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Learning as participation in early clinical  
experience: its meaning for student  
physiotherapists

Julian P. Hargreaves

Doctor of Education

University of Sussex

2014

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## **Declaration**

I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree.

**Signature**

## **Acknowledgements**

Many people have helped me pursue this goal of completing my professional doctorate in education.

I should like to thank the lecturers in the School of Education and Social Work at the University of Sussex, who contributed to the delivery of the Doctor of Education programme and helped me to develop my critical understanding. In particular, I should like to thank my supervisors, Dr John Pryor for his expertise and patient guidance, and Dr Andrew Chandler-Grevatt for his care in reviewing my final draft.

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I dedicate this thesis to my mother who passed away before seeing it come to fruition.

Finally, I thank my partner Richard for his love and understanding that enables me.

University of Sussex

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Doctor of Education

Learning as participation in early clinical experience: its meaning for student  
physiotherapists

**Summary**

This research explores the meaning of learning as a process of social participation in clinical practice. The study focused on six first-year student physiotherapists during a period of early clinical experience on a work integrated learning programme. The programme was unique at the time of the study in that it placed students in clinical settings from the first week of their undergraduate experience. The research applied a case study design and qualitative data were gathered from each student via on-line learning journals, reflection lines and pre/post experience interviews. Data were analysed, between and within cases, to develop a sense of progressive narrative through the experiences made significant by each participant over the course of the clinical experience. An abductive logic was applied to develop a more theoretical explanation of learning as participation in clinical practice for each participant.

The study concludes that these individuals adopted an agentic approach and recognised the benefit to their learning of proactively seeking opportunities to get involved in practice. Interaction with a range of co-participants was valued, for a variety of reasons. Students were more willing to discuss their own deficits and ask questions of junior clinicians. Interactions with senior clinicians were more likely to challenge and extend the students' practice. Interactions with non-physiotherapy colleagues in the multidisciplinary team were valued for the different perspectives they offered. Students valued participation in situations where they could assume greater responsibility, as long as their efforts were recognised by the clinical educator. Participants did not always see value in "routine" practice where there was little opportunity to be involved in decision making or discussion, describing their involvement as being "an extra pair of hands".

Participants described their performance of secondary Discourses of practice in the construction of their respective identities, which I describe as productive worker, trustworthy student, engaged student and junior professional. These Discourses supported participants' bids for recognition and progressive involvement in communities of clinical practice. However, where the participant identity was associated too strongly with a particular Discourse the educator could restrict access to learning opportunities. Participants dis-identified themselves from Discourses that conflicted with individual habitus and conveyed lack of care or unethical behaviour. Where power relations challenged the possibility of overt rejection, participants were strategic and excluded these Discourses from their future, rather than current repertoires.

At the start of their early clinical experience, participants expressed a desire to “learn by doing” and “learn on the job”. These cases demonstrate that even at an early stage of experience, participants were contributing to the productivity of the workplace and they felt valued when their contributions were recognised.

These cases demonstrate that mutual relations support participation but require ongoing negotiation. Considering mutuality as a mechanism for participation in early clinical experience can support analysis of the ways in which social relations support both learning and work objectives. Mutuality as a mechanism for participation requires the learner and educator to recognise these dual objectives. Changing conditions of practice can threaten mutuality. Where a threat occurs, it is countered by adaptive practices that continue to support mutuality in terms of engagement, repertoire and enterprise with the community of clinical practice.

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## Glossary

Ax	Physiotherapy assessment
BP	Blood Pressure
CoP	Community of practice
CoCP	Community of clinical practice
CSP	Chartered Society of Physiotherapy
C/E	Clinical educator – the clinician responsible for supervising the student in the practice setting
D/C	Discharge from care
ECE	Early clinical experience
HCPC	Health and Care Professions Council
MDT	Multidisciplinary team – the extended team that engages in patient-centred care
Obs	Standard observations record, i.e. blood pressure, respiratory rate, pulse rate
OT	Occupational Therapy
PBL	Practice-based learning
P/T	Physiotherapy
Rx	Physiotherapy treatment
R/V	Review
SOAP Notes	A format for clinical documentation of patient records of progress and is an acronym for, Subjective, Objective, Assessment, Plan
S/V	Supervision
Technical instructor	An assistant who has additional training and has increased responsibility for devising patient treatment plans
Therapy assistant	An assistant who works under the direction of a physiotherapist to carry out protocol-based clinical interventions, but without responsibility for patient assessment or intervention planning
VAS	Visual Analogue Scale - a method of scoring the subjective experience of pain
WBP	Workplace-based physiotherapy
WCPT	World Congress for Physical Therapy
WIL	Work integrated learning

## **Chapter One      Introduction and Context**

### **Introduction**

This thesis explores practice-based learning as a process of participation in clinical practice from the perspectives of first-year student physiotherapists. The educational programme context was a workplace-based physiotherapy (WBP) programme which was believed at the time to be unique in enabling students to learn predominantly in a clinical setting (Baldry Currens and Hargreaves, 2010). Another unique feature of this professional programme required students to commence learning in a clinical setting from the first week of term in the first year. This period of early clinical experience provided the temporal context for this exploration of learner participation in practice.

When I began this research, I was responsible for leading a WBP programme that was delivered by a London university in partnership with five local National Health Service (NHS) organisations. Through the two and a half years in which I carried out the research and developed this thesis, I occupied multiple roles as a lecturer, programme leader and researcher at the host university, and as a part-time student on the professional doctoral programme in education at the University of Sussex. These multiple perspectives influenced my approach to the study, my interpretation of the findings and my co-construction of meaning. During the course of the research and in the midst of a financial crisis in the UK, NHS London made the decision to terminate funding to the WBP programme as part of broader cuts to healthcare training in London. With the impending closure of the programme, I decided to pursue a different career pathway in academia. I complete this research in a different academic post at a different university from where I started.

My interest in how students learn in clinical environments developed from my own experience as a physiotherapist and lecturer in academia. I was curious to understand why some students appeared to manage better in some clinical settings than in others. As programme leader, I noticed that students who progressed easily through clinical placements were not necessarily those who achieved the highest academic grades in class. My professional experience as a physiotherapist had developed my appreciation of the complexities of clinical workplaces and I recognised that first encounters with the strangeness of clinical environments could be challenging for even the most able students.

My broad aim for this research was to understand students' early experiences of learning as participation in the wider social sphere of clinical practice. I was particularly interested to

develop an understanding of early experience from a learner perspective. I will briefly describe my interest in this aspect of clinical education before outlining the broader context of physiotherapy practice in the UK and the local context of this unique WBP programme in London. I conclude this introduction and context setting with the research questions considered in this thesis.

My motivation for this research emerged from my own situation as programme leader for this WBP programme. A number of features, which differentiate this programme from others, are worthy of fuller explanation. In England, bachelor degrees in physiotherapy are of three years' duration and students can expect to spend around one third of their time (1000 hours) in clinical practice (Chartered Society of Physiotherapy, 2002). By contrast, students on this WBP programme spend in excess of 1500 hours in clinical settings and learn three days a week in the workplace supported by two days in the university. Most physiotherapy programmes introduce clinical experience towards the end of the first year or later, whereas students on the WBP programme started their practice-based learning (PBL) in the first week.

Physiotherapy programmes typically structure PBL as a series of short-term placements, in a variety of clinical specialties and locations. Each student on this WBP programme received a contract of employment with an NHS partner organisation on admission to the programme and then completed all PBL in that single organisation. The status of the employed student was that of a student intern, reflecting his or her identity as both an employee and a full-time student (Baldry Currens and Hargreaves, 2010).

In phase one of my EdD, I reviewed a paper on the application of situated cognition to the PBL experiences of undergraduate medical students (Stalmeijer *et al.*, 2009). I was introduced through this paper and the work of Seely Brown *et al.* (1989) to the concept of situated cognition developed through engagement with authentic practices. For me this offered a fresh perspective, since learning is often conceptualised in the clinical education literature in terms of cognitive acquisition and knowledge transfer. This acquisitionist perspective seemed to deny context and failed to pay attention to the power relations between students and practitioners that I recognised as a feature of clinical environments.

My interest in exploring the contextual environment of PBL developed further through my small-scale research project that explored student perceptions of the conditions that enabled or constrained their learning in clinical settings. A focus group of final-year students on the WBP programme described in detail how they experienced and understood the power relations at play in clinical settings. They spoke about the learning strategies that they adopted

in order to navigate their way through learning in clinical practice. The students stressed the importance of early engagement and the need to “get confident” (behave and act confidently) as quickly as possible if they wanted to benefit from the rich learning opportunities presented (Hargreaves, 2010).

My critical analytical study in phase two of the EdD programme provided an opportunity to engage with the concept of PBL in greater depth (Hargreaves, 2011). My critical thinking was aided by considering the knowledge claims made in the PBL literature, in terms of what Maton (2001) identifies as their form (what was being claimed) and function (why it was being claimed). Three features seemed to surface repeatedly in relation to PBL. First, the unit of analysis tended to focus on individual attributes more than social interactions. Second, learning was frequently represented as a product rather than a process. Third, context was absent from most empirical accounts, or was mentioned in relation to the challenges faced by educators in balancing student supervision with a clinical workload. In terms of function, I reflected on why these three claims had achieved prominence. I hypothesised that the power of higher education faculties to determine the discourses of PBL tended to promote a focus on individual attainment, rather than a focus on the social learning required for effective team working in the clinical setting. I also suspected unwillingness by university faculties to problematise the context for fear of risking the provision of clinical placements. Downplaying contextual variation in relation to PBL is perhaps a feature of professional discourses aimed at smoothing local variations in practice with evidence-based generalisations.

Having explained what I believed to be evident from my review of the literature it is appropriate also to comment on what was missing. Research on clinical education across all disciplines does not amount to an extensive body of work. The paucity of research is rather at odds with the esteemed position of clinical education in professional educational discourses. The pedagogy that is evident often appears to assume the necessity of front-loading propositional knowledge as preparation for practice. Practice often appears reduced to little more than an alternative setting for the transfer of propositional knowledge and the potential for practice to be a generative source of knowledge receives rather minimal attention. Practice described in terms of a location for socialisation seems to be rather inadequately juxtaposed with the rhetoric of evidence-based practice.

## Context

Physiotherapy provides the professional context for this study of learning as participation in ECE. The World Confederation for Physical Therapy (2011, p.56) describes physiotherapy practice as:

[Assisting] Individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing services in circumstances where movement and function are threatened by ageing, injury, disease, disorders, conditions or environmental factors. [ ] Physical therapy is concerned with identifying and maximizing quality of life and movement potential [ ] This encompasses physical, psychological, emotional and social wellbeing.

Knowledge of the history and culture of a profession is essential for understanding its current approach to education (Eraut, 2004a). In the next section, I will provide a brief overview and introduce some sensitising issues to help the reader to appreciate the context of physiotherapy practice and education in England. The education of physiotherapists occurs in contexts that span higher education, health and social care. Grenfell (2008, p.221) proposes that considering the “macro”, “meso” and “micro” level relations constituted respectively in the policies of these sectors, the epistemologies of institutions and the dispositions of individuals is appropriate to a critical consideration of these fields of practice.

### The historical professional context of physiotherapy

In the UK, physiotherapy emerged as a distinct field of healthcare in the latter part of the 19<sup>th</sup> century and achieved greater legitimacy with the bestowing of a Royal Charter in the 1920s. The value of physiotherapy rehabilitation was recognised in helping to deal with the aftermath of World War II (Barclay, 1994). Physiotherapy has continued to evolve in order to respond to changing needs of healthcare. From 1960 control over the scope of physiotherapy practice rested in the hands of the medical profession in the form of prescriptive rights. A change came in 1977 when adjustments to the statutes of the Chartered Society of Physiotherapy (CSP) allowed for the professional autonomy of physiotherapists in clinical decisions that were previously the legal responsibility of members of the medical profession. From that point forward, physiotherapists were able to assume control over their work and professional autonomy remains a jealously guarded foundation of identity for physiotherapists in the UK.

### **The field of physiotherapy practice**

The founding principles of the NHS are to provide accessible healthcare that is free at the point of use and is based on need rather than ability to pay. These principles remain central to healthcare in the UK, but are being placed under increasing pressure by expanding public health needs and new possibilities for the treatment and prevention of disease.

Physiotherapists have a strong sense of their own autonomous practice. The neo-liberal marketisation of health and the establishment of purchaser-provider arrangements in the NHS have eroded freedom from control by medical prescription. Professional power is partially eclipsed by state regulation of physiotherapy practice under the aegis of the Health and Care Professions Council (HCPC). State regulation was the price exacted for protection of title, justified on the grounds of protecting the public from unregistered practitioners.

Professionalism in health and social care is under scrutiny following a series of scandals associated with poor quality care and lack of compassion in healthcare practitioners. Reduced public confidence has galvanised professional and regulatory bodies to police professionalism through extensive standards of education and practice for allied health professionals (Quality Assurance Agency for Higher Education, 2001; Chartered Society of Physiotherapy, 2011b; 2011a; Health and Care Professions Council, 2012; 2013a).

The challenge of sustaining health and social care services in a challenging economic climate has led to an emphasis on efficiency and cost effectiveness in the NHS. UK Government reforms have apportioned funding more directly to patients, coupled with a focus on measurable clinical outcomes and de-centralisation of decision making in the NHS (Department of Health, 2010). The effects of these reforms were evident in the institutional settings where my research was undertaken. Strategic services in London were de-commissioned, physiotherapy services in secondary care were slimmed down to fund increased provision in primary care (Department of Health, 2013). Clinicians were cast as purchasers or providers resulting in restructuring of the fundamental basis of relations in the NHS.

### **The field of physiotherapy education**

In the UK, physiotherapy education completed the transition from diploma to degree in 1992. This development was considered to be essential by a profession that was keen to embrace a scientific practice model and achieve a graduate workforce (Bithell, 2007). Subsequent

academic qualification “creep” has led to the growth of MSc qualifying programmes. This perhaps reflects the power of higher education to influence professional development to reflect educational, rather than clinical priorities. The potential for distancing education from practice has led to concerns of a theory-practice gap (Roskell *et al.*, 1998). Eraut (2004a) argues that occupations based on personal interactions with clients have tendencies to construct ideologically attractive theories that are almost impossible to apply, being unrealistic in terms of the time and investment of effort, which makes practices unattractive to patients and unaffordable to the NHS. Eraut (2004a) suggests this is due to ideological differences between teachers of practice in higher education, teaching practice as they would like to have experienced it, and those actually having to make practice work in reality. Initial physiotherapy education in the UK continues to be competence-based and instrumentalist, reflecting its funding and function to produce the future NHS workforce. At the time of preparing this thesis there were 52 programmes approved by the HCPC to educate and qualify physiotherapists (Health and Care Professions Council, 2013b).

My own position in relation to physiotherapy education and practice was not straightforward. I have extensive experience of practice in different contexts. My initial professional education as a physiotherapist occurred before the move to degree status and I qualified in 1983 with a diploma in physiotherapy. I was aware that I needed to ensure that my qualification retained value in the field of practice and so I subsequently undertook a BSc (Hons) in health studies. When I became a lecturer practitioner, I undertook an MSc in physiotherapy and then a P.G. certificate in learning and teaching in higher education. My relationship with the theory and practice of physiotherapy is increasingly ambivalent. I am increasingly frustrated by what I perceive to be a lack of honesty about the functions of professional practice and education. I am committed to developing practice and education as a primarily social and secondarily technical form. I believe that this is essential for a discipline that deals with the effects, rather than the causes of disease and disability. This position has however, caused me to be perceived at times as being engaged in an alternative discourse of professional practice. For my part, I am quite comfortable and increasingly confident with the critical distance that this position affords.

### **The workplace-based physiotherapy programme**

The educational context for this study of learner participation in clinical practice was the programme called “Physiotherapy by Situated Learning”. The programme was founded



principally on an agenda of widening participation (Baldry Currens and Hargreaves, 2010). Despite its name, the model of curriculum can be described more accurately as a work integrated curriculum where “learning is situated within the act of working” (Cooper *et al.*, 2010, p.1). The programme was a collaborative venture between a London university and six local NHS organisations to produce a socially inclusive curriculum with the intention of producing “home-grown” graduates who would stay and work in the local area.

This small programme with just 30 students ran along side a much larger programme that was organised on a traditional professional curriculum model. My involvement in this small programme was extensive since I was responsible for leading the programme in the university and with our external collaborative partners from the point of admission, through to graduation. I taught on many of the modules that the students studied and I was personal tutor to half of them. I was naturally very involved in the students’ progressive participation over the three years that they studied on the programme, but particularly in their first year. Mindful of the privileged position in which this placed me, I endeavoured to maintain a reflexive interaction with the programme, my roles and responsibilities and students perspectives and experiences. My motivation for this research was to explore the experience of entering clinical practice, as students perceived it and made meaning of it.

## **Research purpose and questions**

PBL enjoys an esteemed position in the professional education of physiotherapists. Relatively little is known, however, about how students get involved in practice environments, or what they believe is worth getting involved in. The purpose of this research was to understand the meaning that learners associate with their participation in practice, when participation is considered as an aspect of social practice (Lave and Wenger, 1991).

A genuine question which represents a real and living doubt should be the starting point for research, according to Gough (2003). The sociological gaze that I adopted sees learning as a socioculturally situated activity, leading to the development of knowledge, skills and values consistent with becoming a competent student physiotherapist. I wanted also to adopt a critical perspective to explore the power relations in practice, from the perspective of the relatively powerless novice student physiotherapist.

The overarching research question that this research aims to answer is:

**What is the meaning of learning as participation in early clinical experience for students on a work integrated learning programme?**

The two sub-questions were:

- **What do they value in relation to their participation in early clinical experience?**
- **Which identities do they bid to have recognised in the context of their early clinical experience?**

I present six cases of learning as participation in early clinical experience. I present empirical data to offer plausible insights into the experiences, drawing on multiple sources of data including students' written accounts, learning journal entries and interviews. These data were analysed with the intention of understanding how each of the newcomers pursued their progressive involvement in practice. My analysis is framed by a sociocultural perspective on learning as a dynamic process of participation.

It will be helpful to explain for the reader, briefly, how I have structured the following chapters of this thesis. In chapter two, I present a review of the literature. This consists, in part, of a review of my previous analysis in my critical analytical study that explores the empirical research on learning as social participation in practice and participation in ECE. In chapter three, I explain and compare three theoretical approaches which inform my analysis, namely, the theoretical frameworks of Lave and Wenger's legitimate peripheral participation in communities of practice, Bourdieu's concepts of field, habitus and capital, and Gee's theorisation of performed Discourses of practice. In chapter four, I present my methodology. In chapter five, I present my results as six individual student cases, first as descriptive data and then as a theoretical analysis of the significant features of each. In chapter six, I discuss my findings in relation to the three questions that were the focus of this research and its limitations. In chapter eight, I present my conclusions in relation to the questions and some suggestions for practice.

## Chapter Two Literature Review

Education is not simply a technical business of well-managed information processing, nor even simply a matter of applying “learning theories” [ ] It is a complex pursuit of fitting a culture to the needs of its members and of fitting its members and their ways of knowing to the needs of a culture.

