with a patient, to come out and say how was my handling on that, or do you think my communication with the patient was appropriate for that, so be very specific about what you want feedback for, otherwise the educator is kind of stood there, and you know, they could be very, very broad, in what they say about you."
**Step.2.b – exploratory comments.**

**Participant 1.**

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"Oh that's interesting actually, that..."

certain of needs as a learner
Preference for immediate feedback recognised later in placement
Here the participant uses words that indicate the need for the feedback to be in context and accessible to the learner more tangible ... you'd know about the specific event
Evaluating the week's practice

Recognising individual needs
time to grasp own preference for feedback

Focus on feedback seen to be a learning development
Here educator appears to encourage student to be active in the process

Here student is encouraged to ask questions to elicit feedback
Focus on explicit feedback
Need for student to clarify purpose of feedback & why they want it

Kind of stood there (a bit of a spare part) leading to feedback that is of little value - very broad
and did that help you focus?"

"Yeah, yeah, very much so, um... because it’s... I think for most people going into a... into that environment with an educator, I don’t... you know, apart from maybe learning to drive, you’re never really in that situation where you get one on one feedback in such kind of... a lot of one to one feedback, you know. You’ll never have someone watch you in any kind of other aspect of life, I think anyway, um... apart from that driving situation really."

Emphasis on very very much so

Expectations unclear initially

An interesting analogy with driving instructor Sees this as unusual “your never in that situation”

? element of exposure not used to being observed constantly
Step three – developing emergent themes

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| **Uncertainty** | "I think that when I first started on the placement I didn’t really know how I’d like to receive my feedback, whether that was kind of as and when I was doing things or at the end of a session with a patient or even at the end of a week, but I think as I kind of developed, I liked to have immediate feedback after I’d been in a session, so it was more tangible to what you were doing, and you’d know about the specific event that the educator might have been talking about. And then probably, kind of at the end of every week to have a summary of what’s been good and what’s been bad about that week, I think have worked quite well for me, but I think it’s quite an individual thing, and only probably in the last two placements have I really felt that I’ve grasped that um…and I think certainly at the end of my first placement, my initial placement, one of the kind of developments that my educator said to me was to be very specific about what | Initial uncertainty re feedback
? need to prepare students for this gap in our preparation

| **Value of immediate feedback** | Preference for immediate feedback recognised later in placement

| **Feedback in context** | Here the participant uses words that indicate the need for the feedback to be in context and accessible to the learner more tangible …you’d know about the specific event

| **Tangible feedback** | Evaluating the week’s practice

| **Regular summary and evaluation** | Recognising individual needs time to grasp own preference for feedback

| **Time recognise preference** |

| **Specific feedback important** | Focus on feedback seen to be a learning development

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*positive*, they can be ones that weren’t so positive. Just so... just talk me through any experience of feedback"
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<td>Student sees this as an unusual “your never in that situation”</td>
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<tr>
<td>Situation it appears having that being asked to be specific about feedback helps her to adjust to the close one to one feedback ? element of exposure not used to being observed constantly</td>
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“That's a nice analogy actually. And was that something you could have perhaps been prepared for. Perhaps it... is it something that you could have... would it have helped if you had been prepared for that?”

“Yeah, possibly, just kind of... yeah, about kind of... yeah, maximising feedback, getting the best out of your feedback maybe. Because otherwise it can be a bit... it's not really very focused I don't feel, um... and you probably don't develop yourself as much... and you could do if you had specific feedback to focus on. I mean certainly in my last placement I was made to make objectives every week and then they would feedback to me and I would feedback about how I'd feel if I've achieved those objectives, and if I haven't, why haven't I, and that's a... I feel that was a much better way to focus you throughout your placement so you feel you're hitting goals as you go along, rather than having your objectives at the beginning and six weeks to fulfill them and you might fulfill them within the first three.”

useful to think about maximising feedback opportunities getting the best out of feedback

lack of focus linked to possible lack of progress

importance of specific feedback

feedback linked to learning objectives

here the student talks about regular feedback providing a focus to the whole placement so goals are being achieved as they move forward along a continuum

XXXV
<table>
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<tr>
<th>Linked to reaching goals</th>
<th>&quot;So the objectives at the beginning are part of a learning contract obviously which you fill in, but from your point of view, having... reviewing those objectives on a regular, or the skills on a regular basis was much more helpful to you...&quot;</th>
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<tr>
<td>Regular feedback more helpful</td>
<td>&quot;Much more helpful I feel. And you can really see your progress as well, because we might not really, from week one to week six, unless you... I think unless you evaluate yourself as you go along and reflect on your practice as you go along, you may not see what a major difference that you've achieved, so I think it's really important to have a regular... regular feedback&quot;</td>
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<tr>
<td>Self-evaluation and reflection essential part of process</td>
<td>Emphasis placed on really here student recognises the value of regular feedback liked to self-evaluation and reflection in helping them to see what they've achieved</td>
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<tr>
<td>Need to see progress</td>
<td>Reflection and self-evaluation linked to recognition of progress</td>
</tr>
<tr>
<td>Importance of regular feedback</td>
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**xxxvi**
Step four: clusters and quotes

Clusters and quotes – Claire participant 1

Excerpts from clusters and quotes:
Looking for patterns in emergent themes and mapping quotes from the data against the clusters

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Quote</th>
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</table>
| Cluster - uncertainty | "I think that when I first started on the placement I didn't really know how I'd like to receive my feedback... if you’re floating around not really knowing what’s going on then it's not going to be effective so... uncertain
If you don’t have confidence because you’re not quite sure that what you’re doing is right, needing reassurance then that comes across and the patient won’t trust you.”
... you almost don't know where you stand and as a student you kind of don't want to say oh well unsure of role (more than 1 educator)
so and so told me to do it like that. You don't have that kind of um... yeah, role to be saying that.”
So that's what those Am I getting enough smiles per gallon? Am I getting that positive feedback needing reassurance

| Cluster - Pressure? | if you're having watched assessment it can feel like it is a watched assessment and you get very hot and flustered and it's not a nice situation to be in, um... a bit more pressure...” pressure
and I probably didn't feel comfortable talking maybe about it which was...it was... that wasn't the feeling uncomfortable
fault of the educator probably, that was just probably me, yeah.”
... it's go, go go with you most of the time and there's less opportunity to feed back to your educator time pressures
and when they don't know the patient then it's even more time taken out to discuss what's been going on.” |
you need that overall of how am I doing as well, um... which there wasn't really any time for that."