(Bruner, 1996, p.43)

Bruner’s description conveys a sense of education as an enterprise which is reflexive, culturally specific and complex. His assertion is, I believe, as pertinent to the enterprise of clinical education as it is to education more broadly in society. In this chapter, I present a review of empirical research and the occasional scholarly paper to argue for a perspective that recognises the needs of learners in clinical practice. In keeping with this aim, I will refer to practice-based learning (PBL) to mean any learning undertaken by students in a setting where practice happens. Other terms used to describe PBL in different disciplines include clinical education, fieldwork education, clinical experience, practicum and placement learning (Mc Allister *et al.*, 2010). I consider culture to be the commonly held beliefs, attitudes and practices of a practice community, which are often considered as common sense. My experience of supporting nascent student practitioners entering practice, suggested that the actions and judgements of clinicians did not always resonate with the students view of what might be considered common sense.

Kell (2013) argues that research on PBL in physiotherapy has tended to assume a cognitive perspective. Indeed, PBL has been explored quite extensively in terms of cognitive processes of clinical reasoning (Higgs and Titchen, 2001). It seems curious, however, that these clinical decisions appear to have been isolated from the very contexts that imbue them with meaning. A constructivist theorisation of learning in physiotherapy underlies curricula that typically prioritise formal learning of propositional knowledge as preparation for PBL. Whilst not wishing to negate the cognitive dimension, there appears to have been relatively little consideration of PBL in relation to social or affective dimensions of learning. Research with a specifically cognitive focus has been excluded from this literature review.

Physiotherapy practice is constituted in the complex web of interactions that form and disperse around patients as they journey through healthcare. Walker (2001) argues for the contribution of social learning to the development of expertise in physiotherapy, whereby progressive participation in sociocultural practices involves the active, constructive and transformative agency of the learner.

In this chapter, I will first present a summary of my findings from my CAS completed in an earlier phase of my doctoral study. I argue that a body of empirical research in PBL has functioned to fit ways of knowing professional practice to the needs of physiotherapy education. I then present two models of practice and epistemology proposed by Schwandt (2005). I suggest that both models are identifiable in the discourses of professional physiotherapy practice and this presents a paradox for initial professional education. Next, I review the limited body of research that investigates PBL as a situated, social and cultural enterprise. I propose the adoption of this focus and a change in the culture of professional education to acknowledge the needs of its members who learn in and through practice. I complete my review with a brief critique of research that focuses on learning at an early stage of professional education known as early clinical experience (Rudy *et al.*, 2000).

### **Empirical research of practice-based learning in physiotherapy**

In the CAS, I attempted to surface the instrumentality of some of the knowledge claims presented in relation to PBL. I drew on Maton's (2001) differentiation between knowledge form and function. The function of knowledge lies in its utility for a particular perspective that serves a specific interest. I considered the utility of knowledge claims in the historical context of physiotherapy becoming an all-graduate profession and with professional education re-located in higher education from the NHS. A subsequent period of rapid growth in student numbers in physiotherapy accompanied the massification of higher education in general. At this time, clinical services were put under huge pressure as they tried to continue to maintain the 1000 hours of clinical experience provided historically, but now for a much larger volume of student physiotherapists. The claims of PBL research from this period can be organised around four functions:

1. To raise concerns about the rigour of learning assessment practices in the workplace and concomitant concerns with the pedagogic competence of clinicians (Cross, 1995b; 1995a). The effect was to focus research to validate assessment tools, devised in higher education, for use in practice (Cross, 1997; 2001). These studies applied positivistic concepts of validity and reliability. There was comparatively little attention paid to how students learned in clinical situations and still there has been no attempt to consider assessment practice in sociocultural terms or account for the effects of power.
2. A second function of the literature was to address concerns about the potential for divergence of institutional responsibilities for initial professional education. A number of

studies supported the desirability of students in practice, whilst recognising potential conflict with the priorities of clinical services (Maxwell, 1995; Baldry Currens and Bithell, 2000; Stiller *et al.*, 2004; Öhman *et al.*, 2005).

3. A strong and persistent focus has been research into models of student supervision with the aim of trying to demonstrate the value of collaborative supervision to clinical service providers. Collaborative models that enable one clinician to supervise multiple students were seen as a way of accommodating expanding student numbers. Research studies differentiated the needs served by different models, but frequently assumed a learning outcome of increased technical competence (Strohschein *et al.*, 2002). No clear benefits were identified, however, in terms of increased technical competence (Bennet, 2001; Baldry-Currens, 2003; Bennet, 2003; Moore *et al.*, 2003 ; Lekkas *et al.*, 2007; Morris, 2007). Nonetheless, these models were promoted as no worse than one-to-one supervision. Only one research investigation identified a detrimental effect of collaborative models' inhibiting a deep approach to learning (Kell and Owen, 2009). This study was published after the acute pressure for student placements had begun to reduce due to funding cuts for training and falling student numbers.
4. A smaller number of studies focused on learning in clinical practice although these often focused on product rather than process. For example, student behaviours that concern educators (Hayes *et al.*, 1999), the perceptions of educators and development of educator roles (Moore, 1997; Higgs and Mc Allister, 2007; Mc Allister *et al.*, 2008; Delany and Bragge, 2009).

The function of this research appears to be the gathering of evidence with which to convince clinicians of the benefits of supporting students in clinical settings. Smith and Hodkinson (2005, p.917) assert that educational research is often focused "more by pragmatic than epistemological concerns". In these cases, the pragmatic concerns of academic researchers who undertook pedagogical research focused on developing pedagogical rigour in assessment of clinical performance and capacity building in practice whilst attempting to satisfy the quality assurance requirements of higher education and professional bodies. McAllister *et al.* (2010, p. xii) observe that there has been a general focus on "quantity rather than quality" of learning in physiotherapy education.

Returning to Bruner's (1996) observation at the start of this chapter. The focus of this body of research appears to be the ways of knowing of clinical educators and adjusting these to meet the needs of the culture of higher education. The research that I have briefly identified does not progress our knowledge much further in relation to pedagogy of PBL. Bruner (1996, p.3)

proposed that whilst meanings exist in individual minds, they originate and achieve significance in cultural contexts. However, constructivism has attracted criticism for failing to account adequately for the influence of social and cultural dimensions of meaning-making (Sfard, 1998). In pursuing this line of thinking, I turn now to consider the meaning of practice in physiotherapy and the type of knowledge that is valued. I have found it helpful to consider practice and epistemologies of practice with reference to two models proposed by Schwandt (2005).

### **Conceptualisations of practice in two epistemological traditions**

Kilminster (2009) comments that it is difficult to define clinical education or achieve consensus about its goals because differing conceptualisations of learning and knowledge are applied to its study. There have been calls from Richardson (1999) and Bithell (2005) in the UK for an epistemology of physiotherapy practice to be developed. It is therefore appropriate at this stage in my thesis to consider the epistemological basis for practice. Whilst the two models by Schwandt (2005) were not intended specifically for clinical practice, they do have relevance for contemporary physiotherapy.

Schwandt's (2005, p.315) "model<sub>1</sub>" accepts a form of scientific instrumentalism, which seeks and values an evidence base generated outside of practice. Similarly, the evidence base of physiotherapy is derived from the discipline of the life sciences. The criteria of validity and reliability applied to the development of practice knowledge seek to negate the influence of context and eliminate practice variations through scientific methods of randomisation and control. Knowledge defined in these positivistic terms is valued for its objectivity and it lends itself to transmission in the classroom. Physiotherapy students are taught to monitor their personal tendency to introduce bias into clinical judgements, which follow hypothetico-deductive processes of clinical reasoning intended to objectify patients and their problems as clinical presentations amenable to physiotherapeutic intervention. This model informs physiotherapy curricula, which place classroom preparation before clinical experience as an opportunity to apply theory in practice. Assumptions about the transferability of knowledge accompany this model, and its theory-to-practice rationale suggests primacy of theoretical knowledge over practical know-how. The time for applying this knowledge is deferred to the end of the first year or later, in most physiotherapy curricula.

Eraut (2003, p.62) suggests that in disciplines that seek to apply a borrowed knowledge base to their own practice, theory is viewed as offering a “direct guide to action” and is valued for its usefulness in practice. The notion of a direct guide to action appears to be supported by Kell (2013). In her research on PBL of final-year physiotherapy students, she noted that the discourses of educator interactions guided learners towards empirical, science-based approaches that tended to devalue patient narrative and agency.

In nursing, and to a lesser extent in physiotherapy, theory-practice relationships are conceptualised in terms of a deficit as a gap between theory and practice (Melia, 1984; Roskell *et al.*, 1998). This concept of a gap is reflective of a scientific instrumentalist epistemology of practice which seeks to increase the amount of propositional knowledge with which to justify practice and counter what has been identified as a behaviourist, sometimes ritualistic, apprenticeship model of training (White, 2010). Practice in both nursing and physiotherapy that was perceived to lack the application of higher order knowledge was seen as undesirable in an all-graduate profession, where degree programmes needed to achieve credibility in higher education. Newton *et al.* (2009) question the very notion of a theory-practice gap as an issue of translation, and suggest it is symptomatic of differences between institutional cultures and contexts. Eraut (2000, p.113-136), however, observed a tendency for theory-practice gaps to reflect ideological differences between the way practice actually happens, and the way that teachers of practice in higher education would ideally like it to happen. Aguilar *et al.* (2013) describe how clinicians believed they had a responsibility to demonstrate evidence-based practice, but felt constrained in pursuing this by a lack of research evidence. The promotion of evidence-based practice as a panacea for addressing the subjective inconsistencies of practice has been widely promoted in healthcare (Bury and Meade, 1998), whereas the limitations of practice knowledge, when constrained by narrowly defined scientific terms, is a discussion that has begun more recently (Kemmis, 2005).

Schwandt’s (2005) “model<sub>2</sub>” is present, but currently less prominent, in the discourses of physiotherapy education. This model accepts an evidence base generated discursively in practice. Knowledge is often tacit and shaped by cultural norms and values. Expertise in commanding this knowledge lies in one’s ability to recognise contextual variations, translate knowledge and adapt practice accordingly. The model is clearly identifiable in “routine” practice, in which resides the practical “know-how” to get the work done in complex and changing situations. In my experience, this model has the greatest capital in the workplace for practitioners and teams who remain accountable for their practice, regardless of the situational challenges they encounter. Schön’s (1983) insight into these tensions and dilemmas

of the workplace, which he described as “swampy lowlands” of practice, supports this epistemology of clinical practice, in contrast to the professional “high ground” discourses of evidence-based practice.

Discourses of education in physiotherapy tend to adopt an evidence-based rhetoric, which reflects the assumptions underpinning Schwandt’s model<sub>1</sub>. The reality of clinical practice is, I would argue, closer to model<sub>2</sub>. The reification of practice presented in the teaching of clinical reasoning often appears distinct from the messy reality of practice. The distinctly different profiles of these two models in the discourses of physiotherapy education are symptomatic of the relative power of the educational field to influence undergraduate curricula. Kell (2013) challenges the physiotherapy profession to explore PBL by looking behind the rhetoric that has been constructed to present physiotherapy as science.

Eraut (2004a, p.201) is critical of the lack of attention paid to transfer of knowledge between workplace and classroom, which he attributes to cultural differences between the two as well as to the “profound ignorance” of the amount of learning involved in developing competence at work. Simply focusing on settings and random sequencing of classroom and practice experiences fails to consider these differences and the implications for student learning. Eraut’s (2010) research on early career professionals explored the ways in which knowledge provided the foundation for individual performance in practice. He identified different types of mostly “non-codified” knowledge that supports action and is developed and made accessible through informal interactions in practice (Eraut, 2010, p. 38). Kell (2013) cautions that failure to consider naturally occurring practices reduces the potential to understand the meaning of learning for physiotherapists in complex contexts.

Morris (2010, p.63) argues that “learning how to do the job, by doing the job” involves learning in parallel with working. These two dimensions of learning in authentic practice settings must surely apply to PBL. Learners encounter rich opportunities as well as challenges when learning in work settings. Workplace-based learning recognises the value of knowledge generated intrinsically in workplaces and challenges learners to identify and understand learning as integral to work activities (Cairns and Malloch, 2011). In the next section, I focus on a small number of studies that approach this issue by framing learning as participation in clinical practice. These investigations acknowledge practice as an inherently social enterprise, in which learning requires reflexive interaction between learner and environment.



## **Learning as social participation in clinical practice**

Kell (2013) draws attention to the paucity of research into PBL but also to the lack of attention paid to investigating the learning that happens in naturally occurring practices. As I found only a small number of studies in physiotherapy, I extended the review to include empirical research in medical and nursing education.

Egan and Jaye (2009, p.107) suggest that when learning is considered as social participation, it offers a “powerful framework for recognising and explaining paradox and incongruence in clinical teaching and learning”. This paradox, generated in part from the divergence of institutional habitus, determines that providers of healthcare or education operate with different ethos, objectives and structures. Student physiotherapists must learn to operate in these distinct contexts by understanding how things are done in the workplace. The knowledge and skills that are recognised and valued in the workplace may differ from those learned in the university. Students inhabit a unique position and face a distinct challenge of developing their practice in relation to both the normative practices of the workplace and the formal assessment requirements of university programmes.

Skøien *et al.* (2009) explored the social interactions between clinicians, physiotherapy students and newly qualified physiotherapy interns. The intention was to explore the relationship between social interaction and learning from the students’ perspectives. The authors proposed that when clinicians created a welcoming environment and were accommodating to learners’ needs for time and space, then learners became more confident in testing their abilities in practice. In these socially inclusive environments, learners recognised and valued interactions with patients and peers as learning opportunities. They also noted beneficial consequences for the wider community where responsibility for the learning of others was recognised by the team as a component of professional competence (Skøien *et al.*, 2009).

Laitinen-Väänänen *et al.* (2007) applied discourse analysis to interpret interactions between physiotherapy students and their educators during patient treatment sessions. Three discourses of supervision were identified as, “directing the interaction”, “making limited room for the student” and “encouraging the student’s participation” (Laitinen-Väänänen *et al.*, 2007, p.29). In these informal interactions it was noted that student educator relationships were defined by the relative dominance of the educator who determined how each interaction was structured. The negative effects of this situation were the limitation of learner participation in decision making, and rejection of their attempts to rehearse critical thinking (Laitinen-Väänänen *et al.*, 2007). In a subsequent study, the same researchers analysed conversations

between physiotherapy students and educators to explore how meanings were constructed in the course of their discussions about practice (Laitinen-Väänänen *et al.*, 2008). Three interpretive repertoires were identified. They noted that whilst the discussions appeared to be quite uncritical of practice, the educators exerted significant influence in the construction of understandings and with students' revising their own perceptions in acts of compliance. These two studies surfaced some of the power relations underlying student-educator interactions that have tended to be absent in empirical investigations of PBL.

Kell and Jones (2007) explored clinical educators' perspectives on PBL in physiotherapy in the UK. They deduced that whilst clinical educators were aware of the need to provide "pastoral care aware environments" for students, learners still experienced environments in which knowledge transmission models of teaching were the norm (Kell and Jones 2007, p. 273). Kell (2013) subsequently undertook a detailed ethnography of interactions between learner, patient and educator in the course of naturally occurring practices in clinical contexts. She detailed her ethnomethodologically informed observation of interactions as exemplifying situated learning practices. She concluded that clinical environments exerted a powerful influence, which resulted in learners reproducing the situated practices valued within that community. Whilst Kell and Jones (2007) and Kell (2013) used different methodologies from those of the Scandinavian studies, they all support broadly similar claims. They observed that power relations present in student educator interactions impact significantly on the learning and meaning-making of students in clinical contexts. Whilst educators were aware of the need to create socially inclusive environments, the normative culture of practice tends to equate learning with teaching. Educator led interactions tend to guide the learner to construct understanding that supports the reproduction of situated practices. Kell (2013) observes that these interactions favour a scientific epistemology over a patient-storied approach.

Kell (2013) observed final year students and noted how rarely they questioned any of the practices they were required to co-produce with their educators. She suggests that the power of assessment and students' assumptions about assessment practice support their willingness to conform with situated practices. This finding concurs with that of Le Maistre *et al.* (2006, p.344), who studied student-educator relationships in four allied health professions over a four-year period. The authors suggest that students acquiesce to educators who evaluate their performance and that, where possible, mentor and evaluator responsibilities should be divested in different individuals. As in the studies by Laitinen-Väänänen *et al.* (2007, 2008) and

Kell (2013), interactions between learners and clinical educators tended towards justification of practice more than its critique.

A growing body of literature that adopts a sociocultural perspective on PBL is emerging in medical education. Swanwick and Morris (2010, p.538) suggest that acquisition as a metaphor for learning is “so strongly socialised in the medical profession as to go unrecognised”, but argue that focusing on the nature of interactions in the clinical setting has a high degree of relevance to medical education. Swanwick (2005, p.859) previously argued for attention to be paid to the contribution of informal learning to the development of the “medical apprentice”. Medicine has a substantial and historic commitment to a scientific epistemology of practice which may hinder more recent efforts to move medical education towards producing more caring and compassionate medical graduates, according to Martimianakis and Albert (2013). Reilly (2007, p.705) suggests that there is a disrespect for clinical education in medicine. He suggests that educators must guide learners towards exemplary practice that links learning to caring and kindness and will ultimately “make patients more satisfied, teachers more effective and learners more receptive” (Reilly, 2007, p. 710). A sociocultural theorisation is proposed as appropriate for understanding learning in complex situations involving multiple ways of knowing, which are a feature of clinical practice (Bleakley, 2006; Egan and Jaye, 2009; Martimianakis and Albert, 2013).

In clinical situations, learning and teaching frequently occur in the midst of action on wards and in clinics. Morris (2010) cites the work of Billett (2001; 2004a) who calls for clinical workplaces to be made more invitational and to value a broader CoP which involves students in all aspects of their work. Sheehan *et al.* (2005, p.302) observe that tacit recognition of student performance is often based on his or her willingness to get involved with the clinical team. In their study of medical interns, Sheehan *et al.* (2005) sought to identify factors that facilitate learning within a clinical team. They propose initiation and maintenance of practice as two important dimensions of participation. Effective initiation involved personal behaviours of being helpful, offering to do things, understanding roles and expectations, asking questions about patients and interacting with the wider team. Maintaining ongoing participation is dependent on the learner’s developing confidence and identity within the team. Sheehan *et al.* (2005) stress the reciprocal dependency of practices for initiating and maintaining good interpersonal relationships, which they see as crucial to participation in practice. Relationships are identified as a central feature of best practice in clinical supervision by Kilminster and Jolly (2000) in their review of the medical education literature. Meanwhile Daley (2001) explored situated learning in professional groups including nurses. She deduced that knowledge often

acquires meaning for nurses when it stimulates the affective dimension of learning and observes that PBL research has paid little attention to social and cultural influences on meaning and understanding.