*Lack of time*

, like a journey almost so you've got your thirty days to impress the educator and you could... it could be um... *pressure to impress*
you have very good days or extremely bad days and kind of knowing that that's a natural thing and you can't do anything about that, so you've just got to get on with it,

Um... and this one's kind of like you almost put a mask on um... and just play the game *playing the game*

I suppose for some of the time. And it's a bit scary to start with, but as you get initial worries integrated into the team you get more relaxed, um..."

Yeah, yeah, I think it does, so um... you kind of always have that feeling of am I impressing them? *Need to impress*

So that's what those Am I getting enough smiles per gallon? Am I getting that positive feedback or am I just getting a... half hearted feedback?* seeking affirmation*

It was quite difficult because that was again a weekly thing, so every week you would *challenged by self-evaluation*
come up with good things about yourself and the placement and bad things about yourself and the placement so it was quite difficult and certainly on the first week I don't think I mentioned anything bad about the placement and..."

Whereas if your educator is just a blank face sitting there and just watching you and maybe not getting involved in what you're doing, then it does... it brings on that um...

I'm in a watched assessment, this is... I'm... this is quite panicky, I'm quite nervous pressure of watched assessment

*Cluster – immediate and specific feedback*

but I think as I kind of developed, I liked to have immediate feedback after I'd been in a session, *values immediate feedback*

so it was more tangible to what you were doing, and you'd know about the specific event that the educator might have been talking about

at the end of every week to have a summary of what's been good and what's been bad about that week *summary useful*
so be very specific about what you want feedback for, otherwise the educator is kind of stood there, 

**need to be specific**

and you know, they could be very, very broad, in what they say about you."

Because otherwise it can be a bit... it’s not really very focused I don’t feel, um... and you probably don’t develop yourself as much... as well as you could do if you had specific feedback to focus on. **need for focus**

I was made to make objectives every week and then they would feed back to me and I would feed back about how I’d feel if I’ve achieved those objectives, and if I haven’t, **importance of goals**

why haven’t I, and that’s a... I feel that was a much better way to focus you throughout your placement so you feel you’re hitting goals as you go along,

I think unless you evaluate yourself as you go along and reflect on your practice as you go along, **need for regular feedback**

you may not see what a major difference that you’ve achieved, so I think it’s really important to have a regular... **regular feedback sessions.**"

and specific pointers and um... in that certain patient case it was um... **specific feedback essential and reasons why... why I could change... could change**
| Feedback conversation | blending the two if you like so that I'm constantly saying look refer to the... refer to the assessment form, you know, that... that's your guide and... and then we sort of... a conversation sort of happens, almost from day one and they're getting feedback on... on the areas like that. And also I think that the feedback is... is a two-way um... process and I think that, you know, the... it's really important to take feedback from the students, one for your own learning, but you know, so that they get the learning experience that they want because I think that, again as I've developed as a practice educator, you sort of realise well, it's their real... it's their responsibility as well, the learning experience, it's not just your responsibility, which when I first started, I thought maybe, you know, you... all the responsibility was on your... you to deliver this perfect learning experience, but, you know, it's certainly a sort of more equal relationship, and so their feedback to you is very important and you have to invite that. They have to feel comfortable for that, so... |
| Sees feedback as two way process | Talks about blending the two |
| Sees feedback as a conversation | |
| Uses assessment form as a reference point | |
| Needs to be a two way process | |
| Educator can learn from feedback | |
| Two way feedback helps student to get support they need | |
| Student has responsibility | |
| To say what they want | |
| Importance of reciprocal feedback | |
| Need for reciprocal feedback | |
| Importance of reciprocal feedback but educator needs to invite it | |
| Student has a role in process | |
| Equal relationship | |
| Students need to feel comfortable | |
um... you know... so getting that feedback is very important."

"And why do you think it's so important for them to have to
Emerging themes participant one

*Balance in relationship essential*
- respect for student
- need to recognise stage of learning
- "peer relationship" useful

*Getting the best out of feedback*
- being specific
- self-evaluation
- aware of learning needs
- likes to take the lead in feedback
- playing an active role

*Feeling uncertain*
- need for regular feedback
- non-verbal communication "Am I getting enough smiles per gallon?"
- 1:1 feedback seen as unusual like a driving lesson
- expectation uncertain

*Like you've got a mask on*
- need to feel part of a team

*Useful feedback*
- self evaluation and reflection
- need for acceptance
- lack of integration
- feeling unwelcomed
- need to impress

*Unhelpful feedback*
- lack of feedback
- lack of time for feedback "on wards it gets pushed back"
- regular slots
- encouragement "nod of the head"
- tangible specific feedback
- regular summary worked well
- focus important - linked to progress

*Pressure*
- need to impress
- pressure of watched assessment
Appendix three

Figure Concept map of emergent themes from all student participants.

Lived experience of formative assessment

- A sense of context
- A sense of disempowerment
- Quality "best thing since sliced bread"
- Overloaded car

- Unwelcoming team
- Lacking consistency - multiple educator models
- Worthless feedback "nothing else just carry on as you are I ended up on not progressing so that was very frustrating" (P6)
- Communication
- Non-verbal - looking for funny expressions
- "so I would check over and if my educator's nodding"
- A sense of collaboration: she actually prompted me to reflect by the end of the placement we were singing from the same hymn sheet because our thinking was so in tune
- Peer learning:
- A sense of agency (proactive) "I see it as a learning experience and I actually don't care much about the marks" "I always sit down with my educator early on and I take that initiative myself"
- Open relationship "yeah open to your self - very honest to your educator so it gives them things to work on straightaway"
- Structure and tangible goals
- Immediacy of feedback
- No surprises "the feedback was really very good... I had a very good preception of how I was doing and so it wasn't a surprise"
- Overwhelming feedback
- Assessment driven "well the way I understand it - it's part of your requirement to get a grade"
- Fear of failure "I get the feeling from some of them it's almost like a fear of failure it's a scary environment"
- Volcanic eruption
- Undercover agents
- Concept of a watched assessment
- Linked to constant assessment

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Appendix four:

- Themes from practice educator participant data

- Master Table of main themes and sub-themes for the whole participant set with quotes
### Themes from practice educator data

**"It absolutely crucial to the whole process adopting a holistic approach"**

- **Structure**
- Need to identify feedback preferences
- Need to set ground rules
- "No ambiguity"
- Weekly feedback — “then you’re not chasing your tail”
- Feeding forward

**Challenges of multiple educator model**

- "Pushed from pillar to post"
- Lack of communication
- Lack of experience and consistency

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**Table 5. Themes from practice educator data**
### Theme 1. Feeling overloaded

"my brain is overloaded"

**Andrew:** "it does seem very scary, quite a lot of information"

**Anna:** "My brain feels overloaded and I need to do this and I need to do that"

**Mike:** "Like you're getting kind of bombarded with everything"

**Peter:** "Build up of points build up over time"

**Ill timed feedback**

**Mike:** "so I kept doing what I was doing and then they brought it up on the last day when I didn't have a chance to change it"

**Sally:** "left to end of day getting told you didn't do this right"

**Pam:** "Sometimes they can catch you in between patients and you just can't be bothered feeling stressed you just think oh can't we have it a bit later on"

"it's always about testing"

**Sally:** "I think if it's someone who's giving you grades you don't want to voice things"

**Peter:** "I felt I had constant monitoring by my supervisor"

**Anna:** "I felt like everyone was assessing me"

**Simon:** "You're put into the environment and you've got to do it and justify everything that you do. Um so in that respect it's always about testing"...

**Claire:** "it can feel like a watched assessment and you get very hot and flustered and it's not a nice situation to be in, um...a bit more pressure"

**Andrew:** "it's almost like a fear of failure"

**Hannah:** "Yeah, that's the kind of the more negative side where I think I do feel like... under pressure um... intimidated um... in... I don't know, I just think it's like a monster task, it's such a big thing and I can't... it's so hard for me to do... one little step and it just seems exactly the same... far to go.... Um"..."
Theme 2 Challenges of multiple educators

“Getting inside two people’s heads”

Sally “Yeah I had multiple educators on two of my placements I think one educator would say one thing and the other would say something different”

Pam “I’ve got four educators sometimes you just wish that you might have one because it might be easier when you’re going to get your feedback because you’re going to get different feedback and they could be confusing as well”...

Andrew “from the perspective of the educators, just everything about communication and what you’re doing and what they expect of you is ...is doubly important”

Andrew “If you have two educators it’s almost like two placements, because you have to get inside two peoples’ heads, so I found that initially quite a challenge and sometimes things are in contradiction as well, so you have to balance that off”

Anna “if they’re not communicating as well I think, just from... you don’t get as much from it”

Peter “a clash between the feedback from my main educator and the other feedback from the other physios within the team”

Claire “Because they don’t... because it might be that one day one educator is there and another day the other educator is there and they don’t... you don’t get that carry over things ......because otherwise you can get conflicts that... you’ve been told by one educator to do something in a certain way and then you do it in that certain way and then the other educator says oh why are you doing that? I think it’s really important that you’re on a kind of level playing field with that um... “

Jo practice educator “it’s a real challenge to keep... to keep the educators coming up with a consistent approach really, when they’ve got very different styles as well. I find that hard to oversee the educators when I know that there’s definitely sort of personality and learning er... type differences there”

Helen practice educator “I do think that can be a really big problem. Particularly if the educators are not talking to each other, um... and particularly if they’ve got very different working styles”
Theme 3 Problem based learning influences

“Taking stock and looking ahead”

Andrew “I see it as a problem that I’ve got to tackle from the start some of the strategies that I’ve employed… that comes from problem based learning”

Sally “I suppose being PBL taught you do a lot off your own back and in our pbls you tend to give each other feedback on your presentations so perhaps your used to having feedback more than at undergraduate level”

Mike “So that it helps in that way because you’re usually fielding all the questions and things like that on a PBL question so it helped with that …… maybe the taking stock and looking ahead, so taking all the advice on board, kind of assimilating it and… and looking ahead to the next one”

Claire “so I suppose it does mould you in that you’d maybe might be more aware of um… what your learning needs are and therefore you can set objectives easier.”.

Simon “Um…I think um… there was one time on my care of the elderly placement where we just sort of sat down and we talked about um… outcome goals and particularly referring to falls assessment and we kind of sat down and we went over it just like a PBL sort of thing discussing the pros, the cons, and then we actually”

Pam “I suppose being pbl taught you do do a lot off your own back and in our PBLs on Monday and Friday you tend to give each other feedback on your presentations so perhaps your used to having feedback more than at undergrad level maybe and cause I think sometimes you know if you do a bad PBL that everyone’s going to say to you that was rubbish some people might not say it’s rubbish but if their your friends it’s like XXX did you have a bad day ??!! ”

Theme 4. Fulfilling experiences

“brings it all together and gels it”

Simon “I think it [immediate feedback] just brings it all into context ….brings it all together and gels it “

Claire “I liked to have immediate feedback after I’d been in a session

Mike “But this way I could do it straight away, take their views on board and then you could really see improvements straight away because from the first patient there was always an improvement to the second one and continuous just improving I think and just like a cycle…so I prefer to have it in the moment to maybe take it on board and use it for the next
Andrew “Because it’s the immediacy of feedback, you can act on it straight away and the way that we learn, Sort of trial and error learning, it immediately reinforcing that that feedback mechanism immediate feedback reinforces learning so you’re correcting straight away”

Peter “in terms of the feedback later on in the placement I felt quite balanced so for example every time we saw a patient there was immediate feedback there and then which was quite helpful”.

“tangible goals and nothing woolly”

Anna “Uhmm there was a weekly kind of supervision kind of more of a formal feedback every week which was really good, because you don’t get that on all placements and I thought it was good because you don’t have to wait until you’re halfway and then discover that you know”.

Andrew “When I actually had the formative assessment I was given very good constructive feedback, sort of things I was doing well. I was also given some very good things to work on, some very tangible goals”

Claire “at the end of every week to have a summary of what’s been good and what’s been bad about that week to have a set time to feed back, whereas on a ward setting, there’s not as much of that kind of regimented timing. Therefore feedback always gets pushed back and pushed back, whereas actually it always should be brought forward I feel, it’s really important”.