Learning in a communities of practice framework, within a dedicated nurse training unit, was studied by Ranse and Grealish in Australia (2007, p.171). Their study of 25 nursing students concludes that students participate more effectively when they feel that their educators are accepting of them. A study which focused on a similar training setting was reported from Sweden by Lidskog *et al.* (2009). Their study of student nurses, social workers and occupational therapists used a framework of LPP to consider learning in the context of an inter-professional training ward. The researchers focused on learners' ways of participating in teamwork and analysed the meanings that students gave to their participation. The findings of the study concur with Ranse and Grealish (2007); namely, that learning opportunities lack authenticity for the learners in these simulated situations, with the result that the purpose of participation needs to be made much clearer to them in order to counter uncertainty around the expectations of their performance. Both of these studies suggest that attempts to create practice experiences for the purposes of training are only partially successful because they lack authenticity and clarity of purpose for the learners.

### **Participation in early clinical experience**

As previously stated, student physiotherapists usually begin periods of PBL towards the end of the first year or in the second year of professional programmes. For medical students, authentic practice might not be experienced until even later, leading to concerns that they find it difficult to see the purpose of their early learning (O' Brien-Gonzales *et al.*, 2001). There is little published research focusing on students' early experiences of learning in practice. To counter this in medicine there have been more recent attempts to focus on introducing clinical experience at an earlier stage, with a number of benefits being identified, including:

- earlier opportunity to experience the reality and grasp the bigger picture of practice (Rudy *et al.*, 2000; Cole and Wessel, 2008)
- the creation of meaning and its use in relation to formal knowledge (Yardley *et al.*, 2013)
- motivation of students' learning as preparation for changing professional roles in medicine (O' Brien-Gonzales *et al.*, 2001)

- the grounding of abstract concepts in concrete experiences to facilitate learning (Lalumandier *et al.*, 2004).

ECE has also started to be discussed in physiotherapy education as practically and theoretically desirable for fostering student engagement with interprofessional working (Verheyden, 2011). I identified one study in physiotherapy that investigated introductory learning experiences. Cole and Wessel (2008) propose that introductory learning experiences are beneficial for introducing physiotherapy students to procedures and for supporting recognition of the relevance of classroom-based learning. They researched 51 physiotherapy students' experiences of an introductory clinical placement in the first year of an entry level Master's programme. They asked students to complete the Brookfield Critical Incident Questionnaire each day, which explored their feelings about engagement, interpersonal relations and challenges of practice. The intention was to understand how clinical educators could better support student learning. They concluded that a range of pedagogical practices was helpful, such as explaining, demonstrating and questioning student understanding, and providing access to "hands-on" experience. They also identified that respect for students, valuing their input and allowing a level of independence was important, though they did not address how these practices were enabled or constrained by contextual variations. Interestingly the authors identified the demonstration of professional behaviours including evidence-based practice and continuing education as important in influencing students' awareness of practice. This last point implies a normative culture aligned with Schwandt's model<sub>1</sub> of scientific instrumentalism. The focus on the clinical instructor role positions the clinician as teacher and assumes the primacy of this didactic relationship in the learning experience of students. This teacher-centric view also lacks reference to the influence of patient interactions on students' learning.

Yardley *et al.* (2013) undertook a study in the UK to explore how medical students in ECE constructed and used meaning in relation to formally recognised knowledge. Using data from interviews with students, educators and faculty staff, they refined their interpretations through a sociocultural concept, "Métis". This term is borrowed from ancient Greek (Scott, 1998), but Yardley *et al.* (2013, p.111) describe Métis as meaning the practical know-how that people use when interacting in complex environments to achieve successful ends for themselves or for the institution. Yardley *et al.* (2013) suggest Métis as an appropriate concept for explaining how medical students generate meaning and understanding when confronted by contradiction and paradox between medical school curriculum and ways of working and learning in clinical practice. Students generated different forms of Métis to deal with uncertainty and develop ways of working around troublesome situations (Yardley *et al.*, 2013,

p.111). *Métis* seen in this way represents the practical knowledge that enables students to present themselves in ways that are useful to achieving their objectives. The authors concluded, however, that the gap between practice in medical school and practice in authentic clinical settings might be difficult to bridge, since students feel unable to claim legitimacy in both simultaneously. Rather, they choose to enact “chameleon identities” as their preferred way of managing these competing expectations of performance, in university and practice settings, without fully committing to them (Yardley *et al.*, 2013, p.47).

A study in the US by O’Brien-Gonzales *et al.* (2001) debated the lessons learned about ECE across ten medical schools. The authors identified beneficial effects of ECE for increasing learner motivation, which helped sustain medical students through the first two years of their course by enabling them to see the relevance of their classroom-based learning to their goals of becoming doctors (O’Brien-Gonzales *et al.*, 2001). Initially students identified with patients’ perspectives more than educators’ perspectives, but gradually they began to identify themselves as student physicians and negotiated relationship with their educators who they saw as vital to support their learning. O’Brien-Gonzales *et al.* (2001) recommend that learning objectives for ECE should be broadly set so that experience unfolds in ways that reflect the contextual diversity of practice.

Helmich *et al.* (2010) identify strengthening evidence of the benefit of ECE for the development of communication skills, confidence and empathy in students, as a result of enhanced understanding of the impact of disease on patients’ lives. They studied the experiences of medical students who completed a nursing attachment as their ECE. The intention was to evaluate whether improved understanding of the roles and responsibilities of nurses influenced the constructions of their own professional identities as doctors. Perceptions of doctors were ambivalent, before and after their experience, seeing some as friendly and some as authoritarian, for example. Students expressed positive attitudes towards nurses, but were critical of the hierarchies they observed between doctors, nurses and patients. The experience promoted a positive self-identification with the type of doctors that students wanted to become, described as “kind and social, empathic and careful” (Helmich *et al.*, 2010, p.677). The students often contrasted their own positive attitudes with the negative attitudes of doctors, which some experienced. Helmich *et al.* (2011) subsequently explored the associations between students’ learning objectives and outcomes before and after placements with age and gender. They noted that younger students’ outcomes were strongly patient-focused and identified concerns with communication, empathy and dealing with emotions.

Older students maintained a broader perspective on career choice, learning and motivation. The potential for students to be surprised by their emotions in ECE was common.

Jaye *et al.* (2010) observed medical students during ECE on a surgical ward. Remarkably, in this New Zealand based study this did not occur until their fourth year of study. The researchers applied Lave and Wenger's (1991) concept of LPP in communities of clinical practice (CoCP), which they defined as focused around the provision of individual patient care. Jaye *et al.*'s objective was to investigate how professional attributes were learned through informal practices. The study focused on identifying the mechanisms that facilitated students to adopt the values, attitudes and behaviours of the CoCP. The ultimate goal of LPP for learners, according to Wenger (1998, p178-195), is to belong within the CoP through a process of "alignment". In discussing their findings, Jaye *et al.* (2010, p.59) suggested that, through largely informal participation, the normative expectations for behaviour in practice are transmitted as "normalising technologies of self", as students learn how to become "one of us". Students learned what clinicians value and how to please their educators, in order to get on. Jaye *et al.* questioned the assumption that being a team member is sufficient to confer legitimacy on a student. They argue that it is through the act of participation that learners make meaning of practice and develop their identities as team members, enabling them to achieve legitimate status in the CoCP. Jaye *et al.* (2010) suggest that because participation is active it is more learner-centred and less likely to leave the learner on the periphery of practice than when membership is simply conferred.

Individuals acquire the discourses of a group through the process of socialisation into the culture of that group. Socialisation of student physiotherapists was the focus of a study by Öhman *et al.* (2001) who applied the concept of habitus to explore students' changing career choices over the course of their physiotherapy education. The authors found that many of their dispositional preferences remained relatively stable throughout their training. Black *et al.* (2010) investigated the socialisation of graduate physiotherapists during their post-qualifying year and found that social interactions, confidence and identity formation emerged as important features of learning.

Walker (2001) suggests that a social approach to learning can reveal learning as active, constructive and transformative. He contrasts this with socialisation discourses that imply a "passive individual shaped by socialisation agents such as family, educational institutions, workplace and media" (Walker, 2001, p.25). Clouder (2003) studied the professional socialisation of occupational therapy students over the duration of a three-year programme.

She observed that professional discourses of regulation and control exerted powerful effects to conform on individual students. Clouder (2003, p.217) notes subtle differences, however, between student compliance and conformity and conceptualising the development of professional agency in these students as “learning to play the game” and “presentation of self”. Her application of these terms acknowledges the work of Goffman (1971). Clouder (2003, p. 213) advocates a perspective on socialisation as a reflexive process with which learners engage rather than a “repressive and deterministic” process. The question of how learners engage with practice and learn what to do, without necessarily knowing what to do, is tangential to the usual focus of professional socialisation. My study was less concerned with understanding how students feel about becoming professionals, and more with the meanings they attach to their participation in the practices of the clinical workplace.

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In this chapter, my intention was to guide the reader through the empirical literature that focuses on PBL in physiotherapy. In order to cast the net more widely, I have drawn on parallel research in the disciplines of medicine and nursing. Research identifies paradox and complexity as features of participation in the clinical workplace as students pursue competent performance in culturally distinct contexts of higher education and clinical practice. A desire to challenge the dearth of empirical research in physiotherapy that considers PBL as social participation provided my motivation for this research. I also recognise that underlying my motivation was my own habitual predisposition to seek an alternative perspective that was more affirming to my own practice as a practitioner and educator of future practitioners.

Kilminster (2009, p.41) observed that clinical education research is “often either completely atheoretical or uses a concept [ ] without any justification of the use of that particular conceptual framework”, whilst Bleakley (2006) suggests that where theory is identifiable, it is often for ideological rather than evidence based purposes. PBL as a situated learning enterprise unfolds in relation to the social and cultural complexities of clinical and academic practice. My engagement with theory has really only arisen since my enrolment on the EdD programme at Sussex. Clinical practice espouses effectiveness based on a commitment to empirical evidence. Whilst I believe this to be a largely deceptive discourse in physiotherapy, it is beyond the scope of this research to embark on such a thesis. My enjoyment of theoretical thinking arose from a seminar on the EdD when the lecturer described theory as a “tool for thinking”. This simple statement stripped away a persistent misunderstanding that I had



confused my professional judgement, that theory was something you fell back on when you did not know the answer!

I have engaged a number of perspectives and theoretical frameworks in developing and writing my thesis. In order to achieve an analytical perspective it was helpful to draw on established theories of social learning. In the next chapter, I explore these theoretical standpoints, drawing on the theoretical frameworks of legitimate peripheral participation in communities of practice, field theory and Discourses of practice. These theoretical frameworks challenged and developed my thinking about what it means to learn through participation in clinical practice as a nascent practitioner.

## Chapter Three    Conceptual Frameworks

According to Edwards (2005, p.56), when learning is conceptualised as a sociocultural practice it can be related back to one of two theoretical foundations. One of these foundations is a cultural perspective arising from the work of Vygotsky (1978), where learning implies a social constructivist process with collective cultural meanings assimilated by the individual. This “outside in” perspective assumes meaning to be mediated through shared cultural artefacts and tools, such as language, for example. The second foundation arises from an interactionist perspective and the work of Meade (1934), wherein learning implies a process driven by individual agency. This “inside out” perspective views meaning as the construction of an individual actively seeking opportunities to participate in practice. Edwards (2005) suggests that both perspectives identify participation as a relational process that supports the development of expertise where knowledge is discursively constructed, reflecting the cultural context of its development. Edwards (2005) argues that the interactionist perspective and individualism is the foundation for Lave and Wenger’s (1991) framing of learning as participation in communities of practice.

### **Legitimate peripheral participation in communities of practice**

Lave and Wenger (1991) propose situated learning as an analytical framework within which to consider learning as social participation. They identify participation as a progressive process that is relational with the learner achieving legitimacy as a potential member of a community of practice. Legitimate peripheral participation is suggested by Lave and Wenger to involve the “whole person” in learning the social practices of a community and offers a way of thinking about learning outside formal classroom situations (Lave and Wenger, 1991, p. 53). Fuller *et al.* (2005) suggest that Lave and Wenger’s conceptualisation of learning as participation provides an alternative to the standard paradigm as described by Beckett and Hager (2002) and which frames learning as a cognitive process of the individual mind. Situated learning does not simply denote spatial and temporal indices of learning, but acknowledges the situatedness of knowledge, meaning and identity that emerge as functions of the learner’s engagement in practice (Wenger, 1998). When learning is viewed as a social and relational process, it can act as a heuristic for consideration of workplace learning (Hager, 2011).

LPP is proposed as a defining characteristic, when learning is considered as a socially and culturally situated activity (Lave and Wenger 1991). Participation in authentic situations gradually reveals the discursive repertoires of practice, and so supports the learner's access to situated meanings, enabling his or her progressive engagement (Lave, 1993). Lave and Wenger (1991, p. 51) do not deny the cognitive construction of meaning, but they question the value of considering learning as disconnected from social and cultural dimensions that imbue practice with meaning. For Wenger (1998, p. 47), practice is a form of "doing in a historical and social context that gives structure and meaning to what we do".

Consideration of clinical practice as a form of "social practice" allows both the cognitive and social dimensions of activity to be recognised. Physiotherapy practice as described by the World Congress for Physical Therapy (2011) is fundamentally a social practice:

Physical therapy involves the interaction between the physical therapist, patients/clients, other health professionals, families, caregivers and communities in a process where movement potential is assessed and goals agreed upon, using knowledge and skills unique to physical therapists.

As part of a multidisciplinary approach to patient-centred care, physiotherapy practice involves close communication and team working in order to avoid the fragmentation of care across professional boundaries. It is entirely appropriate, therefore, to explore clinical practice and PBL from a social learning perspective. The meaning that practice holds for a student physiotherapist arises from his or her experiences of "being" and "acting" in the social world. As Wenger (1998, p. 52) describes the process, "living is a constant process of *negotiation of meaning*" (original emphasis). The negotiating function is central to the coherence of Lave and Wenger's notion of legitimate participation in practice which involves language, but is not reducible to language alone (Tusting, 2005).

Membership of a CoP achieves coherence when considered in terms of three enabling dimensions of practice, according to Wenger (1998). These dimensions locate the learner's engagement with the CoP in pursuing a common purpose for practice, opportunity to engage with others in pursuit of this common purpose and for the individual to appropriate the repertoire of cultural resources and tools shared by the community. Becoming a competent participant in practice requires the learner to address the functional, affective and social dimensions of learning (Illeris, 2011). These dimensions, described by Wenger (1998) and Illeris (2011), are mutually dependent and in such conditions enable learning that supports

progressive integration for the individual in the CoP. Lave and Wenger (1991, p. 98) describe a CoP as:

A set of relations among persons, activity and world, over time and in relationship with other tangential and overlapping communities of practice.

Practices arise from, and in turn lead to, the development of situated knowledge (Wenger *et al.*, 2002). These practices evolve and are continually “reshaped in communities of practice” (Kemmis, 2005, p.394). These concepts have a great deal to offer a theorisation of clinical practice with its inherent requirement for social interaction.

Wenger (1998, p. 56) argues for participation as an active process of engagement, involving the development of identity. These processes are relevant to the novice’s engagement with clinical practice for the same reasons explained by Lave and Wenger (1991, p. 29):

Legitimate peripheral participation provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artefacts, and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice. A person’s intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice.

Lave and Wenger (1991) propose participation, peripherality and legitimacy as relational components of learning which act as modifiers of participation and thereby facilitate the newcomer’s access to practice. Legitimacy is also relational with the construction of participant identity enabling novices to participate as potential members of the community “by being useful... being the right kind of person” (Wenger, 1998, p. 101).

Lave and Wenger (1991) propose that LPP in practice often includes ways of engaging that might not be instantly recognisable as learning. Finding appropriate ways to recognise informal and tacit dimensions of learning is a challenge for PBL, given the instrumental curriculum of initial physiotherapy education. Informal learning in PBL is often bundled together rather indiscriminately as development of generic and transferable skills. Critics of Lave and Wenger’s framework often challenge the difficulties of bounding the CoP. Fuller *et al.* (2005) question the applicability of CoP to describe contemporary workplaces and their complex forms of participation that may constrain as much as promote learning. Normative influences on practice were identified by Jaye *et al.* (2010) in relation to medical students who internalised practices in order to regulate their own practice and “fit in”. A possible effect of normalisation could be to mitigate against change, according to Seely-Brown and Duguid (1991).

Lave and Wenger (1991) explained situated learning and LPP as involving a process of becoming. The meanings that people apply to themselves and share are bound up in identity and identification (Burke and Stets, 2009). Handley *et al.* (2006) is critical of what she describes as the situated specificity of participant identity implied by Wenger, and argues that individuals can maintain a sense of self-identity by adopting trajectories of participation as marginal or even non-performers. Ajjawi and Higgs (2008) suggest that healthcare professionals mediate their identities through individual agency, but these authors follow the trend in clinical education research that fails to account for the structuring effects of power in physiotherapy practice and education. A couple of studies have identified the dual roles of mentor and evaluator, when resting with one individual, as paradoxical to the learning and participation of students in practice (Le Maistre and Pare, 2004; Le Maistre *et al.*, 2006).

Edwards (2005) claims it is unsurprising that studies of learning in the workplace draw on participation to theorise learning, but cautions that participation is sometimes used to imply engagement. Billett (2010) counters this position by arguing that learning is synonymous with progressive participation in the practices of the workplace. Sfard (1998) developed participationism as referring to the process by which a learner makes sense of other people's discourses of practice. Sfard (2008, p. 131) subsequently developed participationism as implying the need for the learner to understand the function as well as the form of discursively constructed knowledge in order to develop a sense of meaning.

Fuller (2007, p. 19) says that Lave and Wenger make an explicit connection between social practice and learning, which distinguishes their framework of learning as social participation from the reflexive sociology of Bourdieu. My intention was to utilise Lave and Wenger's conceptualisation of participation with the intention of exploring the experiences of novice student physiotherapists in ECE, and achieve a more theoretical framing of practice-based learning than is currently evident in the physiotherapy educational literature.

### **Bourdieu's field theory**

Grenfell (2008) identifies the philosophical basis for Bourdieu's theory of practice as the objectivism of Levi-Strauss, and the subjectivism of Husserl and Heidegger. Bourdieu (1984, p.244) attempts to transcend the subjective-objective debate by recognising that practices generated by the habitus "[ ] are always more adjusted than they seem to be to the objective conditions of which they are the product". Bourdieu, like Lave and Wenger, emphasises the importance of understanding the social factors that shape practice, in order to explain the

relations of individually embodied and socially objectified forms of power (Kemmis, 2005). To this end, Bourdieu applies the notion of reflexivity to the relationship between what an individual comes to know of the social world, and the possibilities for knowing that the social world presents. It then follows that an individual's knowledge is structured by the social world he or she inhabits. Discourses and social practices, tend to reproduce the relations of power that generate those same discourses and practices. The consideration of power is integral to Bourdieu's theorisation of practice and may counter the less present power relations that have attracted criticism of Lave and Wenger's treatment of situated knowledge. As Maton (2001, p.206) explains:

Bourdieu's approach [analyses] the *social* relation of knowledge. It provides a sociology of knowledge, and not an analysis of knowledge itself; more a theory of *power* than of *knowledge* or *pedagogy*. [original emphasis]

Bourdieu (1977) presents a number of theoretical concepts that may provide a critical purchase on social relations in student physiotherapists' participation in practice. Three of Bourdieu's concepts – habitus, field and capital – are explained briefly here.