Mike “we always had our set goals in mind so the feedback might have been specific towards the set goals”

Linda practice educator “I think ground rules to start off with are terribly important… Are you happy for me to interject in front of a patient? It has to be handled very sensitively [emphasis here on very sensitively] having clear boundaries as to when and how feedback should be given or should the student be given permission by the educator to ask am I going along the right way to reassure the patient as well”

Linda practice educator “it’s really specific so it’s not woolly, try not to make it too woolly and then that”

David practice educator “I’ve learnt very specifically that… that the feedback that you give, it has to be useful to that person and it’s not just good enough saying oh, you’re doing well, and things like that”

Helen practice educator “Yep, um… as a more sort of structured thing I have actually um… a weekly feedback form, where at the end of each week, you know, before they go off for the
weekend, we sit down and there’s an opportunity for the student to reflect on things that have
gone well or that could, you know, where there could be room for improvement and for
myself to do that as well”

Theme 5. Learning from relationships

“in tune and parallel”

Mike “I think it was because we were quite open with each other. I knew um the feedback
was really like truthful and direct, we both knew how we wanted it to happen so we both
knew where we stood if I hadn’t have had the conversation with him, ... ... he mightn’t have
known exactly how I wanted to take it, whether I’d take it well or I’d take it badly. We both
knew where we stood, so I think that helped”

Simon “She was quite relaxed, quite easy, she was quite friendly,...she would break it down
and make it almost seem easy to understand [feedback] you know, just sitting on a plinth and
just sort of chatting about it...off to the side, so that was quite easy sort of feedback”

Andrew “I’d say openness, honesty and openness. Er they’re approachable, friendly, those
sort of things. Not authoritative, not judgemental... when you realise they’re approachable,
and they’re not that scary person you imagine you can ask about how you’re going to be
assessed in a very open ...open way”...

Claire “you know, they have to be constructive with that, you know, feedback, um... and but
you know, I think you can... you can have authority over someone without being in your face.
And I think that’s a really important balance to have”,

Claire “Because I think, you know, this... it comes back to this sense of disempowerment
doesn’t it? The student needs to feel empowered that they have control of their placement
and that they can trust their educator to actually have an equal relationship and an
understanding and want to facilitate their learning. They need to be able to feel that if they’re
setting goals, they’re going to achieve them so... you know, it’s crucial”

Helen practice educator “Well probably frank discussion initially about um... what the
educator’s expectations are as well, without putting too much pressure on the student”

Jo practice educator “The student needs to feel empowered that they have control of their
placement and that they can trust their educator to actually have an equal relationship and
an understanding and want to facilitate their learning”.
Collaborating with others

Sally: “I think working more very much more in a team and having a lot of time with people rather than your educator because everyone give you feedback in a different way and I think that would be quite nice and I think quite good at developing yourself holistically which I think is important.”

Mike: “Yeah, um... a couple of the... the OTs and the physio assistants gave me really good um... really good reviews at the end. Because some of them had been there for twenty years, so they had excellent like practice knowledge so... they gave me some really good feedback on things that they... they felt I’d done really well, um... things that I might bring up with educator and things I might be able to improve on, that they thought, just from... from another perspective”

Simon: “Recently I got some feedback off an OT student which was quite interesting. I think maybe in terms of like a confidence boost to me....we were actually working together on one or two patients...it worked quite well and just trying to get the most out of our patients ...I think uh for me [peer feedback] it’s given me sort of more like understanding of other people’s roles um how other people perceive your work as well, very much so”

Simon: “Well a couple of my placements I have had with other students ......one of us would take the lead with a patient and the other one would just be there as a second pair of hands, and also just the chance to sort of give feedback maybe I would have done it like this or something like that...so it was quite good to bounce ideas off each other that way...you probably don’t mind gaps in your knowledge to them”

David practice educator: “Yeah, I think there’s a lot of skill involved from the practice educator’s point of view and a lot of organisation in getting these peer learning relationships really working well”

Jo practice educator: “Yes, OK, but I think that’s an area it would be really good to explore further because I think a lot of educators still struggle with how to facilitate peer learning I really do”

Helen practice educator: “Yeah, and I must say that now I’m community based obviously we’re tending to take one student at a time, purely for room, um... so there hasn’t... there isn’t always a massive amount of opportunity for peer learning”

Pam: “I shadowed one of the juniors...it helps because when you watch your clinical educator they’re obviously a band up there and they’ve got 10-20 years of experience and they fly through things and I think... How did you get from that to that? But watching a junior it was quite helpful because it’s almost that’s what you’re aspiring to that’s what you’re heading...”
towards rather than all this skipping things out... but no I didn't get any feedback from the junior. When I watch the juniors they're still good but they do it more logically so by having them watching you and them saying oh that's what I would have done it's almost reinforcement I think.

Table .6. Master table of themes and sub – themes for the participant group with participants' quotations.
Appendix five

Some examples of participant stories:
Sally's story – participant 2.

During each participant story I have drawn on data from the main interview but also from the theme board and reflective diary.

When I interviewed Sally about her experience of formative assessment on placements, she talked about positive and negative experiences to illustrate aspects of formative assessment that she felt enhanced or detracted from her learning.

During the opening part of the interview Sally talked about one placement experience in a busy outpatient setting where she had experienced what appears to be a “crisis of confidence”. This significant lack of confidence left her feeling very small. Sally depicted this period on her theme board as a dark area, a “secret hell” that left her feeling “desperate” and “small”. A small plasticine figure with a glum face on the theme board illustrates her lack of self esteem. Sally found herself alone, working in a department with a group of senior physiotherapists

“then very much being thrown in and I just I don’t know I didn’t feel like I was coping with it as such and very much like everyone was amazing and knew what they were doing and I was just sort of the student stuck in the corner like not really knowing what she’s doing”

Sally seems isolated and is in awe of the “experts” around her. She perceives herself to be at a distance from the team both physically and in terms of experience.

“Yeah yeah I think in my head there was this barrier to outpatients and this very negative view of it because I didn’t think I could do it I don’t know why I had those thoughts I think whatever any feedback they’d given me would just build up in my head that I wasn’t good at this I won’t be good at this so up until the halfway point I was just thinking you know I was really quite worried about it”

Sally repeatedly uses “I” and seems to hold herself responsible for the problems that she was experiencing. It seems as if her preconceived ideas about outpatients together with her lack of confidence in her own performance exacerbated the situation. She is aware of her own lack of self esteem and acknowledges that “whatever feedback they’d give me would just build up in my head”.

“So very very negative at first not really happy with the placement and the feedback .... I felt quite small at first and ummm”

Sally’s repeated use of the words “at first” in the above quotation suggest that this negative phase was time limited and later on she acknowledged the progress she made during her outpatient placement. This progress is illustrated by the inclusion of a larger second plasticine figure with a smiling face positioned on the theme board. As she continued to talk about her experience she reflected on a number of factors that she felt contributed to the challenges in that particular setting.