Habitus is a property of social agents such as individuals, groups or institutions. Habitus consists of sets of dispositions that develop over time and are durable and generative of practices, attitudes and values. Through its interaction with field, habitus is generative of the social practices that enable the agent to act on the social world (Bourdieu, 1990a). Habitus is referred to by Bourdieu (1984) as a structured and structuring structure. The form of the habitus is not random but ordered and represents a "way of being" in the world, a habitual state (Bourdieu, 1977, p.214). Habitus presents a somewhat intangible phenomenon that structures behaviours and practices, but is not overt. Reay (2004) further differentiates habitus as embodied in movement, speech and the behaviours expected of certain types of people. Moore (1999) suggests that Bourdieu's earlier view of habitus was of a more enduring mechanism than was presented in his later work. The concept of habitus that I have adopted here is located in sets of dispositions, structured by the individual's life history and generative of the attitudes and values that contribute to the structure of his or her practice as he or she seeks to become progressively more involved in physiotherapy practice.

Field exists in the social relations between individuals who have a stake in its function. As a social space, field is located in historical, political and institutional constructs (Moore, 1999). Field is bounded by the coherence of sets of beliefs that rationalise the practices which constitute it. Field is therefore structuring of the habitus of those who practice within it, and

the practice of those within it is in turn structuring of the field. Practices will, however, serve the interests of some in the field more than they serve others (Thomson, 2008). Field is therefore a contested space in which agents manoeuvre to achieve control over the resources that are valued within. Power relations are features of the field that arise between agents, as a result of their habituses and situations in time and space (Grenfell, 1996, p.290). Power is central to Bourdieu's account of field and defines the relations of agents operating within, whereas Lave and Wenger's concept of CoP has been criticised for not adequately accounting for power (Fuller *et al.*, 2005). Hodkinson and Hodkinson (2004, p.30) suggest that Bourdieu's concept of field may be better for locating learning as social participation in a broader sense:

*Situated learning, or learning as social participation, are better terms than communities of practice to capture the underlying essence of Lave and Wenger's (1991) theoretical approach. The field of practice, or learning field, following Bourdieu, may be better terms than community of practice to represent the view that learning is ubiquitously social.*

For student physiotherapists, learning in clinical practice requires participation in a variety of situations. As participants in the practice community they must be aware of the learning field of higher education and frameworks of practice defined by professional and regulatory bodies. I propose, therefore, that it is appropriate to consider social participation as involving relations between novice students and the broader field of practice, as suggested by Hodkinson and Hodkinson (2004).

In field theory, capital extends beyond its traditional economic form to include symbolic forms of social and cultural capital, which achieve value in the field according to Bourdieu (2006), and is essential to understanding the structure and function of the social world. Now that we have considered the generative potential of habitus and field to produce and reproduce each other through social practice we can explore the concept of capital as providing the "energy" for this generative process (Moore, 2008, p.105). Capital may be embodied in the habitus and support the individual's disposition to act. Capital may also be objectified in the field, for example as professional competence, with practice being directed towards its acquisition in order to advantage the individual who possesses it over others who do not. Bourdieu explains cultural capital in a number of ways, but the explanation that is most helpful for explanatory purposes in this thesis is of capital as "credit, it is the power granted to those who have obtained sufficient recognition to be in a position to impose recognition" (Bourdieu, 1990b, p.138).

For student physiotherapists entering practice, cultural capital may be the theoretical knowledge the individual can access, or prior experience of clinical practice through work

experience or employment as a physiotherapy assistant. The extent to which forms of capital are valued in the field will support those who are advantaged by its possession. The tendency of this situation to legitimise and maintain the status quo might exclude those without a capital advantage. The value of capital is its claim to intrinsic coherence with the situation, which Bourdieu refers to as supporting misrecognition as doxa. Nolan (2012, p.205) describes doxa as:

The set of core values and discourses of a social practice field that have come to be viewed as natural, normal, and inherently necessary, [ensuring that] the arbitrary and contingent nature of these discourses are not questioned or even recognised.

Doxa then can be said to exist in the situation where the fit between habitus and field seems attuned. Supported by capital one feels like a fish in water, accepting of the way things are, and accepted in the field (Bourdieu and Wacquant, 1992). Power works to sustain misrecognition of arbitrariness and legitimises relations, for as Bourdieu argues:

What exists in the social world are relations – not interactions or intersubjective links between agents, but objective relations which exist independently from consciousness and individual will.

(Bourdieu and Wacquant, 1992, p. 72)

Fit between field and habitus is never perfect and when individuals enter a new field a dispositional adjustment may be required (Moore, 1999, p.308). For example, when students first enter the field of clinical practice they may find that previous experience has not fully attuned them to the relations in the field. Doxic relations between habitus and field can be considered by contrasting with associated concepts of orthodoxy and heterodoxy (Bourdieu, 1977). The relationship between these is usefully explained by Smart (2009, p.160):

To the extent that there is near agreement between habitus and field, we have “doxa”; to the extent that any previous disagreements have been negotiated, we have “orthodoxy”; and to the extent that there is little agreement between habitus and field, we have “heterodoxy”.

Practices can be viewed as relational responses to field, habitus and capital. Maton (2008, p.53) expresses the relationship between these concepts as:

[(habitus)(capital)] + field = practice.

Bourdieu applies the term “hysteresis” to refer to situations where field and habitus are not attuned. He suggests this is most likely to occur when one is new to a field, its values and



practices. When power operates to support mis-recognition of relations it perpetrates what Bourdieu (1990b) termed symbolic violence, against individuals who are complicit due to their ignorance of the possibility for any different state of affairs to exist.

Physiotherapy education is both an individual and a collective endeavour. It involves higher education and healthcare as distinct fields of practice, which structure the habitus of the individuals operating within them and who in turn, cultivate the fields in particular ways. Institutional and individual practices involve clinicians, students and patients and are shaped over time and with experience (Kemmis, 2005). I wanted to explore the interactions of habitus and field in the early clinical experiences of student physiotherapists in order to identify the well-attuned and not so well attuned practices of learners as participants.

I believe that the application of Bourdieu's field theory can support the development of a critical perspective on PBL in physiotherapy. His concepts are appropriate for considering the social relations that influence, and are influenced by fields of clinical practice. The habitus of the novice entering the field will provide the dispositions, values and attitudes that function as forms of cultural capital with which to secure his or her bid for recognition in the field of practice. Whilst I was unable to locate any studies in physiotherapy that have applied Bourdieu's concepts I did locate studies in nursing by Morberg *et al.* (2012), and in teacher education by Grenfell (1996; Grenfell and James, 2004) and by Nolan (2012).

## **Discourses and identities**

There are many theories of identity. The theory applied in this thesis is that proposed by Gee (2001) as appropriate for understanding how people perform certain identities through their interactions in a given context. Gee's (2001, p. 100) theorisation of identity builds around four different perspectives on "what it means to be recognized as a 'certain kind of person'." Each perspective is defined in terms of the processes involved, the powers developed and the sources of power on which one draws in order to develop an identity:

1. Nature-identity – a state developed from forces in nature
2. Institution-identity – a position authorized by authorities within institutions
3. Discourse-identity – individual traits recognized in Discourses of/with "rational" individuals
4. Affinity-identity – experiences shared in the practice of "affinity groups"

These four offer different, but complimentary analytical perspectives for the exploration of identity in different contexts.

Gee (2001, p. 99) argues that interaction between people in a given context involves recognizing the actions and interactions of others as those of particular kinds of people, and that an identity can be claimed when recognised as a certain “kind of person” in a certain context. Identities are seen as multiple and performed, rather than fixed. Gee (2001, p. 103) explains that one cannot achieve such identities “by oneself”; rather they require recognition by others with whom one is interacting. In considering identities expressed in dialogue with others, I have drawn on Discourse identity, which is appropriate for this level of micro-interaction between participants. From this perspective, identity is discursively constructed (achieved) through the performance of secondary Discourses and “arises as an emergent property of the ways in which the [persons] words and deeds get recognized by actors” (Gee, 2001, p. 104).

The concept of discourse has a number of interpretations and so I define here what I take to be the meaning as I have applied it within this thesis. Discourse as the linguistic character of language and text is a traditional and recognised use of the term. The fine-grained analysis of linguistics is not the type of discourse analysis considered here. My application of the concept of “Discourses”, with a capital “D” and in the plural, aligns with that proposed by Gee (2005, p.7):

When “little d” discourse (language-in-use) is melded integrally with non-language “stuff” to enact specific identities and activities [ ] “big D” Discourses are involved.

So what is the “stuff”, apart from language, that helps individuals to enact identities? Gee, (2011, p. 177) describes the non-linguistic features as:

Distinctive ways of acting, interacting, valuing, feeling, dressing, thinking, and believing. In turn all these are coupled with ways of coordinating oneself with (getting in synch with) other people and with various objects, tools and technologies. All this in the service of enacting socially recognizable identities.

I propose that this interpretation of Discourses reflects Wenger’s articulation of “meaningfulness” in relation to social practice, which involves ongoing negotiation and “may involve language, but is not limited to it” (1998, p. 53). Discourses are ideological and strategic, because their function is to offer positioned ways of presenting aspects of the world (O’ Regan, 2012). They can give collective meaning to practices, actions and knowledge (Kemmis, 2005).

Individual performance of Discourses can bestow recognition on an individual as being a culturally competent member of a group. Gee (2005, p.26) calls these performed Discourses, “secondary Discourses” that an individual acquires in order to bid for recognition as a member of a social and cultural group, in other words to achieve an “affiliate identity”:

The key to Discourses is “recognition.” If you put language, action, interaction, values beliefs, symbols, objects, tools, and places together in such a way that others *recognise* you as a particular type of who (identity) engaged in a particular type of what (activity), here-and-now, then you have pulled off a Discourse.

(Gee, 2005, p.27)

Forms of professional language and documentation, ways of acting, the wearing of clinical uniforms and the beliefs and values formalised in professional and regulatory standards, contribute to the Discourses of professional practice. Individuals co-ordinate themselves with Discourses through a process of identification (Gee 2011). Attempts to coordinate one’s self with a group can be seen as involving the achievement of an identity as an affiliate of a particular group such as a professional clinical team. The title that I apply to physiotherapy students on the work integrated learning programme that provides the context of this research is that of ‘physiotherapy intern’. This title denotes a specific identity for the learner as both an employee and a student, which differentiates him or her from other student physiotherapists, and may be considered an institutional identity, attributed to the individual’s status in relation to this particular programme of initial professional education. For the purposes of this study, I refer to interns as participants, for consistency with my theorisation of learning as participation.

Lave and Wenger (1991, p. 109) consider discourses to convey the meaning of talk “within practice”, rather than talk “about practice”, and claim this is critical to establishing identity within a CoP. Though they do not capitalise the word discourse, I will continue to do so for consistency. Discourses convey the situated identities and situated activities that make people meaningful to each other and support their progressive participation in a CoP.

Bourdieu and Wacquant (1992) considered Discourse as social practice, and as such it is relational to the constitution of habitus, field and capital. Reflexive interaction between habitus and field is relational to the discursive capital at one’s disposal. An individual who is well habituated to the field of power is one whose Discourse is less in conflict with the dominant Discourses in society. These conceptions of Discourses have similar meanings, though Gee, Lave and Wenger, and Bourdieu express them in different terms. Gee focuses on

their performance as secondary Discourses, which supports an individual's bid for recognition of identity and action to convey cultural competence. Lave and Wenger suggest that Discourses constitute part of practice, the expression of which is relational with legitimate participation in that practice. Bourdieu suggests that Discourse supports practice and the misrecognition of power relations in the field as doxa.

Bourdieu's field theory offers a theoretical conceptualisation of social practice constituted in the sets of relations between individuals that frame the possibilities for knowing in a field of practice. The habitus, as sets of dispositions, offers a way to think of knowledge as historically, socially and culturally constructed and shaped in relation to the fields one inhabits. The degree to which one may feel 'at home' in a field being influenced by the extent to which one is in possession of the sociocultural forms of capital that achieve value in the field.

A CoP considered as "a set of relations among persons, activity and world, over time" (Lave and Wenger, 1991, p.98) represents a particular focus of practice in relation to which an individual's actions and interactions may be considered as form of participation. The degree of affiliation between participant and community being mediated by his or her identity as a legitimate member, or potential member. An individual may seek or possess degrees of affiliation with any number of communities at any particular time and place, and the legitimacy within each varying and relational to the opportunities available to the individual to interact with others in that particular field as a more or less peripheral participant.

Identity when discursively constructed through the performance of Discourses is multiple, fluid and transient. Discourses offer ways of conceptualising practice in terms of linguistic and non-linguistic dimensions including the ways that individuals dress, the beliefs they espouse and the attitudes they convey. The performance of Discourses may be focused to signal one's affiliation with a particular community of practice as constituted in a particular field of relations in a particular time and place. The degree to which an individual seeks affiliation will be influenced by his or her dispositions to achieve mutuality between his or her intentions and practices and those of the community within which recognition is sought. The degree to which one achieves mutuality in social practice will be influenced by the degree to which a participant's identity is recognisable to the co-participants as exemplifying the performed Discourses of the community.

In exploring PBL as a process of socioculturally situated learning, I believe that the theoretical concepts discussed can contribute to a fuller understanding of the meaning of learning for the novice student as a participant in clinical practice.

I applied these theoretical perspectives to frame my consideration of six student physiotherapists participating in early clinical experience. My intention was to achieve an analysis of learning as social participation in the fields of practice that they encountered. Furthermore, I wished to maintain a learner-centred focus and explore their efforts to construct meaning in relation to their participation as novice students in clinical practice.

## **Chapter Four            Methodology**

The over arching research question that this research aimed to answer was:

**What is the meaning of learning as participation in early clinical experience for students on a work integrated learning programme?**

The two sub-questions were:

- **What do they value in relation to their participation in early clinical experience?**
- **Which identities do they bid to have recognised in the context of their early clinical experience?**

In this chapter, I explain the methodological decisions that informed my research strategy, the case study approach that I applied and my methods of data collection and analysis. I conclude with a consideration of the ethical framework that guided this research.

### **Research strategy**

The methodological structure adopted for this research includes suggested core elements for social research design proposed by Blaikie (2009) one of these being the research strategy which supplies the logic for planning and organising research methods to most effectively address research questions. I adopted an abductive strategy, which Blaikie (2009, p.19) describes as starting from a focus on actors and the ways in which they “give meaning to their social world, their tacit knowledge”. Atkinson and Delamont (2005, p.833) describe abductive logic as supporting exploration of the social world through engagement with it, and with the intention of deriving “provisional understandings”. The research strategy suggested procedures that were intended to reveal taken-for-granted practices and Discourses, in order to achieve a more theoretical analysis. Blaikie (1993, p.177) argues that because social life is so much taken for granted in day-to-day situations, it is only when routine is disrupted that individuals are forced to search for meaning. The early clinical experiences of novice students challenged their beliefs and values and so presented a potential for disruption of habitus-field relations.

Another core element of this research strategy is the ontological perspective of subtle realism. From this perspective, knowledge is likened to plausible beliefs, and given that, all knowledge is considered a “human construction” based on certain assumptions and performing specific

functions (Blaikie, 2009, p. 94). Within subtle realism it is logical to represent multiple perspectives that contribute plausible explanations in which one can be reasonably confident (Hammersley, 1992). I would argue that subtle realism allows for consideration of the experience of practice, which involves our attempts to deal with the effects of disease and injury on bodily tissues, as well as the functional capacities of people and their interactions in society. In his critical realist philosophy, Bhaskar (1998, p. 56) identifies three ontological domains of the empirical, the actual and the real. Our only access to these domains is at the level of empirical experience even though events happen at the actual level, whether we experience them or not. Beyond the actual in the real domain, generative mechanisms may produce effects at the other two levels (Danermark *et al.*, 2002, p.20). My adoption of a subtle realist rather than critical realist perspective supports a focus on the empirical domain and through theoretical analysis seeks access to the actual domain, stopping short of retroductive analysis which seeks to test any theoretical relationships proposed (Danermark *et al.*, 2002). Subtle realism assumes a relativist and constructionist epistemology where knowledge is constructed relative to particular standpoints (Blaikie, 2009). These standpoints are relative to the structuring effects of habitus, field and reflexive practices that emerge over time in relation to assumed meanings and shared understandings. The generation of these social constructions mediate subjectivities of which one may not be fully conscious, with situations experienced in fields of practice.

In a previous chapter, I identified some of the reasons for my research focus based on what I believe to be of interest in the ECE of physiotherapy students. My abductive strategy assumes a starting point for constructing explanations through engagement with the workplace practices of learners. Whilst I considered concepts of LPP and CoP from situated learning theory, I have also considered Bourdieu's concepts of field and habitus and Gee's concept of secondary Discourses. My intention is to avoid a tautological process by utilising the different foci provided by these frameworks and the possibilities they afford for exploring learning as participation in the social practices of professional communities. I am mindful that my decisions about the focus of this research as well as my interpretation of the participants' perspectives do not constitute objective observations. Rather my decisions and interpretations are value laden, influenced by my own experiences and my observations of other students undertaking ECE. My status is that of an "insider" researcher with respect to my experience of the programme, my choice of focus for this research, my position as programme leader and my ideas about what I might expect to find (Drake, 2010, p. 98).

Research methods were adopted with the intention of generating descriptions of events that detail the meanings and understandings that participants construct to make sense of their social worlds (Denzin and Lincoln, 2005, p.17). My role as researcher was to re-describe meanings and situations in a more technical discourse (Blaikie, 2009). Through this process of interpretation the first order constructs of agents are analysed in a systematic way to develop second order analytical accounts (Atkinson and Delamont, 2005, p.833). Blaikie (2009, p. 89) suggests that an abductive strategy is appropriate for answering “what” and “why” questions by producing understandings, rather than causal explanations. My intention was to share in the meanings of participation in ECE and develop a shared understanding, in accordance with Blaikie’s (2009, p. 87) description of abductive logic as leading to exploration of a phenomenon, but stopping short of a retroductive approach aimed at explaining underlying mechanisms that produce regularities in particular contexts.

### **Case study approach**

Case study, described by Stake (2005, p.443) as “a choice of what is to be studied”, guided my research method which aimed at exploring the meanings that novice students attached to their participation in ECE. Whilst the WBP programme provided an opportunity to study participation in practice, it did not constitute the unit of analysis. My focus was the six individuals who each brought prior experience, dispositions, beliefs and values to bear on the construction of meaning. It seemed appropriate, therefore, to retain the focus on each individual, striving to understand his or her induction into clinical practice. Case study can be particularly helpful in studying processes or relationships, according to Denscombe (1998, p.31). Participation in ECE, as I have framed it, involved the development of relationships and a process of progressive involvement. It seemed helpful to explore the variations in meanings from these six situated perspectives.