“I sort of felt very much that I was thrown in the deep end because I was left on my own and would rather have had time with my educator where she could have watched what I was doing and given me feedback”.

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It is evident that although Sally felt abandoned “thrown in at the deep end” she was acutely aware of her educator’s busy caseload and the pressure her educator was also under. However the lack of observation and lack of feedback only served to make her confidence worse.

“I think it would have built my confidence and enabled me to sort of believe in myself”

(laughter).

The feedback she received from her educator was often rushed due to the lack of time and this prevented Sally from discussing her clinical reasoning and gaining a more holistic approach to the management of her patients. When she did receive feedback it was often at the end of the day when Sally was tired and “just wanted to go home and escape” and she describes it as being mostly negative, identifying the things that she did wrong. It seems as if she found it overwhelming, difficult to take on board.

Her awareness of the time constraints appears to have exacerbated the situation as Sally talks about feeling isolated from her educator:

“I actually felt that I didn’t want to uhmm take away my educator’s time because she was rushed because she had a full caseload I was having to call her from behind a curtain when she was with a patient and say can I discuss so and so with you and it was very rushed”

This isolation was made worse by the fact that she perceived all her educators to be “experts” , leaving her to feel like “the student stuck in the corner not really knowing what she was doing”.

Although, the situation improved I feel it raises some important questions about the quality of patient care from the perspective of both educator and student. The lack of time spent with her educator prevented Sally from being able to get feedback on her “hands on” treatment of patients which she felt “maybe wasn’t a true representation of what actually went on” and secondly the quality of the educator’s patient consultation may have been impeded by Sally having to interrupt her.

Sally described a turning point at the halfway stage when her educator suggested some ways of managing her lack of confidence and Sally realised she had to take control of her own learning in order to turn the placement around.

this is silly you can’t you’ve got to stop being so worried about it and actually thought ok this is what they’ve said this is what I can do to implement what they’ve told me

This type of reflective self-dialogue where Sally appears “to gain control” enabled her to view her position from a different perspective and to be more proactive, she seemed to develop more control and a sense of agency. As she talked she went reflected on the impact of the halfway feedback and made an important observation that provided me with insight into why students value continuous feedback more. Sally talks about the halfway feedback splitting the placement in two when feedback is concentrated at halfway and final stages as opposed being delivered by an integrated gradual delivery.
"so I suppose it kind of comes with the whole halfway final thing you can very much have the placement split in two whereas in my first placement it was very much each week building on something rather than halfway the first three weeks you're doing something and the second three weeks you improve on that yeah and you can sort of gradually improve rather than thinking halfway oh this is what they said this is what's going wrong the next three weeks got to go now and try and improve I think it's better to gradually and be able to identify yourself what you need to improve on"

Further analysis of this section of transcript suggests that a gradual improvement in practice generated by more continuous feedback helped Sally to develop her skills of self-evaluation “to identify yourself what you need to improve on”. Such practice would have helped Sally to take more of a proactive role in the learning experience and she felt may have averted some of the problems she faced.

Sally is aware of the need to focus on the learning experience as opposed to assessment grades she reflects on the PBL course where the pedagogic philosophy is on learning as opposed to a focus on assessment and percentage grades. She describes another placement on a stroke unit where she felt more relaxed and supported by an educator who helped her to focus on her learning by sharing her own limitations

“lt was more relaxed and she emphasised a lot how everyone’s learning and she’s always learning from other people and how no one can be perfect just a lot of time to discuss patients and uhm it was a lot less rushed"

Here the educator’s emphasis seems to be on learning “she emphasised a lot” seems to have helped Sally to relax and gain confidence.

Although the initial example of formative assessment appears to detract from her learning on placement there were a number of positive examples.

The theme a sense of quality provides evidence of some of examples of feedback that enhanced Sally’s learning. She really felt she benefited from feedback on a stroke unit which was regular and debriefing in advance of a patient encounter helped her to “get it clear in my mind”.

“I was with my educator most of the time and she was with me with most of my patients and I didn’t find it as if she was assessing me at all because she’d give me constant feedback on my handling skills and my treatment plan and everything and she’s say oh you could try doing it this way a very very positive experience”

Feedback from this educator and form another in an A& E department was delivered in a positive way. The educator used a feedback sandwich to emphasise the positive aspects of Sally’s practice but also managed to “turn the negatives into something that I could actually do something with rather than say well you’re not very good at this”.

She reflected on an element of good practice employed by her educator on a respiratory placement who set aside time at the end of each week for feedback. This educator encouraged her to reflect on her practice and to use self-evaluation to identify five things that had gone well during the week and five things that Sally wanted to develop further. She
found this approach to facilitation helpful as it helped her to use her educator in an effective way and made her feel able to share concerns with her educator in a productive way.

"It made me actually reflect on the week and it sort of let her know what I wanted from her as well so I think that was actually a good way of doing it"

My interpretation of this practice suggests that the educator was encouraging Sally to take responsibility for her own learning and by using a reflective approach enabled Sally to identify the areas she needed to address and to use her educator in a productive way. There is evidence that Sally drew on specific examples from her own practice to provide evidence during the weekly feedback discussion, placing the feedback in the context of her own practice. "You can think of specific sorts of experiences rather than general .....it makes you sort of organise in your own head what works well and what you can go away and do next week". She has previously found general feedback on her outpatient placement unhelpful. This educator appears to have integrated the feedback into a regular weekly pattern as well as making it relevant to Sally’s needs and practice development. There is also a sense of motivation as Sally talks about “what you can go and do next week".
Simon’s story

In sharing Simon’s story I have drawn on data from several sources to describe his experience of formative assessment during his placements in a variety of settings.

Simon’s theme board provided a backdrop richly illustrating the challenges he faced before and during placements. His concern about constant assessment depicted as a barbecue, and labelled “going through hell” highlighted the pressure he felt by constant assessment on placements “in placement I think you can’t really escape ..you’re constantly being tested”.

Despite these initial concerns he welcomed feedback and saw formative assessment as way of guiding, supporting and helping him to learn new skills that he hadn’t covered during campus based learning. He valued regular and immediate feedback that was more accessible “it gives you that chance to discuss it while it’s still fresh and work on it” (p6: )this was particularly useful for complex cases “it brings it all into context …just brings it together and gels it ”().