Descriptive and analytic accounts are the natural output of case study research according to Cousin (2009). This perspective was consistent with my adoption of subtle realism that recognises the influence of an objective reality on subjectively mediated meaning, when knowledge is partial and judged by its plausibility. According to Cousin (2009, p.132), case study can lead to the construction of “integrated meaning”, when considered within a framework that recognises a realist ontology, a partial and provisional epistemology and an interpretive methodology. The use of a case study approach was justified in view of my aim to better understand the meaning of participation in ECE from the novice student’s perspective. I



acknowledge however, that my position was a privileged one in relation to the study participants. I tried to remain always aware of my privileged position, conscious of the way that my perspective was framed by it and how it contributed to the meaning making process in which I engaged with the study participants. As Drake (2010) observes, it is important to maintain a critical awareness of what the researcher's framing renders visible through the research process.

The possibilities for defining a case are various, but all have in common the need to delineate the entity as "self-contained" (Denscombe, 1998, p. 38). The boundedness of these six cases is explained here for the purpose of differentiating them from external contexts, as suggested by Cohen *et al.* (2007). However, Denscombe (1998, p. 39) cautions against treating boundaries as if they seal the research, researcher and participants from the influence of the outside world. Students experience influences on their participation that extend beyond the physical or temporal boundaries of ECE. Stake (2005, p.444) suggests that the case will commonly have certain features that may be considered to be an activity pattern. The features of these cases that could be considered to demonstrate a pattern of activity included the following:

1. Each student's clinical experience was located in a single organisation.
2. The host university delivered two professional education programmes in physiotherapy.  
Only students enrolled on the work integrated learning programme experienced ECE in the first term.
3. Meaning was sought from each student's perspective.
4. No sampling decisions were applied other than participant's enrolment on the work integrated learning programme, in order for the cases to maintain their natural co-existence which recognised social and collaborative ways of learning.
5. Six students consented to participate in the study.

## **Methods of data collection**

Ethical approval for the study was received from both the host university where the physiotherapy programme was located in London, and the University of Sussex where I am a student registered on the EdD programme.

Data sources were selected for variety of purpose, voice and addressivity, which included:

- written answers to a specific question
- participant's learning journal entries addressed to me
- reflection lines and memos recorded in practice

- interview transcripts of participants discussing experiences of participation in ECE
- my field notes of two routine visits to each participant in the clinical setting.

### **Reflective “short” writing**

All participants submitted a short piece of writing in which they reflected on the potential benefits and challenges of learning in the context of future clinical practice. This was standard coursework, on which all students received feedback, with work being retained as data from participants.

### **Semi-structured interviews**

I interviewed each participant before the period of early clinical experience and again just after. The first interview lasted around 30 minutes. I used a guide consisting of open questions clustered around a set of broad themes (**Appendix 1**). In the second interview I encouraged the individual to reflect back on the clinical experience by providing a set of five open questions in advance (**Appendix 2**). The interview lasted about 40 minutes and enabled detailed exploration of issues identified by each participant.

Semi-structured interviews in this research were used to access the learner’s perspective and achieve an understanding of the meaning of learning as participation in ECE. Each student was asked to reflect on a “productive” and a “not so productive” experience of participation, and how they thought they had changed as well as how others might recognise them as having changed over the course of the experience. Enabling the development of participant narrative can provide rich insights into how they make meaning and position themselves in relation to the clinical experience, particularly during periods of transition as newcomers to practice.

All interviews were recorded as digital files, transcribed verbatim and loaded into NVivo8 to support data analysis. NVivo8 files were password protected on my personal laptop and as back-up files on the University of Sussex server. The original recordings were deleted.

### **Electronic learning journals**

All students were requested to keep an on-line learning journal which was set up on the host university’s virtual learning environment (VLE). These individual journals provided a space for critical reflection. Each journal was only accessible by the individual student and by me as their tutor and researcher. Creating a secure place for student’s reflections, away from practice and with my supporting a questioning approach to their experiences, helped to promote confidence to challenge practice within that space and develop self-knowledge. The on-line journals were accessible to students whilst away from the university. Over two hundred

entries were posted by participants in the course of the study with variations between one, and thirty postings.

Engaging students in written reflection can encourage writing skills (Moon, 2006). For three of the participants, English was not their first language. They received feedback on structure of their writing, particularly in relation to summarising and paraphrasing. Moon (2006, p. 24) suggests that learning journals can support students in learning how to learn. This potential benefit might extend to learning in clinical practice.

Reflection, whilst in practice was prompted by questions that related to dimensions of developing competence, was identified by Illeris (2009b, p.10) as “functionality, sociality and sensitivity”. These questions were used as prompts in relation to reflection lines and when offering feedback on students’ journal postings. The questions included:

- What did I do this week in practice? What have I learned this week?
- What seemed to be most significant?
- What do I need to be able to do or know? In addition, why might I need to know this?
- What appears strange to me in practice or university?
- What have I found challenging? What have I found helpful? What helps me learn?
- How does my practice-based experience link with my University experience?
- How did I feel this week? Happy, anxious, tired, confused, frustrated, enthusiastic ...

I was aware that the students were writing about events in an organisation, which they might see as distinct and even dissociated with the university. It was important therefore to maintain a questioning, rather than overly critical approach, for example, when students had a bad experience and wanted to tell me the story of what had happened. Because I was naturally only hearing the students’ accounts in most cases, it was important for me to try and encourage a balance in students feelings about what happened, when sometimes they might have wanted my affirmation and acceptance of a particular version of events.

### **Reflection lines**

Students were asked to record weekly reflection lines whilst on placement (**Appendix 3**). These were used as a quick way of recording experiences and as an “aide memoire” in subsequent interviews (Orland, 2000). The reflection lines allowed each student to indicate how they felt the week had gone in terms of their learning, their involvement and their enjoyment of practice. The use of reflection lines helped address some of the limitations of memory recall in

the post-placement interviews by enabling a focus on the significant rather than most recent experiences.

### **Tutor visits**

Participants received routine visits from me as their tutor whilst on placement to discuss their progress and provide support. I visited each participant on two separate occasions in the course of the practice placement.

### **Power in the student tutor relationship**

My position in this research was not intended to be neutral, but facilitatory to the meaning-making process. I used some summarising statements and paraphrasing, and sometimes suggested concepts that linked some of the emerging issues as “horizons of meaning” (Holstein and Gubrium, 2005). Participant interviews enhanced our joint understandings. I was aware of the potential for the inherent power relationship to influence participants to construct a version of their narrative that they believed might be pleasing or affirming. I explained that I was interested in knowing what had gone well and what had not, from their points of view. The building of trust supported the depth of exploration achieved in the interviews. I tried to ensure that I maintained an open questioning approach in the interviews and tried to avoid making assumptions of what I thought might have happened in any situation. It was helpful to keep repeating open questions to the interviewees, such as “why do you think x happened”, “what did you think was going on”, “why did you decide on that course of action”, and so on. This encouraged students to explore their experiences and also to begin to recognise if they were also making assumptions about the intentions behind certain practices.

### **Data reduction and analysis**

A challenge was to restrict the scope of my analysis to a small part of the thick descriptions provided. The abductive logic that underpinned my analysis is described by Blom and Moren (2011, p.69):

Abduction means that single events or occurrences – by means of concepts, theory and models – are described and interpreted as expressions of more general phenomena.

The theoretical concepts of LPP, habitus, field and Discourses of participation were considered. Data analysis occurred in phases over an extended period and involved back and forth

categorisations and searching for emergent themes. I fragmented the data thematically and temporally in order to explore it from a variety of perspectives.

NVivo8 software was used to manage data, query data and manage the themes that emerged (Bazeley, 2007). Initial coding of transcripts followed a middle order approach as described by Dey (1993) to capture concepts in the context of their expression. Concepts were identified and coded descriptively as a way of providing category labels. The intention was to capture concepts as expressed in participants' own language. Twenty-nine "free" categories were identified in this way from multiple readings of all the data sources. There was no attempt to structure or relate the emergent concepts at this stage.

Data from learning journal entries, memos and interviews were reviewed to identify references to social practices and social interactions in the context of workplace practices. Data were coded to two broad categories, depending on whether the practices were described in positive or negative terms by the participants.

1. Positive experiences – social interactions identified in broadly positive terms, i.e. productive, helpful, enjoyable, inclusive, motivating etc.
2. Negative experiences – social interactions identified in negative terms, i.e. unproductive, unhelpful, upsetting, excluding, de-motivating etc.

The number of data sources (18) and references to positive practices (136) was similar to the sources (22) and references to negative examples (127).

Data in each of these two categories were then further fragmented and coded to three subcategories based on Illeris's (2009b) dimensions of learning as competence development.

The subcategories were defined as:

1. Content dimension – the coded data focuses on the development of knowledge, skills, and understanding in relation to clinical practice tasks.
2. Incentive dimension – the data focuses predominantly on the student's expressed motivations, feelings, volition and affective orientation to engaging in practice tasks.
3. Interaction dimension – the data focuses on social interaction, co-operation and communication between students and others in the practice environment.

I recognise that multiple dimensions sometimes were represented in one datum but coding decisions were made by reading each datum in its extended context. The categories were not mutually exclusive and there was overlap. This process was repeated on all data sources until

saturation of each category was achieved. These dimension categories contained six subcategories, as shown in Table 1.

Learning dimensions	Positive	Negative
Incentive	38	54
Content	47	64
Interaction	84	73

**Table 1. Data segments coded to dimensions of learning**

Having fragmented the data, coding it into categories, I then reviewed the data organised within each case and looked at the themes that seemed to achieve significance in each individual's account of their participation over the course of the study. The effect of exploring the data in categories and cases was that it enabled data to be re-contextualised and to develop a sense of narrative within the case. The use of NVivo8 software supported my closeness and familiarity with the data, but also allowed me distance from the data at the stage of abstraction (Bazeley, 2007). NVivo8 software allowed me to organise and retrieve data rapidly and to pursue lines of thinking within the cases, in order to explore development over time and look for emergent themes and narratives. One line of inquiry that I pursued involved the application of questions suggested by Gee (2011, p.181) to interrogate the data in relation to big "D" discourse analysis. I looked for evidence of the recognition of identities, competing Discourses and frames of reference that were being applied in each participant's account.

My access to participant's individual construction of meaning was through his or her discursive representations in written accounts and interviews. I was mindful that the accounts mediated the ways in which participants chose to present themselves as playing meaningful roles in practice. Gee suggests there are many different approaches to Discourse analysis and the approach that I pursued sought to analyse "... ideas, issues and themes as they are expressed in talk and writing", and dealt with "... meaning in social, cultural, and political terms" (Gee, 2011, p. ix).

Since I was the programme leader, I took care to express clearly my researcher status. My role was considered in the co-construction of knowledge in this research, and I endeavoured to explicate my interactions, thoughts and assumptions to make them transparent throughout

the process. My presence was also acknowledged within my analysis as a function of the data, since student accounts were not written purely for their own reflection, but as documents that were accessible by me as a tutor and researcher. It is assumed that students were aware of writing for an audience and this specific intent may have influenced their construction (Gee, 2005). The participants determined what they chose to record. My aim was to explore what they had identified as significant, and attempt a more technical interpretation in terms of theoretical concepts.

## **Ethical framework**

An ethical framework as a component of research methodology serves to protect the interests of the research participants and researcher and can facilitate a thoughtful approach that enhances research credibility (Cousin, 2009). Ethical approval for the research was granted by the University of Sussex and by the host institution. Ethical approval was not required from any healthcare organisations since my focus on the student perspective did not require any access to patients or clinical staff. Data collection involved methods that were integral to the PBL pedagogies in use on the programme. The host university required an amendment to the protocol, requesting that the initial approach to potential participants be made via a third party, rather than by me as the programme leader. Accordingly, an administrator sent an initial e-mail and information letter to all ten individuals holding offers for the programme (**Appendix 4**). Six individuals consented to participate in the study by completing consent forms (**Appendix 5**). On reflection, I believe the premise of neutrality for this anonymised approach may have been perceived by participants as lacking transparency. Students who had not consented on the initial approach asked if they could join the study, concerned that I might perceive them as having been uncooperative. I reassured them that this was not the case, but did not include them in the study.

Informed consent was ongoing and none of the participants withdrew. I explained at each interview how the data would be used. Participants were sent interview transcripts to check for accuracy and amend or withdraw comments if they so wished. My role as programme leader allowed regular access to participants. I tried not to make them feel pressured to write in their learning journals, but attempted to reassure them that all opinions were valued. I explained that the learning journals were safe places, where they were welcome to state opinions, explore issues and challenge practice. I explained my role as that of a co-learner. I taught the participants in class each week, but took care not to discuss my research with the

group. I responded to journal postings with a questioning approach commensurate with my collaborative learner Discourses.



## Chapter Five                      Data Analysis

### Introduction to each participant

Six students provided an oeuvre to the situated meanings of learning as social participation in ECE. In this section, my description and analysis focuses in turn on each individual's experience. The understandings shared here have developed from my interaction with the participants as a researcher, tutor and programme leader.

Learner habitus influences how individuals perceive and co-construct opportunities for learning in the workplace (Billett, 2004b; Hodkinson *et al.*, 2004). This group of mature students presented a rich cultural mix of nationalities, and educational and employment histories. A commonality amongst the group was their stated preference for learning by doing and learning on the job, which had been influential in their decisions to choose this work-integrated programme. I was curious to know what learning on the job meant to them at the start of the programme. How did they view the clinical environment? Were their views, based on experiences as service users or as employees? How had cultural depictions of the NHS informed their perceptions of clinical practice?

I provide here a brief summary of information, offered by each participant in a short piece of reflective writing in the first week of the programme. I hope to provide some historical contextualisation to each participant's experience and make my subsequent analysis more meaningful for the reader. The demographic characteristics of participants are summarised in Table 2. All names are pseudonyms.

#### James

James was thirty years old and had recently returned to the UK after living abroad and working as a football coach. He had a B.A. degree, but had no experience of working in healthcare and so he decided to gain some work experience in the physiotherapy department of his local hospital before starting the programme. His experience was "a real eye opener", which confirmed his decision to become a physiotherapist. James was confident in his team-working capabilities. He was happy as a team player or to provide leadership when required and he looked forward to being part of a clinical team.

**Drago**

Drago was thirty-seven and had been educated in his home country in Eastern Europe. He moved to the UK thirteen years ago. Drago said that his English language had been poor when he moved here and he had wanted to develop his language skills before pursuing further academic study. Before joining the degree programme, he had been employed as a therapy assistant in the same organisation where he was now a student intern. His experience motivated him to study further to become a physiotherapist and he said that he wanted to “make a difference” for disabled people. Drago was well known and respected by his colleagues with whom he had worked as a therapy assistant.

**Rahim**

Rahim was twenty-seven and had a Sports Science degree. After graduation, he had worked in retail management but had then been made redundant. He subsequently worked for a short period as a classroom assistant for children with special educational needs. He became interested in physiotherapy after his involvement in a relative’s rehabilitation after suffering a stroke. Rahim was enthusiastic and very proactive in his approach to learning. He had arranged work experience in the summer before he joined the programme at the hospital where he was going to be placed as a student. He e-mailed me a detailed reflective report of his learning experience.

**Sven**

Sven declared he was not keen on “office work” and had always preferred physical jobs. At thirty-three, he had decided on a career change from being a professional dancer and personal trainer. Born and educated in Scandinavia, he had completed an extended degree to prepare himself for seeking admission to the physiotherapy programme. He had a passion to learn how to treat patients in a holistic way, which had developed from his experience of trying to help his clients improve their fitness levels. His natural curiosity about the workings of the body had made him think that physiotherapy would offer an interesting career.

**Magda**

Magda was a thirty-year-old national from a country in the European Union. She had studied physiotherapy to Master’s degree level in her own country, but because UK professional and regulatory bodies did not recognise her qualification, she had been unable to practice since

living here. She described her training in her home country as “more theoretical than practical”. Magda worked as a physiotherapy assistant in the UK, but decided to re-train as a physiotherapist because she was concerned that her knowledge and skills were declining as time went by. Like Drago, Magda found English challenging. She felt that she worked more slowly than her peers did, but she compensated by putting in more hours.

**Mark**

Mark was twenty-six, born and educated in the UK. He had gained a Sports Therapy degree, before working as a physiotherapy assistant in the NHS. His interest in studying physiotherapy via a work integrated learning programme developed from the realisation that he liked being able to apply what he learned directly in practice. Mark said he was not much of a reader and he found it difficult to concentrate at times, and he felt that his performance at school had not truly reflected his capabilities as a learner.

Participant	Gender	Nationality	Highest academic qualification achieved	Entry qualification for BSc physiotherapy	Age	Previous experience in practice	Previous full-time employment
Mark	M	UK	BSc – UK	BSc Sports Therapy	26	Physiotherapy assistant NHS Sports therapist – Football	Physiotherapy assistant NHS
James	M	UK	BA – UK	Cert. of HE for Life Sci and Allied Health	30	Coaching children with disabilities. Work experience hospital	Football coach in the UK & International
Magda	F	EU	MSc – EU	MSc + BSc Physiotherapy – non-UK	30	Therapy assistant, care worker – UK Physiotherapist – non-UK	Physiotherapy assistant NHS Physiotherapist outside UK
Rahim	M	UK	BSc – UK	BSc Sports Science	27	Family member received physiotherapy for stroke Work experience – NHS hospital	Retail manager Classroom assistant both in the UK
Sven	M	EU	Baccalaureate – EU	Extended Degree Health & Bioscience	33	None in physiotherapy	Personal trainer in the UK Professional dancer outside UK
Drago	M	Non-EU	School certificates non-EU	Access to HE Physiotherapy	37	Physiotherapy assistant NHS	Physiotherapy assistant NHS Personal trainer in the UK

Table 2

## Demographic Characteristics of Case Study Participants

My intention in this subsequent section is to present data for each participant to give a sense of his or her participation in clinical practice.

I first present data as a case description for each participant. Each description follows a loose chronology over the course of the participant's engagement. I aim to identify and focus on some salient issues as they emerged in their pre-placement short writing and interviews, and the learning journals and reflection lines during placement and post-placement interviews. The issues described are those made significant by each participant, and this necessarily limited selection offers a partial view of all the experiences they described. My intention was to provide rich data as a sufficiently thick description from which the reader may achieve an understanding of what transpired and what, at the time, mattered most to each of them.

Immediately after each case description, I present an analysis of the emergent issues. The analysis considers the data from a sociocultural perspective and applies the theoretical and relational concepts of social participation as LPP, habitus, field, capital and secondary Discourses of practice.

Extracts from interview transcripts were prepared using the notation conventions identified in **Appendix 6**. Extracts from learning journals are presented as written by the participants at the time and may include grammatical and spelling errors that often occur in the writing of a journal.