In contrast he felt frustrated, deeming his practice to be less effective and his development delayed when feedback was lacking or left until the end of the placement “you’re sort of left not knowing” and “stuck in a rut” (p6.t.b). A hang glider hovering over water (p6.t.b) helped to illustrate the fine balance between success and disaster made worse by a lack of feedback “flying along …you don’t realise how close you are to an upset”. However, this dearth of feedback on a ward placement ultimately made him more proactive in requesting feedback. He found self-evaluation helped him to understand the complexity of the assessment criteria and to see things from his educators’ perspective. It also facilitated discussion with his educators as he had “scenarios in place that I could talk about”.

Collaborative discussion and reflection was promoted by an approachable educator who actively listened to him talking through a complex assessment on a neurology patient. He found this educator “quite relaxed, quite easy, …quite friendly” and this helped him to openly share his thoughts “you didn’t have to hold anything back …she seemed intent to listen” in contrast to less attentive educators who gave “sort of general quite generic feedback” or those who were “pernickety” and “seemed just to criticise”. It felt “like an uphill struggle” trying to remain motivated when his educators failed to acknowledge his progress.

Simon valued the peer assisted learning opportunities, available on two of his five placements. These peer learning opportunities encouraged him to explore things from different perspectives “it was good to bounce ideas off each other” and to be honest about “gaps in knowledge” to peers who were not involved in assessment. An interprofessional peer learning opportunity with an occupational therapy student provided him with feedback that “just gave me a confidence boost”. This was an area that Simon felt could be developed on placements. It increased his understanding of his colleague’s role and the joint patient assessment resulting in immediate feedback was felt to be more efficient “you can get two sessions in one basically make it more effective” and may have benefits for patient care.
Feedback from a variety of sources including rehabilitation assistants, carers and patients contributed to his professional development. He reflected on feedback from a patient’s wife that helped to boost his confidence “she acknowledged the work we were doing”. This acknowledgement helped Simon to feel valued as a professional and made him think about the way in which patient feedback could be used to help health professionals meet service users’ needs.

Simon felt that PBL (problem based learning) helped him to problem solve in practice, enabling him to identify his own learning needs and access resources. In addition he was used to feedback on presentations from his PBL course and was able to build on this feedback during presentations in the practice setting to develop his practice.

**Peter’s story**

Peter’s theme board illustrated some of the challenges he faced when experiencing feedback in the practice setting. The initial collages reflect his optimistic mood at the start of his placement. He felt welcomed by the close knit team and was encouraged by his halfway assessment. This optimism is illustrated on the theme board by an image of a smiling person holding two thumbs up. However Peter’s optimistic mood is relatively short lived as he experiences what he describes vividly as “a volcanic eruption” illustrated on the theme board by a picture of a person being pushed off a cliff.

During his interview Peter talks openly about his complete surprise at receiving relatively positive feedback at his midway assessment only to be followed shortly after by a torrent of negative feedback from his main educator. Peter felt encouraged by his halfway feedback and there was no indication that his educator was concerned about his practice. However, shortly after his halfway feedback the climate changed.

> “the mistakes that have been building up after that started to be picked up and right after the midway and sort of came back to me as a volcanic eruption and at that point I felt that every point I made even the smallest mistake I wanted to have feedback every time I made that mistake at the time instead of being piled up piled up and then build up all of a sudden everything well actually the things you’ve been doing for the past three weeks wasn’t so great these these these”.

Peter describes feeling very small “the honest feeling was I felt very small”. He illustrated this on his theme board with a picture of a large hand plucking a very small person from the ground. The feedback that Peter perceives to be withheld is depicted as a “closely guarded secret” one which Peter remained unaware of until the “volcanic eruption” occurred. Further analysis of the quote above suggests that Peter may have had some awareness of the mistakes he is alleged to have made. He talks about them starting to be picked up and later on in the interview makes reference to the fact that he may have missed some cues. However, he was adamant that none of the points raised in the later feedback session had been identified at halfway, suggesting some withholding of feedback.
The initial attempt at giving him feedback was delivered by his educator at the nurses' station in an open arena. Peter describes this as informal feedback and later feels that this open environment and informal chat may have contributed to him misreading the situation. He later refers to “hints of maybe I’m not doing and maybe I’m not going in the right direction” delivered as an informal chat. My interpretation here is that either the educator was avoiding talking to Peter about her concerns about his practice or he may have had difficulty in interpreting the feedback as it was delivered in an informal way. Peter appears to have been he was used to feedback being delivered more formally. Whatever the cause was there seems to have been a severe lack of communication between educator and student.

Peter goes on to describe the more direct feedback episode with his educator that was held in a private room. He talks about feeling debilitated by the one-way negative feedback he received from his educator and describes feeling overwhelmed by the amount of feedback that was delivered during one session. Interpretation of this section suggests that he was so overwhelmed by the “torrent” of feedback that he found himself unable to reflect on what he had done wrong and make links with his practice “to take everything over to look back at what I've actually done and because there were negative points it sort of debilitated my feeling” and to try and make sense of where he had gone wrong. Peter attempts to explain some aspects of his practice to his educator but felt unable to do so:

It felt that it sort of felt that the method for the educator to uhmm make me feel overwhelmed and it's a bit hard to explain but if it was because the feedback was uhmm all the feedback regarding the minor mistakes the minor points was carried out at the same time in a large amount so I found it quite difficult to digest uhmm the feedback and to express my opinion to express my feeling towards that feedback and so at that point I was I felt I wasn't sure which or how to express my opinion and it was more of a one way direction uhmm conversation.

There appears to be a significant power deficit here which Peter describes as a “one way direction conversation” that leaves Peter defenceless, unable to express his opinion. We do not know if it was the educator's intention to make Peter feel overwhelmed as he suggests. However, this direct approach to feedback that left no space for him to respond had the effect of making Peter very small and under pressure. Peter appears to be bemused, when immediately after the feedback session his educator gives him a contact number of a tutor at the university and suggests he makes contact. Peter feels abandoned and his perception is that his educator had devolved responsibility just when he needed time to talk through his own needs as a learner.

Interestingly I didn't find that quite helpful uhh because the problem was in the clinical setting at the placement and by speaking to someone external outside that setting I didn't find that helpful.

On further analysis of the transcript it seems that the educator may have felt that Peter needed to discuss the issues related to his placement with someone external, in this case the university tutor. Peter acknowledges this later on and tries to see things from his educator's point of view. However, he feels that as the problem existed in the practice environment it would have been better for the two of them to talk things through together. It seems as if Peter really wanted to open up the communication between himself and his educator but the challenges of communication were firmly shut.
His theme board depicts the shame he felt during the placement illustrated by a lonely solitary person standing alone and pictures of binoculars that depict the close monitoring he experienced throughout the rest of the placement.