## **James**

Based on his experience, James felt that he learned most effectively when "thrown in to the deep end". He anticipated that the clinical environment would be demanding but ultimately beneficial for his learning because he would need to stay focused. James had little experience of clinical settings and practices, and an early concern for him was the possibility that his uncertainty about how to act in certain situations could be misinterpreted as a lack of enthusiasm:

When I was with our clinical educator, she was like talking to a patient and I was just (.) somewhat just standing back and observing. Whereas Drago would step in and say things to the patient and that and, I wasn't sure (.) is that, like (..) I mean I don't want to feel like I'm just sitting back and not trying. I don't want it to appear that I'm not bothered when in fact, I am, and I'm trying.

(Pre-placement interview)

James wanted to create the “right impression” with the patient and with his educator, and he was aware that Drago, his learning partner, was already more familiar with the clinical environment and better known to colleagues who acted as their clinical educators.

James had expectations of high standards of practice and believed this would create many opportunities for learning:

Routinely surrounded by professionals such as Physiotherapists, Doctors, Nurses etc day-in day-out will create a learning environment, which will encourage a commitment to excellence 24/7. This will provide the unique opportunity to learn by watching and interacting with other professionals as they go about their daily schedule.

(Pre-placement short written account)

The clinical environment challenged James at first as he encountered the human reality of illness. He wrote about arriving on a ward with “the patient screaming in the corner”, seemingly unnoticed by staff going about their duties. James described this early experience as “a bit of a head spin” as he adjusted to being in a clinical environment. There were other ways that his experiences challenged his expectations, as he observed that practice did not always suggest a culture of excellence:

Uhm (..) Physios are a lot (...) uhm, I’m not going to say lazier (..) but, they work a lot slower than I assumed (..) they would do (...) . And I thought they’d enjoy their work more than they actually do not many seem to enjoy it you know? Uhm (..) yeah and just (..) it’s a lot different to how I thought it would be.

(Post placement interview)

Reflecting on his first semester, James had identified the need to be proactive in seeking opportunities to get involved in practice. He described how he and Drago tried “busying ourselves” with tasks and volunteering whenever they saw an opportunity. Their approach was not always successful and they said they sometimes felt in the way or ignored – not being given a desk to use in the communal office, and “hanging around” whilst clinical educators completed their paperwork. James thought that some of physiotherapists seemed unhappy and unmotivated, which he associated with an uncaring attitude.

The organisation in which James and Drago were employed was undergoing significant restructuring. One effect of this process was a change to staffing levels and many colleagues had to reapply for their jobs, or face having their current role downgraded. This affected James’s experience because his clinical educator Mary was required to take on additional

managerial responsibilities, and she delegated her supervision of James to other staff members:

The educator wasn't (.) wasn't present a lot of the time (...) so I was kind of dumped with physios that were on the ward or uhm assistant physiotherapists, but there wasn't, there was no regularity to my uhm, my education on the, on the ward. It was kind of mix and match. Because it was so disjointed it kind of made me realise (.) quite soon after starting that it's, it's going to be 100% down to me, how much I get out of it.

(Post placement interview)

James responded to the disjointed feeling by drawing on his strength as a naturally sociable person to engage colleagues through what he called "chit-chat". His strategy was evidenced regularly in his journal entries:

I asked to go and sit in on different sessions to like the speech and language therapists and the O.T. sessions and sat in with them, trying to kind of liaise with other professionals on the ward like the doctors. And tried to get to know them a little, uhm. Also on a personal level, what I like is a bit of chitchat. So they feel more, I feel more comfortable going to them, and develop a little bit more of a relationship with them. Rather than rely on just, uhm my educator, who wasn't, wasn't there very often.

(Post placement interview)

James considered that his "chit-chat" approach was successful when, towards the end of his placement, multidisciplinary team (MDT) colleagues would ask his opinion of the progress of patients' he had been treating. A sociable environment was important for James to feel "settled".

It is evident good communication makes life a lot easier for a physio on the ward. Nurses are happy to help and doctors are freely available for discussion on different cases, something that has seemed a rarity on other wards!

(Learning journal entry)

However, his strategy was not effective in every case and journal entries described his frustrated attempts to engage Peter, who was one of his senior educators, on a social level. James found it difficult to accommodate to Peter's very rapid, task-focused approach to practice. Peter did not offer much opportunity to discuss patient cases, or the intended outcomes of physiotherapy intervention. James said that Peter's approach seemed intended to avoid conversations with patients and get the work done quickly:

Peter was in a rush and quickly jumped from patient to patient, I suddenly found myself working alongside Peter with a patient I knew nothing about, not even his/her name!

(Learning Journal entry)

James enjoyed working with more junior clinicians and assistants, where he felt the pace was less frenetic. These interactions involved questions and brief chats, which James considered helpful in constructing a more holistic view of a patient and their progress. James felt this more friendly and relaxed atmosphere “made life a lot easier on the ward”.

With Dimitri, who was the physio assistant, maybe because he, he didn’t feel like it was his whole job just to educate me. When (.) when I was with him that was a lot more, a lot more enjoyable, and I felt I could approach him more and I **actually learned** different things from him as well, maybe things that I wouldn’t have asked Peter.

(Post placement interview)

Although his relationship with more junior clinicians felt more comfortable, he was concerned that they did not “challenge” him the way that Peter did and they allowed him less responsibility with patients.

I’ll say that when I was on the acute ward with Peter I did not really (.) get on with (.) him very much. But he (.) he was very good at uhm, he was good, good at trying to teach you things and **make** you learn things. He **forced** you into the situations where (.) you kind of had to lead with the patient and you had to, to assess them. So it was kind of a big a big jump into the deep end but, uhm I kind of learned **more** being put in that situation, and being forced to kind of think on my feet

(Post placement interview)

Towards the end of his placement, a change in James’s relationship with Peter began to emerge. James put this down to Peter beginning to “take an interest in me as a person, away from the hospital”. James said that as a result he felt more confident and relaxed. Towards the end of the placement James seemed to be more accepting of Peter’s view that he needed to be more direct in his patient communications, as he was allowed more responsibility for practice:

Use to pace now, Peter gave me more responsibility and I saw patients on my own, assessing and treating them. I enjoyed the assessment part very much, having to think quickly to gain understanding of the patients physical condition. Need to work on giving clear & concise communication.

(Learning journal entry)



I visited James on a number of occasions over the course of his clinical experience. My perception was that James often felt that he was seen as the 'new boy', next to Drago who was better known to the clinical team, and was more experienced than James was. Many of our discussions involved my reassuring James about the challenges he was experiencing in the clinical environment, which he often related to on an emotional level. James expressed his feelings and experiences of practice by frequently writing in his learning journal and this functioned as a regular source of communication between us whilst he was in the practice setting.

### **The meanings of participation for James**

The clinical environment that James encountered was marked by change. The local reconfiguration of healthcare services appeared to have disrupted some established ways of working and this affected some of the roles and relationships in the team. The effect appeared to frustrate James's hope of immersion in a culture of professional excellence.

Bourdieu's (1977) concept of field, as a contested social space involving networks of power relations, offers a helpful perspective from which to consider the CoCP as James encountered it. James could not claim status based on claims to technical knowledge of physiotherapy or situated knowledge of that environment. Consequently, his chances of imposing recognition as a competent student were not high. However, James's habitus was influenced by his experience as a team player and this disposed him to proactively seek relationships, which, in these uncertain circumstances, offered the means for him to pursue engagement and get involved. His secondary Discourses acquired through participation in sport and his previous degree, along with his preference for learning by being "thrown into the deep end", contributed to his agentic response to the circumstances in which he found himself.

James set about constructing opportunities for co-participation with others. James demonstrated what Illeris (2004; 2009b; 2009a) describes as "sociality", or developing social competence, in the practice environment. He created opportunities for progressing his participation by establishing relationships through social "chit-chat", with an extended network of MDT colleagues. Wenger (1998) identifies the opportunity for individuals to pursue mutual engagement as one way in which a CoP can achieve a degree of coherence. James's disposition towards being sociable with colleagues also offered an opportunity to progress his participation in clinical working practices. The lack of structure that challenged possibilities for a single educator model of student supervision, in turn offered the greater potential to form

relationships with a more diverse CoCP. This disruption of the one-to-one relationship may have freed James to form social relationships with other clinicians and share understandings of the way things were done in the extended MDT.

The culture of financial constraints and uncertainty that were a feature of public services at this time resulted in a sense of concern amongst staff, which James interpreted as disengagement and unhappiness. For James, disengagement was not an option if he wanted to be successful on this placement. For him, a mutual interest in the person, whether educator or student, enhanced the effectiveness of his learning. This mutuality was lacking with Peter until near the end of the placement. Relationships can confer legitimacy on the novice as a member of the practice community (Lave and Wenger, 1991). Legitimacy can function as a modifier of participation by facilitating access to CoP for novice entrants when operating in relation to construction of a participant identity (Wenger, 1998). In order for novice entrants to participate in practice, they require sufficient legitimacy to be viewed and treated by the community as potential members “by being useful... being the right kind of person” (Wenger, 1998, p. 101).

James found the focus on productivity difficult as the speed of work and constraints of time caused him to become confused. James preferred working “alongside” his educators, with opportunities to ask questions, interact with patients and understand clearly the purpose of the intervention. Wenger (1998) explains this sharing of repertoire and enterprise as a feature of a functioning CoP in which LPP is a possibility. James enjoyed supportive relationships with junior staff with whom he felt relaxed and was able to ask the questions that he may not have asked his senior educator. James also said that he learned differently through these interactions because they felt more collaborative and less focused on his individual performance.

James appeared to adopt a conscious strategy that recognised the power relations at play. He said he would adopt Peter’s approach “for the test part of the practice”, but he would not perform these Discourses in his own future practice. The performed Discourses for Peter’s recognition appeared to be acts of compliance rather than a genuine commitment to his way of working. Interestingly, this position appeared to relax when towards the end of his placement he said that he had come to realise “by himself” that he needed to be more concise in his interaction with patients.

James’s experience as a newcomer challenged his anticipation of learning within a culture of excellence. He was probably the least experienced of all the students who participated in this

study and he was confronted by a field of physiotherapy practice that felt disorganised and somewhat unwelcoming. The effect of this incongruence between expectation and experience motivated James to respond agentically through his disposition as a sociable team member, which had developed from his sporting background and his previous degree. He said that he realised it was “100% down to me, how much I get out of it”. James performed the secondary Discourse of an engaged student, utilising his non-technical “chit-chat” in order to befriend colleagues and gain a peripheral role in their practice. His strategy for pursuing mutual engagement supported his bid for a less peripheral involvement with the CoCP. James’s legitimacy was strengthened through his presentation of a friendly, sociable persona, rather than a claim to technical competence at this early stage.

## **Drago**

Drago had been previously employed in the same NHS organisation where he was now a student intern, and was known to the physiotherapy team as a competent therapy assistant. Drago and James were learning partners in an organisation that was the subject of extensive restructuring, but Drago seemed happier with his learning experience. He did not express concerns about disjointedness, although I noted that he managed to retain his clinical educator, where James had not, amidst the restructuring and change.

Drago liked to be highly organised and structured in his approach to work, because he managed a second job in order to support himself through university. He was fastidious about time management and became frustrated by time wasting and “hanging around when there was so much to learn”. However, Drago’s experience in the organisation had led him to keep his “head down and not get involved in the politics”.

Drago believed that ensuring patient safety was the most important feature of practice. Before starting his experience, he expressed concern about whether he would be competent to deal with situations that might arise with patients. He thought the best way to ensure this would be to adhere to “strict rules” of practice. As his experience progressed, he began to realise that approaches to physiotherapy practice varied considerably between clinicians:

Having treated patients alongside several different physiotherapist of various bands i have realised that everyone has an unique approach towards patients and their treatment. [ ] I have also become more critical about other clinicians performances and started to tailor my own unique (and optimal in my view) approach.

(Learning journal entry)

He became critical of some practices that he observed and appeared to reconsider his rule-guided approach. I posted a question to Drago whilst on placement and I asked him what had prompted this apparent change. He said he felt that patients had a right to receive the maximum possible amount of treatment in order to benefit as much as possible from physiotherapy. He was disappointed that some clinicians seemed to spend more time reading notes than dealing directly with patients. Whilst they justified their practice on the grounds of safety, he was sceptical and said that the time spent was often disproportionate to the relative risks posed by the intervention. He reasoned that his “optimal” approach would ensure safety and provide the patient with as much treatment time as possible. Drago observed, though, that his optimal approach would be in the context of his future practice. He recognised that he could not necessarily apply it as a student, if it appeared to contradict his educator.

Drago’s entries in his learning journal were brief and factual descriptions of his practice. Drago expressed difficulty in knowing what to write in his learning journal, because he often felt he was not learning anything new. He found some of the work lacked challenge and was repetitive and “routine”. His final journal entry said, “Business as usual this week, have not learned anything new”, which typified this experience. When working with Peter, Drago had enjoyed “more independence and less supervision”, which he enjoyed and this contrasted with his experience of working with junior staff or assistants, which usually involved closer supervision. The assistant role involved work that was task focused and did not require clinical reasoning or decision-making. Rather, he was required to follow the protocols with which he was familiar in his experience as a therapy assistant. Rather Drago understood, however, why he was required to do this work:

I do understand there were difficulties in a lot of wards. There’s no **staff** on the ward so I have to participate and take part you know, it’s sort of (..) of course it would be not possible to always have someone senior to be with me, but that that wasn’t always possible so I wasn’t too upset because of that. So it was just as it was.

(Post placement interview)

Drago, like James, focused on developing his involvement with the MDT, and was able to draw on his experience as an assistant to organise his interaction with the team:

When the rest of the medical team get to know your name, they start to ask you questions and address you by your name and it’s kind of rewarding [ ] being part of

the team was enjoyable and I felt that I learned how to address the problems of the patients and how to inform the rest of the team about that.

(Post placement interview)

Overall, he said he had become more autonomous and confident in his communication and had better knowledge of the work routine over the course of his experience.

My relationship with Drago felt much more distant and business like than my relationship with James. Drago wrote only occasionally in his learning journal and my open questioning probes rarely prompted any further exploration of his experiences from his perspective. In the interviews with Drago, his responses to my questions were often short and factual and focused on things that he had done, but rarely entered the realms of how he felt about things. After the first interview, Drago had e-mailed me to say that his mind was preoccupied on the day and he apologised because he felt this had caused him to not fully consider his answers to the questions that I had posed. He said that he would like to “re-do” the interview, but this did not materialise.

### **The meanings of participation for Drago**

Drago, like James, experienced organisational change as a feature of the clinical environment. However, the structuring effect of the relations in the changing field of practice interacted with Drago’s habitus to different effect. Drago had already been an employee in the organisation and possessed sufficient “credit”, as cultural capital (Bourdieu, 1990b, p.138), to impose recognition that ultimately seemed both beneficial and constraining for his learning.

Drago’s professional habitus reflected the structuring Discourses of his experience as an assistant physiotherapist. Assistants practice under the direction of physiotherapists, and carry out protocol-based treatments. They do not carry out patient assessment, treatment planning or discharging. Consistency in the observance of safe process rather than problem solving would perhaps define competent practice for an assistant. Drago was familiar with many of these protocols, and through his identity as a competent therapy assistant he was able to impose recognition of his value to a service that was short of staff. Demonstrating his usefulness as a competent worker had the potential to generate his involvement in more of the same practice, rather than facilitate involvement in progressively more complex practice that challenged him. Drago’s competence in the elderly care unit exceeded that of other first-

year students, but the normative expectations of clinicians may have limited the challenges they set him.

Getting involved in more of the same for Drago did not equate to what Wenger (1998) describes as mutual engagement or “getting involved in what matters”. For Drago, what mattered was to extend the scope of his practice through new learning. Through his involvement with the MDT, he experienced the challenge of participating in an unfamiliar field with other disciplines and different Discourses of practice. He valued developing his ability to communicate appropriately by presenting information in the ways required by these different disciplines in order to inform decision-making.

Legitimate peripheral participation has been criticised for not addressing the power relations and complexities of the modern workplace (Handley *et al.*, 2006). For Drago it appeared that progressive participation did not necessarily lead to engagement in more complex practice. Rather than a centripetal trajectory towards fuller participation, he seemed to be frustrated by his feeling of not learning new things but repeating the same practices. It may have been complicated by the demands of maintaining work productivity whilst service restructuring continued against a background of staffing shortages. Can LPP alone account for this trajectory? If an individual’s presence is legitimised by their performing a valued function and contributing to service productivity, is it more beneficial for the CoCP to support the individual’s progressive participation, or stall this trajectory? The expectation of the learning field appeared to have been opposed by the practice field and the struggling to cover the work.

Gee (2011) suggests that achieving literacy in a Discourse involves one demonstrating who one is and what one is doing. Wenger similarly suggests legitimacy in practice involves the development of an identity as the right sort of person doing the right sort of thing, being like one of us. Drago’s literacy in his secondary Discourse as productive worker seemed partially to eclipse his identity as a novice student. It may be that student and educator needed to negotiate the basis for their joint enterprise in obvious terms as work or learning, in order for novice students to feel valued and to benefit from the experience. Protecting learner identity in this way appeared to be under threat, where staffing levels were low and clinicians were struggling to cover the work. Drago appeared to be concerned about the detrimental impact of his worker identity on his learning opportunities, but he continued to perform as a valued worker and reflected that he should accept this difficulty because “it was as it was”.

Bourdieu (1977) suggested that it is often at this early exposure to a new field of practice that there is greatest potential for discrepancies of fit between habitus and field. Drago accepted responsibility for decision making from the outset and was aware of some of the potential risks of practice, which he would try to avoid by adhering to “the rules of practice”.

Drago believed initially that rules would structure his actions and safeguard his practice. He soon became critical of this position however, when he began to recognise that practice was not homogeneous. Drago was prompted to reflect on the ethical dimension of practice which identified a challenge to his habitual disposition from the field of clinical physiotherapy. Practices emerge as a result of the generative potential of the relations between habitus, capital and field (Maton, 2001). The conditions for emergence of Drago’s new approach to practice were influenced by his motivation to make a difference for people through his practice and, perhaps, because he was still not fully exposed to the time pressures experienced by qualified clinicians dealing with a heavier clinical workload.

Drago appeared to be participating quite fully in practice, but he did not feel necessarily that he was getting involved in the type of practice that he believed was worthwhile for his learning. He was at times, critical of the practice he was expected to reproduce. The prevailing power relations in the field required his acceptance of orthodoxy, by reproducing the repertoire of his educator. In common with James, Drago performed his educator’s Discursive repertoire, whilst retaining his preferred Discourse for a future time when he would be able to exercise more independence.

## **Sven**

Sven identified himself as a naturally inquisitive person who learned best when he could explore practice in a variety of self-directed ways. He wondered how the expectations and responsibilities of being a student or worker might challenge his exploratory approach. He expected variations in practice between clinicians, but felt that this would be beneficial for his developing understanding if he was clear about the intended focus of his learning:

I believe studying in a work place, where different practitioners work, can give me a greater understanding of how to deal with clinical situations in multiple ways. As this could be confusing, it is again important to know what the learning focus is for the placement.

(Pre-placement short written account)

Sven planned to assess the team dynamics on placement and work to integrate into the team as quickly as possible. Acting on feedback from his first placement, he intended to seek more widely distributed opportunities for co-participation:

What I mean by behind the scenes [ ] you were an extra pair of hands in a way. You sometimes felt like they're not really able to see everyone they want to see so, "actually could you go and see this patient?" You know, and you're thinking oh well I can yeah, go and take them for a walk you know, and it's probably good for me to get patient interaction but what am I actually learning here? But I guess everything is sort of learning in a way, but sometimes we felt like an extra pair of hands and I guess that's one I'm going to try and avoid next placement . So rather than being a physio assistant, actually being much more the physio and getting involved in the goal setting with patients (..) discuss patients with other professionals and such.

(Pre-placement interview)

Sven said he valued the opportunity to learn from patients, because it enabled him to construct a more holistic understanding of the person. Sven intended to pursue a co-participatory approach, setting goals with patients and discussing patients' progress with other professionals. He differentiated this approach from the pure work focus of being "an extra pair of hands" and seeing patients under the instruction of the clinician, in order to help get through the work.

Taking time to interact with others and "build a rapport" was central to Sven's approach to practice.

Sometimes I ask myself if I really need to ask my patient how they slept last night and how they are enjoying the hospital food. [ ] but I use my little, and usually insignificant questions to build rapport with the patient and, hopefully without sounding too proud of myself, I get my patients to do what I had in mind even, though it takes a few minutes extra.

(Learning journal entry)

Sven made only one entry in his learning journal. When I visited him midway through his placement, I found that things were not going the way he had hoped. His educator was not present, but it was revealed to me that Sven was her first student.

- Sven is struggling to relate to his educator, finding her unapproachable and not very facilitatory for his learning.
- She tends to give instructions but without explaining why; the clinical reasoning processes are not clear to Sven.
- He describes her as a bit dogmatic, rule driven, not open to discussion.



- Says he has spoken to other people, but cannot work out what to do. Has decided to just do what she says and just “get through the rest of the placement”.

(Notes from my placement visit to Sven)

In the post-placement interview, Sven described his placement experience as a bit of a “roller coaster”. He felt he had not settled in to his “job role” or found his “place within the team” until about half way through the placement. He described feeling lost in the first weeks, but recognised that “maybe it was that no one really knew what I knew either”. The relationship with his educator had affected his motivation and he felt he had been denied opportunity for discussion or reflection. He decided to adopt an unquestioning compliance, which he felt his educator also wanted.

Sven: Well uhm the clinical educator she was very much (.) not going to use the word control freak, I don’t want to go that far but she definitely enjoyed uhm (.) being in control of everything. So it felt like you were never really allowed to try (.) properly in a way. You know, to do it (.) and then do the mistakes, and then talk about it.

Julian: So how would that work then?

Sven: Well so it would be that first (.) this happened a few times at the beginning I suppose. She says, “OK, cool we’re going to do the assessment, broken hip, this and that and you take a lead, go for it.” And you only get to kind of (..) introduce yourself, and then it was like, “oh make sure you did this”. Oh yeah, I’m ( ) I did that, “no don’t do it this way”, and it was the constant interruptions you know? You never get a flow to actually yeah (.) yeah, there was almost to, to do it her way or not, not do it at all.

Julian: So there was no real opportunity for you to lead then it was just

Sven: In the beginning yeah, and I guess towards the end. Maybe I ADAPTED to her way of doing things and I’m kind of secretly thinking, oh I’m not going to be doing that anyway in a few weeks time (laughter). But that’s a different story, so I guess I kind of learned to play the game.

Julian: Were you conscious at the end of perhaps approaching something in a way that she would expect, rather than what you instinctively might (..) think to do or what you’d want to do?

Sven: Uhm (...) I (..) I think towards the end what I. What I never did was question her, or not argue [ ], and then go and sort of have a look at it you know what I mean? Read a bit about it. So I guess it was good in that way, I sort of started thinking about how to back myself up almost..

Sven identified, as had James and Drago, a strategy of appearing to adopt a practice to satisfy his educator, whilst making a decision not to internalise it in his own repertoire of practice for the future. Sven contrasted this rather dysfunctional relationship with the one he enjoyed with the senior educator, who appeared more confident and allowed time to “step back” to consider things. He described this as “more of a teacher approach”, which worked better for him. He liked to observe his educator with a patient and then be able to ask questions “afterwards, away from the patient” and engage in “mutual discussion rather than being confronted”.

My interactions with Sven in teaching and learning sessions and in my interviews with him, felt relaxed and open. I was surprised therefore by his reluctance to communicate on-line in his learning journal. I was equally taken aback to find that he was not coping well with his clinical experience when I made my first visit to his placement. However, Sven explained that he was not a great writer and preferred to discuss events in person. Indeed our interviews and the discussion that ensued on the placement visits were always full and frank. I was struck by Sven’s willingness to discuss any problems he was experiencing and to come up with alternatives as we engaged in dialogue. His approach contrasted particularly with Drago who tended to close down any exploration of issues in discussion.

### **The meanings of participation for Sven**

Sven’s habitus disposed him to an active and inquisitive learning style, which was evident in our interactions in the classroom and was important to him in clinical practice. He was realistic about the challenges he might face stepping into practice, but keen to understand his roles and responsibilities as a student and employee. He trusted his educators to assess his competence and support his development in accordance with their expectations of his practice. Sven liked to try to achieve a degree of mutuality with colleagues by demonstrating that he had “something to give”, rather than simply expecting to be taught. He started his placement in a relaxed and optimistic mood, intending to adopt a reflexive approach so he could attune to his educator’s “style” and quickly integrate into the team.

Unfortunately, Sven’s habitus was not a good fit to the field of relations with his educator who structured his learner experience. Sven’s exploratory, learner-centred approach seemed to be paradoxical to the productive worker Discourses performed by his educator and the team. Work productivity was maintained by minimising his interaction as a learner, and maintaining

an educator directed Discourse with a focus on completing tasks in the most time efficient way. In some ways, this Discourse presents as a traditional apprentice model, a master novice relationship, except the educator did not provide an opportunity for Sven to observe her practice. In addition, Sven did not have the expertise to perform the skills, or at the speed required. Sven's educator did not have the supervisory experience to recognise the level of support required or to understand her own practice in a way that would enable her to scaffold Sven's performance appropriately. Rather she repeatedly let Sven embark on a task, in order then to correct his performance in line with her own tacit understanding of the task. The educator's approach denied Sven the opportunity to become more involved in the work. Sven said he did not find a way to contribute to the team until he realised that his educator's expectation was for him to do the work as quickly as possible. This situation undermined the legitimacy of Sven's identity as a learner in the CoCP.

Unfortunately, Sven's educator confused and undermined his exploratory approach to learning. Her control over the patient interaction denied Sven the possibility of gradually assuming more responsibility for practice. This structured didactic approach frustrated Sven's learner habitus. The effect was to peripheralise his participation. His legitimacy was undermined by interruptions and challenges in front of the patient. Sven responded by disengaging with active participation and adopting a passive compliance with his educator's directions when interacting with patients. The lack of opportunity for dialogue affected his motivation and ultimately his learning. Having tried unsuccessfully to engage with his educator as a legitimate participant in practice, he resigned himself to compliance by "playing the game". For Sven this meant sacrificing some of the learning value in order to contain any detrimental impact on his placement evaluation. Denied possibilities for mutuality in the interaction between Sven and his educator, he decided eventually to take the path of least resistance and comply, but not commit to the Discourse of his educator.

Bourdieu's notion of doxa as the unquestioning acceptance of the way things are is not apparent in this situation. The situation challenged Sven's habitus as a learner and made him feel as though he did not have a legitimate role or "place in the team", with its focus on work productivity. Sven adopted a specific and conscious strategy to reduce the potential for this sense of dislocation to impact on his formal assessment, carried out by his educators. Sven's strategic response also involved him "negotiating" his way through the day, volunteering to help others with their work and so avoid his educator where possible. He acknowledged that he did some additional reading at home "to back myself up a bit", which suggests recognition of the reduced learning potential in this strategy.

This relationship did not reflect mutuality that Wenger (1998) identifies as a defining characteristic for achieving community membership. Sven found it difficult to engage in the team's practice in the way he had hoped. The structuring Discourses that shaped his interactions, such as "taking on the job role", rather than the "learning role", contributed to his identity as an employee who was expected to work quickly and not to ask questions. Sven said that, "as an employee, more is expected of you, more than a student; really you need to get things done." Lave and Wenger (1991) argue for a cultural tolerance of less than competent performance that is accepting of a novice's mistakes and allows learning to emerge. As programme leader, I had a fair understanding of the organisational habitus and believe that a culture of tolerance did exist in his employing organisation. Unfortunately for Sven, the inexperience of his educator undermined that culture and her lack of support denied Sven a sense of legitimacy as a learner – in his words, "to make mistakes and learn from them". Sven did not have a feel for his situation. Unsure what was expected of him, he lacked capitals with which to impose any recognition of his habitus until the point when "it suddenly clicked" that work productivity rather than learning was what his educator valued. Sven's response was to narrow his focus from his inquiring style and to complete purely the tasks that he was set.

## **Rahim**

Rahim posted frequently and extensively in his learning journal. He was the course representative for his cohort and was proactive in organising learning opportunities with his peers. From the outset, Rahim recognised a benefit of workplace based learning as one of enabling him to experience the reality of working as a physiotherapist:

One of the major advantages of learning in a clinical setting is that I will be learning in a dynamic environment that will reflect the demands placed upon physiotherapists. This will allow me to acclimatize myself and be "work ready" for the daily challenges faced by physiotherapists.

(Pre-placement short written account)

The organisation in which Rahim was a student intern was also undergoing service restructuring. Rahim trusted his educators to guide him and ensure his practice was safe and focused on meeting patients' needs. He expressed some concern about how his novice identity might influence his early clinical experience:

One of my major fears of being placed straight away into a clinical environment is how my clinical educators will perceive me. If they perceive me in a negative manner then

this could have a negative effect on my learning and could seriously damage my confidence and self-belief.

(Pre-placement short written account)

Rahim identified the practice of “shadowing” clinicians as helpful for learning how to interact with others, to make decisions and begin to develop the necessary skills for clinical practice. He expected his “clinical reasoning” to develop more slowly than his skills, and he recognised that different kinds of knowledge were required and developed in practice.

Obviously you don’t know what you’re doing when (..) at the start, when you’re doing certain things, practical skills there’s no reasoning behind it, you’re thinking well why are they doing that? And then you sort of tend to learn. Just simple things, like sit to stand you know? Shifting your body weight forward, you don’t really think about that do you? And then you think about it, and then reasoning comes afterwards.

(Pre-placement interview)

Rahim prepared carefully for his placement by reading and reflecting on his experiences in the first semester. He wrote in his learning journal that his placement started well and he was glad to not have been “chucked in the deep end”, because that would have been unhelpful for his learning:

It was quite weird because I thought I might struggle with getting back into the work routine, however, I felt really comfortable in getting on with the jobs in hand. I did not need to think about how I am going to approach the pt, gain consent, position myself etc it all felt really natural.

(Learning journal entry)

The term routine, for Rahim, meant that he understood the intention that lay behind his practice and was confident that the task that was within his capabilities. He said that routine was helpful because, “I know what I am expected to do before and during ax and rx”.

His journal entries recorded his enjoyment of practice. He said he felt comfortable in the workplace culture, because he shared the team’s goal of putting the patient first. Despite this apparent agreement, in a number of his journal entries he identified some risks posed to patient safety by the practice of a member of staff. Rahim said that this demonstrated laziness and he distanced himself from the practice, but he felt unable to report it to his educator. For Rahim and his peers, confidence was influenced by relationships with colleagues, which gave him the “confidence to speak up”, though not in cases of unsafe practice, apparently.

Rahim's journal entries documented the relationship between his developing confidence and his progressive participation in "hands on" practice. As with James and Drago, clinicians started to seek Rahim's opinion on the progress of certain patients. He felt valued as a productive worker and team member, being allowed "greater autonomy and responsibility with my patients", and playing a meaningful part in the team:

Another good week at placement, I have been given my own caseload of patients to manage, so I am planning my own day and taking greater responsibility for my patients. I really feel part of the team and people value my work in the department. [ ] I understood that this week would be tough due to the staff shortages and tried to be as productive as possible by taking on patients I had good rapport with and pt I dealt with before. It was nice to know that the team had good trust in me.

(Learning journal entry)

Then things changed. Rahim enjoyed his relative independence, but became concerned by his educator's prolonged absence, due to illness. He felt he lacked guidance and was unsure how to develop his practice further. His concerns heightened when he compared his knowledge with that of another student:

3 weeks into my assessed placement, I would have expected myself to have known most of the procedural aspects of the department. I am finding that the OT student from [another university] knows more than me even though she joined after me, how embarrassing [ ] feel as though I have taken a step backwards which has knocked my confidence a little [ ] Feel like a spare part.

(Learning journal entry)

Although Rahim considered this realisation in negative terms, it motivated him to address a learning need. When his educator returned he "flagged up" what he had done, making sure she understood "where he was at". Rahim said it was important to make himself "noticed" and yet his success at integrating into the team led colleagues to say they often forgot he was a student. He said that he did not want to appear over confident after this recognition of the limits of his knowledge, but recognition of his contribution to team work was important to him. Reflecting on his development he identified that he felt more like a "do-er" of practice by the end of the placement, whereas previously he felt like an observer. His confidence had grown as his contribution was recognised and he was pleased to feel "more like a junior physio, in a way".

Rahim was a very likeable student and was popular with clinical and teaching colleagues, because he seemed to really enjoy getting involved with people, whether they were patients

or students. What struck me about Rahim was his highly organised approach to study and his willingness to take on additional work and responsibility, in the university and practice settings. Rahim presented as a very engaged and able student and I suppose that because of that I often left him to get on with things, confident that he would alert me to any problems or things of which he was unsure. Rahim posted in his learning journal two or three times a week and even prompted me to respond more frequently to his postings on occasions.

### **The meanings of participation for Rahim**

The service was short of staff; the effect of this was a high workload, and no dedicated replacement for Rahim's educator, who was on sick leave. Rahim had expressed concerns at the beginning of the programme about whether his lack of clinical experience would mean colleagues in practice viewed him negatively.

Rahim's habitus disposed him towards being proactive in the workplace, to which he wanted to make a productive contribution. Rahim started this experience feeling confidently familiar with the routine of work, following on from his previous semester's experience. Rahim seemed attuned to the realities of the workplace. He settled in to the clinical service, expressing his motivation to become "work ready" by learning in a work setting. This situation made for a good fit between habitus and field and Rahim started his experience feeling confident and at home in the workplace. Rahim had a feel for the clinical setting as a workplace and was keen to prove himself as a productive team member in a service that was short of workers. He did not question the Discourses of work productivity that required all hands on deck. Colleagues told him he was performing like a qualified junior physiotherapist, which was recognition and reward for Rahim.

Rahim's apparent literacy in the Discourses of productivity supported his identity as a team member who was trusted by colleagues. The physical environment in which Rahim was working supported his participation in the work of the team since it enabled his practice to be observed by many colleagues in the open plan rehabilitation unit. Rahim frequently mentioned the importance of being noticed in practice, which was helped in the physical environment and through providing more frequent informal opportunities to interact with colleagues. The fit between Rahim's participant habitus and the field of practice felt right to Rahim and he accepted the time-pressed Discourses of practice.

Rahim was “caught up in what seems natural and normal” (Nolan, 2012, p.205). However, the fit between habitus and field is never perfect, and this was the case for Rahim. Whilst he identified with the habitus of a work-ready participant, the relative absence of opportunity for dialogic reflection and feedback began to concern him. His enjoyment in his sense of autonomy was challenged when he realised his repertoire of practice was not as developed as he had thought. Another student performed a Discourse to which he had no access. Gee (2011) differentiates acquisition, as informal learning associated with performance, from formal learning associated with teaching. He argues that secondary Discourses are mastered by acquisition not learning:

You cannot overtly teach anyone Discourse, it occurs through a process of apprenticeship and social practice [ ] by enculturation (apprenticeship) into social practices through scaffolded and supported interaction with people who have already mastered the discourse.

(Gee, 2011, p. 139)

Acquisition must precede teaching in Gee’s view and it involves the type of master–apprentice relationship that requires the learner to say, do, value and believe, within that dominant Discourse. Teaching that leads itself to learning must support analysis and explanation that can lead to the development of “Meta-knowledge”. In the absence of his educator to stimulate reflection on practice, he had to rely on acquisition, which was successful to a degree but became problematic for him in extending his repertoire of practice.

In Lave and Wenger’s terms, Rahim achieved legitimacy as a participant and was on a progressive centripetal trajectory towards fuller participation in the CoCP. He had opportunities for mutual engagement in the open-plan environment of the rehabilitation ward, but the shortage of staff and Rahim’s apparent competence, perhaps, had the effect of reducing his interaction with colleagues. It was Rahim’s potential to extend his repertoire of practice that was undermined by the circumstances in the CoCP, which meant that he had relatively few opportunities for co-participation.

## **Magda**

Magda had a clear appreciation of some of the challenges of learning in a clinical setting from her experience prior to joining the programme. She suggested that becoming used to the hospital environment and work routines, co-operating with other members of the



multidisciplinary team and adjusting to the requirements of her dual roles as student and employee would be challenging.

Magda was employed in a large teaching hospital and the physiotherapy department culture reflected a clearly observed hierarchy based on role seniority. There appeared to be a clear divergence in the perspectives of clinicians who identified their responsibilities to provide clinical services, whilst student education was seen as the responsibility of the university. It was fair to say that Discourses of practice in the organisation did not convey a culture of tolerance towards the developing competence of novices. Rather, the expectation was that students should acquire all relevant knowledge and skills prior to arriving in practice. This position was reinforced through institutional Discourses that positioned clinicians as gatekeepers to the profession, enacted through their roles as evaluators of students' clinical performances.

When I sent Magda the transcript of her pre-placement interview for comments, she returned it with extensive corrections. Identified in italics are the replacements of the original text, which corrected some grammatical errors and tidied up the original verbatim transcription. Part of the edited account is presented here in which Magda expressed clearly how she preferred to organise her learning, based on her first semester's experience.

*First, I would like to discuss some objectives and expectations. I would like to have constant feedback and to be given this feedback on time. I feel a little bit confused (annoyed) if the feedback is delayed a lot. For example if I get the feedback about something what happened two weeks ago- I'm just thinking why this person is talking to me about it now???[ ]feedback delayed for two weeks or till day of my assessment (so I have no chance to improve) is not informative for me at all.*

(Pre placement interview with student amendments to transcript)

Magda's concern about her English continued to challenge her perception of her competence in clinical and academic work, and she felt this slowed her progress, compared to her peers. Her concerns about language focused particularly on her clinical documentation skills. Assistants are required to maintain accurate records of predefined treatment plans and protocols, whereas physiotherapists are expected to distil their findings, evaluations and decisions into accurate documentary records that allow relevant information to be communicated to others.