*I felt a constant monitoring by the supervisor. It could be me being over sensitive to the feedback I received and being more conscious and aware of my educator looking over my shoulder or it could be my educator being more careful with me.*

The above quotation is interesting as the feeling of being constantly monitored may be due to that fact that he was sensitive as a result of the feedback he received. However, it may be due to the fact that his educator needed to spend more time observing his practice. In fact it is possible that the initial problem may have been caused by his educator not having as clear picture of his performance as she should have done. This could have resulted in initial problems not being identified at the halfway stage.

Although, Peter feels under pressure from the "constant monitoring" he feels that the immediate feedback he receives from his educator helps to restore the overall balance of the placement.

*Uhmm in terms of the amount of monitoring I felt and in terms of the feedback later on in the placement I felt quite balanced so for example every time we saw a patient there was immediate feedback there and then which was quite helpful.*

This restoration of the feedback balance helped Peter to move forward on his placement. During the week he worked with a range of practice educators as well as his main educator. However, he continued to get conflicting feedback from his educators

*sometimes later on in the placement there was a bit of a conflict a clash between the feedback from my main educator and the other feedback from the other physios within the team and there was a couple of occasions where the feedback from other physios was good so initially on one occasion I worked with other physios in the team and they gave me a general positive feedback uhmm and I felt quite on the ball a few days later I had a feedback from my main educator about the same occasion uhmm and her feedback wasn’t positive*

It seems that although the other team members of the team encouraged Peter and made him feel more confident in his practice and "I felt on the ball" once again this feeling of encouragement was short-lived as the subsequent feedback from his educator was negative. A mismatch of feedback can be very confusing for novice practitioners who look to their seniors for guidance. It seems as if Peter was trying hard to make progress ad was beginning to feel more confident only to fall to the bottom rung of the ladder following his meeting with his educator. A situation that is synonymous with snakes and ladders.
Appendix six

Excerpts from my reflective logs.

Reflection on a theme board activity

I had the opportunity to engage in two pilot theme board activities before using a theme board activity as part of my main data collection. I felt this was useful as it helped me to feel more confident in my approach and also to identify possible challenges that I may face. I am aware that I like to be very organised and when reflecting with my colleague realised that I might have to allow more chaos to occur as a theme board is a very creative activity. During the first pilot session I co-facilitated a theme board session with a colleague although my colleague took the lead as she had experience of theme board sessions.

My colleague introduced the session explaining the purpose of the theme board as a way of prompting reflection about a particular concept. This session was held on the first day of a course which I’m course leader for and I was concerned as the cohort of students had just met and I wanted them to feel relaxed and the learning environment to feel supportive. I felt it was essential for this group of postgraduate students to build up a rapport with each other and with us as tutors as the whole course is based on reflection and open communication.

I made the mistake of agreeing to peer observe my colleague who was wanted some feedback on the session. I felt this may have been a distraction and prevented me from observing participants interaction during the theme board activity as I focussed on my colleague’s practice and interaction with them. However I was still able to make some notes about the way the postgraduate students approached the activity and the way in which my colleague facilitated it. This helped me to think about some of the challenges I might face.

Before the session we talked about our concerns and felt that it was essential that participants felt comfortable in talking about their theme boards in front of the whole group. My colleague felt that we should not probe to deeply as this might result in individual participants feeling uncomfortable.

A week later I took the lead in facilitating a group theme board activity with postgraduate students on another education module. I felt more confident and having reflected on the first theme board activity with my colleague and talked about the benefits of making it a bit less structured more chaotic. I tried hard not to direct the students too much, providing minimal guidance.

I found this an interesting session as students worked in teams to create their own theme boards. It was very different from the earlier one where students had created their individual boards. There was a lot of discussion about what pictures and text and in which order the boards should be organised. I felt that this distracted from the focus on the theme in this case practice education and how they interpreted it. It activity initially focussed on the teams ability to create a perfect theme board. This
helped me to make my decision about my approach to the theme board data collection and that it would be important for individual participants to create their own theme boards as I wanted to find out about each student's individual experience of formative assessment. I realized that a group theme board activity would not allow me to get to the essence of each experience. However, I still felt it was useful for students to work in a group while they created their individual boards as it may help them to gain peer support from each other.

I took the opportunity of debriefing with one of my supervisors following the two theme board workshops and found reflection on the experience very useful. I realized that the two sessions I had run had been valuable in exploring the way in which a theme board activity could be facilitated but it made me aware that I had approached the activity with my educator hat on. My supervisor reminded me that when collecting my real data I must remember to take a step back and let my participants engage in the activity without attempting to control it. I need to let the data emerge. Talking things through also made me realize that when I'm collecting my data I will need to probe a bit more deeply to encourage my participants to talk about their theme boards in more depth. I must remember to have my researcher's hat on and not my facilitator's hat on. I must keep reminding myself that my role as a researcher is very different and I think that just by writing this reflection has helped me to begin to distinguish between the roles.

October 2009 Theme board data collection.

I arrived at the room in plenty of time to allow me to set it up and arrange the chairs, table etc. I was aware that I needed to adopt my role as a researcher and spent sometime before participants arrived thinking about the way I would introduce the theme board activity. I decided to pose a couple of questions on a flip chart and to create an open and supportive atmosphere by ensuring that participants knew that I was not assessing their theme boards in any way. As participants were used to working in a group during their PBL sessions I felt that they would be comfortable working with other people around. The group were initially quiet and one member moved away from the group preferring to sit on the floor to work. I had to stop myself from asking questions and moving back into facilitative mode and decided once I had introduced the activity I would sit in a corner and make some initial field notes. This worked well and allowed participants to develop their ideas. One of the participants looked concerned a few times and kept on looking at the flip chart where the questions were.

I was very aware of my own position as a researcher and ensured that I acknowledged the participants time and made it clear that I wasn't judging their theme boards or their creativity.

Reflection on interviews December 2009

I was pleased to be able to get 2 interviews done in advance of the main week of data collection. My first participant appeared quite nervous and was initially quite hesitant. We had to use a room that had a desk in and therefore it was not such a relaxing atmosphere than the usual room that I use. I was aware from his short interview following the theme board activity that he had had a difficult time on
one of his placements and this made me conscious of the fact that I need to create a supportive atmosphere. I found that having the theme board as prompt was useful and I felt his body language initially became more open as we talked about the theme board and the images he had put on it exploring why he had made the choices and what they meant to him. As we moved towards the area where he had represented the isolation I felt his body language became more closed again and he lost eye contact at times. However this was just for a short time - the theme board really seemed to help him to talk more freely and more deeply about his experiences. I felt that I could have extended the interview but was aware that the participant admitted being very tired that day so was supportive of his needs.

Extracts from my reflective diary Jan 10th 2010

I'm planning to meet up with a colleague soon who is also using IPA so we can compare thoughts. It's a slow process but I feel that I'm become more acclimatized to taking it slowly and this is preventing me from getting into my old habit of rushing the analysis.

April 25th

I've just read another article on IPA that was a turning point for me and helped with the challenges I've been facing recently. I've been getting very frustrated when naming themes in the data. The author of the paper recognised that this is extremely challenging and this has made me feel much better as I was beginning to think I was very slow and was losing my confidence. I was avoiding sharing my thoughts with others for fear of being thought stupid.

May 1st.

I'm still progressing slowly with my data analysis and emerging themes from participants’ interviews. I found it useful to discuss the themes with my critical friend this week. She made me think about looking at the bigger picture of the emerging data. I feel that sometimes I get so caught up in the minutiae of each transcript line that I get frustrated with my slow progress. She reinforced the advice given by my supervisors at our last meeting. So this has helped to move me forward and increased my motivation and confidence. I am now starting to explore the main themes in a different way and have moved to think more about the feedback process and authenticity. I feel my analysis is moving more towards another level and now feel happier. I have been concerned over the past few weeks that I could not find a way forward. I had become stuck in a rut.

I have been trying to work though a form of IPA in as systematic way as possible and am beginning to make progress. The process of grouping quotes and themes has helped me to get close to the data again and also to get a feel for the main themes emerging from each participant case.

August 2010

Data analysis is progressing and I'm hoping to complete the analysis of the student interviews by the weekend and start to write up my findings chapter. The more I return to the data the more I see different things emerging. I suppose this is the essence of IPA. It's interesting to note that students
who have had a difficult experience and appear to have suffered from low self-esteem during placements seem to want more feedback and more immediate feedback. This finding is different from Eraut’s work that seems to indicate that students with low self-esteem avoid feedback in fear diminishing their self-esteem even more.

I’m still struggling with the challenge of presenting all the findings in a way that will engage the reader. I will probably attempt to construct some concept maps for all participants and then draw together all the main themes emerging from the data. As I’m continuing my analysis I’m finding that thoughts and questions about the process of formative assessment are popping into my head. As Malloy’s recent work on formative assessment suggests we know very little about the actual process of formative assessment. The participants in my study talk a lot about immediate feedback as being helpful and that seems to be related to the way they process information. For example feedback that happens close to the practice appears to help them to adjust their practice a form of reflection in action. So if they get immediate feedback does that help to develop their skills of reflection in action? The need to process the information close to the action also seems to be related to the fact that some of them have difficulty retaining the details of a patient encounter and to remember what their thought processes were. So if feedback is more immediate and more in the context of the whole patient will it have more of an impact on the quality of patient care?

One area that may be a separate theme in itself is the type of setting that students are on practice in. There is a lot of focus on the benefits of the community with more time for reflection and discussion. This could be a useful environment for developing reflection and student’s feedback skills and opportunities for self-evaluation and for supporting students who may feel under confident. In addition there are factors affecting outpatient settings where there is little time for feedback and acute settings also have different pressures. For example time constraints, extraneous noise and as one student suggested limited focus on feedback (part 1).

As I continue to return to the transcripts of the interviews and the theme boards I see other issues emerging. One of the participants talked about her struggle with accepting feedback because she herself was very self-critical and feedback seemed to make her confidence worse. It seems as if she is describing receiving a double dose of feedback her own criticism with an added layer of criticism delivered by her educator. This is something educators need to be aware of and when promoting self-evaluation which is essential for developing the skills necessary for self-monitoring and continuing professional development, they should acknowledge the issues raised by the student and only include additional feedback if it serves to enhance the student’s own self-evaluation. Repetition appears to be valueless and only decreases confidence. This related to previous research on feedback that has linked low self-esteem to difficulty in accepting feedback (Eraut, 2003). Throughout the course of her placements she found feedback very challenging to accept. I wonder if it would be productive for educators to explore how students want feedback on placement and how do they normally respond to feedback? This is something students are referring to the How of feedback.
As I continue to work with IPA I feel it has both advantages and disadvantages for me as a researcher. From the quality perspective I felt that it promotes active engagement with participants' transcripts in a way that encourages you as a researcher to reflect on what is written and this line by line exploration might help to deepen your interpretation and analysis. However, I found at times I becoming stuck in the analytical process and needed to move my thinking forward. When this happened I needed to move away from the transcripts in an attempt to view the process more holistically, looking at the bigger picture as opposed to the minute detail.

Excerpt from my research log August 2010

As I grapple with the data analysis and think about ways of presenting it effectively so it really gets to the essence of the experience. I've thought about drawing my own interpretation. There are so many interlinked thoughts and ideas. The how seems to be key and related to the way forward as students have no experience to draw on. They need that guidance. They can problem solve and self-evaluate at infinitum but it seems to me that without the experience – personal as well as knowledge in practice the "how" element students needs support. This can be collaborative as educators share their experience but it seems an essential ingredient. Do educators misinterpret the how of feedback? This relates to the feed forward cycle. Context also seems key and related to contextualising feedback so it essentially embedded in practice. Students seems to be linking this with immediacy which helps them to make links with their patients and work in progress as part of the reasoning process. It seems without the patterns and illness scripts they have difficulty in relating feedback to patients. Could this be facilitated through the use of concept mapping where students and educators relate to a map of the case? It would have to be anonymous. Concept of a watched assessment? this is an interesting phenomenon where students feel under pressure as opposed to a reciprocal arrangement where reflective dialogue is promoted in an open relationship where learner and educator share ideas. Power to withhold. Seems as if they might be paying lip service to good practice? Overloaded car ? ? emotional aspects.
Appendix Seven

Examples of participants’ theme boards.

Theme board participant two
Theme board participant six.
Theme board: Participant three
Theme board participant four
Theme board participant seven
Theme board participant nine