I still have problem with writing. I am bit frustrated with this. Any time when I'm writing my notes I take time to analyze every sentence again and again to make them perfect. Unfortunately, this what happens is that I am losing the concept of the whole

note and in the end my notes are not as good as they should be. It worries me because I haven't got this problem before. When I was working at [name of hospital] I was able to write 4-5 notes within half hour and talking to my colleagues at the same time- and that notes were not bad really. Now I am struggling and it makes me feel bad.

(Learning journal entry)

Magda liked to be busy and feel that she was contributing to the productivity of the team. She enjoyed being "challenged" by her educator, which she described as being given a task that she knew she could do with somebody, but being allowed to do it by herself. She described her participation in practice in active terms of "leading", "teaching", "evaluating" and making "suggestions" for interventions. Her educator, who told her that she was giving her tasks that she would normally give to a junior member of staff, acknowledged this greater level of responsibility:

I am very happy that my supervisor keeps me busy all the time, because I feel that my presence there is important. She tries to involve me in team's work as much as possible. I like discussing particular cases with her and I like when she challenges me.

(Learning journal entry)

Magda eagerly accepted responsibility for a level of practice beyond what I would have identified for a first-year student. Many of the work tasks and activities were complex and required procedural knowledge that would be part of the competencies expected of a physiotherapy assistant, which had been her previous role. Magda liked the opportunity to take responsibility for doing something "by myself". She described this change in her participation:

Up till now I was just following instructions from others (as a PT Assistant) or watching physios (beginning of the placement). Now I am expected to start making up decisions. Clinical reasoning is a challenge. There are no simple patterns to follow as every patient is different.

(Learning journal entry)

Her sense of playing a meaningful role was dependent on recognition by her educator. When this recognition of contribution to practice was not forthcoming from her educator she described "feeling lost". Her educator also related to me that she felt that Magda was sometimes resistant to feedback and she seemed defensive:

Spoke with [name of clinical educator] who feels that Magda is managing well on the placement, but that she is sometimes defensive when being given feedback. [ ] Magda said this was not the case. I repeated that this is what the educator perceived and

Magda again said that was not the case, I said “this is what being defensive means Magda, try and consider the other person’s perspective!!” We laughed.

(My notes from clinical visit)

By the end of the placement, Magda identified improvements in her “behaviour and professionalism”. When I asked what she meant, she replied that she now knew how to use her time “properly”, which was important if her educator was busy. Instead of going on the Internet, she would read patient notes to try to learn the “bigger picture” about the patient. She also explained that her educator thought that she ought not to argue with her about things that she told her, but Magda felt that she was justifying her practice based on her prior knowledge and did not really see a need to change.

Magda appeared to me to have a very strong work ethic and was always keen to get involved in activities in the classroom as well as in practice. I had a slight concern though that she could sometimes misunderstand a task and go off at a bit of a tangent. Equally, she could also be quite difficult to dissuade from a particular line of action, if she felt committed to it. This resulted on one occasion in my having to be very direct with her about her attitude to a colleague, for whom she had little time. Magda and I had a good relationship but she sometimes appeared rather inflexible and resistant to reflection on her performance.

### **The meanings of participation for Magda**

Magda was the most experienced of all the participants at the start of the programme. Her established competence as a therapy assistant provided her with cultural capital of physiotherapy Discourses with which to support her recognition within the CoCP. Magda’s habitual disposition guided her approach to practice as an industrious and productive team member. She had a good understanding of the purpose of the CoCP which was to do the work of practice, and she pursued opportunities to get involved in this work wherever possible. Magda said she liked to be busy because it made her feel useful and valued by her colleagues. Reay (2004) argues that habitus provides continuity from past to present and future practice. This dimension was problematic for Magda. Her experiences of participation in some ways mirrored Rahim’s focus on developing a worker identity. However, where Rahim was engaged in constructing an identity, Magda had to come to terms with the loss of recognition of her capability as an assistant therapist and accept an identity which she did not value as much, namely, a less competent, student physiotherapist.

When I visited Magda on placement, one of her two educators commented that she had a tendency to be defensive when being given feedback on her performance. She added that whilst she (the educator) was quite relaxed about this, Magda's attitude would not be tolerated by some clinicians who were less accommodating than she was. The doxa within this field is that students should know their place and that they are not the same as staff, even though Magda was an employee. Magda performed with a high degree of independence as an assistant in the department, which went largely unrecognised by her educator. Magda was reluctant to give up the Discourses that identified her as a competent assistant and gave her confidence. The relations of habitus and field now presented as heterodoxy. Magda wanted to convey her identity as a competent assistant and a productive worker, which invited others to respond to her as a team member. Her clinical educator required Magda to take up the position of novice student, which was not so appealing to Magda. Her sense of belonging in the community of practice was strong, predicated on her assistant identity and situated mastery of an assistant's practice. She was able to position herself in relation to this discourse of assistant's practice in her journal using words such as "leading", "teaching" and "evaluating". The focus of her educator's enterprise was established on different relations of accountability. Magda's apparent resistance to accepting these relations, which positioned her as a more peripheral "student" participant, became a point of impasse. What her educator perceived to be defensive and resistant behaviour when given feedback, Magda believed to be critical justification of her practice. Magda's misrecognition of the relations of power in practice caused her some problems in this very hierarchically observant service. She became frustrated if there was no possibility for her contribution to be recognised and did not want to step out of her "comfort zone" and risk performing less efficiently in a more expanded and less well-known practice repertoire as a student physiotherapist. Magda described feeling lost and she avoided proactively seeking work beyond her known repertoire.

As discussed in the last section Magda performed the Discourses of a productive worker, as did Rahim and Drago. She recognised that this often meant that she was asked to perform tasks that would normally be beyond the scope of practice of a first-year student. Magda's literacy in the Discourses of trustworthy and productive worker may have caused there to be some conflict with her educator's need to demonstrate her own legitimacy as a supervisor of Magda as a student. Magda struggled with identifying herself as a less competent student, which met the expectations and therefore legitimised the identity of her clinical educator. Towards the end of her placement, Magda said that she had learned how to use her time "properly" in the way that her educator recognised and expected of an engaged learner. This was not what she

had expected, nor was it what Rahim experienced from his colleagues who were grateful of his offers to help with the work, rather than him filling his time with reading. Magda's initial misrecognition of the basis for her relationship with this clinical educator caused her a good deal of anxiety.

Magda's frequently stated concerns of language as a "barrier" to her learning became focused by her frustration with clinical documentation. The source of Magda's anxiety was her perception that she was losing her ability to write clear and accurate treatment records. In order to document appropriately she needed to understand the reasoning processes that her documentation was supposed to record. Clinical reasoning was new to Magda and she had not previously been required to convey her judgement in written documentation. The issue was therefore less about how to write her notes and more about the Discourses they were meant to evidence. Magda eventually began to reflect on the reasons why she needed to engage with the Discourses of clinical reasoning towards the end of her placement, but these reasons eluded her for a large part of the placement. There were also different situated practices in the two organisations where she had worked in relation to record keeping conventions. She perceived this as a loss of repertoire of practice. This required Magda to recognise the culturally and socially situated nature of Discourses and ultimately become comfortable in the productive student Discourses that defined student behaviour for her educator. Magda had started to show signs of compliance, when at the end of her placement she said she had improved her "behaviour and professionalism", explaining that she now knew how to use her time "properly" when her educator was busy.

## Mark

Mark believed that learning in clinical practice would involve learning from clinicians and patients. He recognised, however, that this might require him to adapt to different clinical environments because they "operate in quite different ways". He also said that he might face a challenge trying to understand his "job role" at first, and he wondered how colleagues and patients might view his novice student identity and how this might affect his interactions:

As a student you don't want to rub people up the wrong way but you don't want to go completely the other way so it's trying to find that middle ground I suppose uhm (..) and I uhm (.). There are times when you're not sure when to uhm, **chip in** (..) if that makes sense? When it's appropriate to do so. And, I suppose again that would really depend on the therapist you're with [ ] As a first year student I feel that there is a fine line between over confidence and just being arrogant in certain situations. You don't

want to come across as if you know more than (...) the person who is educating you. You don't want to, you know what I mean?

(Pre placement interview)

Mark liked learning in a work setting because he could “pick up so much stuff without necessarily knowing the theory”, but he hoped that this course would bring the two elements together. He liked being “hands on” and recognised that he would need to be proactive in order to get the most from his experience. He aspired to what he called an “an MDT style of working” which involved interacting with an extended network of professionals, patients, their carers and families with the goal of co-ordinating the patient's care. This would require good communication skills, in Mark's opinion, and his experience as an assistant coupled with his naturally reflective nature influenced the way he approached others:

I feel that due to previous experiences i am more guarded with my interaction within MDT working i also think that sometimes my lack of knowledge on the patients means that i am not always able to offer a any further information there methods where very direct and know their roles.

(Learning journal entry)

Mark's educator gave him feedback that he should try to be more assertive and she pointed to his learning partner as demonstrating a more assertive approach. Mark recognised that he often did not appear assertive because he was naturally quite “laid back”. He said that he did not offer an opinion just for the sake of being noticed, but only if it added something to the debate. He was aware that it took him a while, but once he felt “comfortable” in a team his personality would emerge. He realised that his educator tended to jump in and take over, and that to avoid this he needed to show that he was being proactive. However, Mark did acknowledge the value of getting his “face recognised”. He believed that if people knew who you were and what you did, they might approach you for help. He described this as building rapport with others and as valuable because it could help him do his job. He said that speaking to a colleague about a patient was easier if they could “put a face to a name”.

Mark wrote frequently and in positive terms about his experience. He frequently identified the need to understand one's work role because this would provide the basis for confident action. He was surprised when he attended an MDT meeting and saw that a physiotherapist rather than a doctor was chairing the meeting. This recognition of a professional role strengthened his belief that physiotherapists had a professional identity that was viewed positively in the

workplace. He said that the clinicians in the MDT seemed sure of their roles and were able therefore to be direct in their communications.

Mark benefited from the structuring of his participation when he was asked to take part in the practice of “handover” on the ward. This provided Mark with a legitimate role and a structured discourse through which he could contribute to the MDT’s work:

This week i have found that i really feel settled into the ward... I feel that this has enabled me to be more confident especially with patients. I feel that the orthopaedic ward is really friendly. I think that i have been getting some patient continuity and have now completed my objectives and this has seemed to help (.) help me focus on what needs to be achieved in this placement.

(Learning journal entry)

Mark found the practice of discharge planning was helpful for his learning because it was an opportunity to see the bigger picture by focusing on an entire episode of patient care. He also felt that a benefit for him of spending an extended period in practice would be beneficial for his learning because he got a sense of “continuity” of practice and this helped him to feel more confident:

Once you get into a routine, the week becomes a bit more routine, nearer to the end of the placement it was, you (...) you get that, you build up the rapport with the other physios so that they give you a bit more responsibility than we were capable of doing. And that’s why I felt really involved in practice later on, because we picked up our own caseload.

(Post placement interview)

Mark struck me as being quite shy and lacking in confidence at first, but I was very pleased to see him grow in confidence through the period of this study. It was unfortunate that his learning partner and he were quite opposite in their personalities. My interactions with Mark on my visits often required me to make a specific attempt to spend time with him rather than his learning partner who always seemed more obvious in his presence on the ward. Mark posted a moderate amount in his learning journal but was more comfortable in our one to one meetings, when he would discuss his experiences in a relaxed and open fashion.

## **The meanings of participation for Mark**

Mark recognised from prior experience in the NHS that work environments operated in different ways and he exercised a cautious and reflexive approach to his early engagement. His habitus disposed him towards a sensitive evaluation of the field of practice in order to locate a “middle ground” in which to engage with his educator. His approach was similar to Sven’s, namely, being responsive to whatever position was taken by his educator and adapting his behaviour to support an identity of the respectful student, who was not too confident or likely to annoy his educator. Mark wanted to be a good listener with patients, giving them the time to talk and avoiding “jumping in” and taking over in the interaction, as he observed some clinicians did.

Mark demonstrated a feel for sensitive interaction and relationship building, but he also perhaps lacked confidence. He said that his previous experience had made him more cautious, particularly in communicating with the MDT, whom he found very direct and self-assured. Mark’s observance of the structuring relations of field in terms of roles was a recurrent theme for his journal entries. He put his trust in roles as offering a way of structuring work relations with colleagues and commented on how they fulfilled roles in meetings and with patients. Mark demonstrated a feel for facilitating positive relationships to support his learning but was observant of the structuring effects of his student role on the types of relationships that might be possible.

Gee (2011, p. 181) states that:

When people speak and act they are “bidding” to be recognised... the “bid” may not always be successful or the person may be recognised in ways different from what he or she intended.

Mark said that it was helpful to get his face recognised, but that he did not want to push himself forward just for the sake of being recognised. Rather he wanted to be recognised for the quality of contribution he was making to the team. The difficulty for Mark was that his learning partner projected a more recognisable presence in the team as a confident and vocal student, yet they essentially were occupants of the role of first-year student. Mark received feedback from his educator that he needed to be more assertive, which he took to mean more vocal when working with his learning partner. He was in a situation of having to modify his practice to compete with his learning partner with whom his educator tended to make comparisons.



Bourdieu's view of practice within a social field as essentially competitive and characterised by the struggle for position by agents is pertinent to this experience. The stakes were high for Mark since his educator would assess his performance as well as that of his partner. Mark recognised the need to meet his educator's expectations of a typical student Discourse. Mark was aware of different styles of interactions with patients and colleagues and he realised that his own style did not necessarily reflect that of his educator. He recognised the need for pragmatism in demonstrating an "orthodox" approach, which reflected that of his educator, in order to ensure a favourable evaluation of his performance.

Mark ultimately benefited from engaging with a defined role in relation to the practices of patient "handover", which helped structure his interaction and support his bid for recognition by the MDT. The discursive practice of handover supports the passing of information about a patient's progress to staff who are changing over between shifts. Mark was able to draw on his habitus in the form of prior knowledge of practice and an awareness of structuring practices in the field. Structure can be considered as "a social system and/or configuration of social roles and practices" (Wright, 2011, p.174). Handover provided a structure through which Mark could engage legitimately with the MDT and demonstrate literacy in a Discourse of clinical practice.

As Wenger (1998) suggests, the cohesion of practice communities can be strengthened by mutuality in relation to engagement, enterprise and repertoires of practice. The structuring effect of these Discourses was to provide a more level playing field, where he could demonstrate his feel for the game and his contribution was legitimised in his performance of a role that did not only depend on personal confidence and force of personality. Whilst roles are inherited and tend towards becoming hegemonic (Danermark *et al.*, 2002), the effect of temporarily inhabiting this role was to boost Mark's confidence and legitimise his fuller participation in practice.

## Chapter Six                      Discussion

My overarching research question asks what participation means to these novice students. Meaning that is constructed socially reflects the cultural norms and assumptions of the context in which it is formed (Jordan *et al.*, 2008). The meanings shared here also reflect the individual history and intentionality of each person and convey a sense of what he or she is trying to do, and who he or she is trying to be.

Lave and Wenger (1991, p. 110) suggest that LPP describes an “initial form of membership” in a CoP. It is therefore an appropriate heuristic for considering the induction of these students into clinical practice. The concept of ECE is not straightforward, because whilst all six were novice student physiotherapists, they were not all newcomers to clinical practice or higher education. The meaning that each attached to their participation was therefore influenced by reflexive interaction between the habitus and the wider social sphere of relations, cultural norms, values and beliefs. Each participant engaged in clinical practice from a unique position. Intentionality drove the interaction between the individual’s habitus and the formal structuring features of practice such as work roles and responsibilities, social hierarchies and forms of communication. The various CoCP of which they sought membership reflected different workplace cultures and the professional Discourses encountered were perhaps rendered more visible by their strangeness, from the perspectives of newcomers. In this discussion, I consider the research questions by drawing on the data and my interpretations of each case and relating these to relevant research and theory that I introduced in the literature review.

Lave and Wenger (1991, p. 53) describe LPP as an aspect of social practice that involves engagement between the whole person and the practice community:

As an aspect of social practice, learning involves the whole person; it implies not only a relation to specific activities, but also a relation to social communities – it implies becoming a full participant, a member, a kind of person. In this view, learning only partly – and often incidentally – implies becoming able to be involved in new activities, to perform new tasks and functions, to master new understandings. Activities, tasks, functions, and understandings do not exist in isolation; they are part of broader systems of relations in which they have meaning. These systems of relations arise out of and are reproduced and developed within social communities, which are in part systems of relations among persons. The person is defined by, as well as defines these relations. Learning thus implies becoming a different person with respect to the

possibilities enabled by these systems of relations. To ignore this aspect of learning is to overlook the fact that learning involves the construction of identities.

Lave and Wenger (1991, p. 113) proposed the structure of social practice, rather than the structure of pedagogy as "the source of learning". The CoP then provides the basis for learning, as well as practice and mutuality in the relations between these enterprises, which are both features and conditions of learning (Wenger, 1998). Each case offers a unique insight into an individual's assumptions, beliefs and values, and their interactions with the culture of the workplace in which they learned to practice.

### **What is the meaning of learning as participation in early clinical experience for physiotherapy students?**

All six participants expressed a preference for learning by doing and learning on the job and this intentionality motivated their choice of this work integrated learning programme. Despite this preference, each seemed to anticipate PBL as a relatively passive process at the outset, which involved the transmission of knowledge from clinicians acting as teachers and supervisors. However, the features of learner habitus reflected the various life experiences and circumstances of each individual.

The values, beliefs and understandings that emerged as the products of prior experiences conditioned the choices each individual made. James envisaged immersion in a learning environment of excellence and being part of a team in a pressured work environment. Drago was methodical in his learning approach and had prepared over a long period for this opportunity to become a physiotherapist. His motivation was a heartfelt desire to improve the lives of people living with a disability. Rahim was pragmatic in his approach and saw the value of workplace learning in its potential to strengthen his employability as a work-ready graduate. Sven seemed to be open to new experiences and enjoyed learning for its intrinsic value. Magda was the most experienced professionally and had a clear insight into the potential demands of learning in clinical practice. Her lack of confidence in her English language skills was a concern and she worried it would mask her competence. Mark lacked confidence in his abilities as a learner and he liked the immediacy of learning on the job. His anxiety tended to inhibit his contribution to discussions.

For me, the consideration of individual habitus was revealing, because I had assumed that students with prior experience would find it easier to settle into the practice environment. The

data suggest that whilst Magda, Mark and Drago were able to draw on prior experience as assistants, its value to their participation was dependent on a number of factors. Drago was able to draw on his situated knowledge of his work setting, which enabled him to contribute to practice. By contrast, Magda found that her competency did not translate so easily to practice in a different setting and culture, and did not support her bid to be seen as a competent practitioner. Mark was somewhat inhibited by his prior experience of hierarchical relations and was unsure how to act when these formal structures were less obvious.

I was unable to locate any studies in physiotherapy that explore how experience informs students' decisions to become physiotherapists. Two studies by Cross (1995b; 1999) investigated perceptions of student attributes that were valued in practice, but none appeared to focus on ECE. Hayes *et al.* (1999) looked at learner behaviours that cause educators to question students' competence. They concluded that critical judgements were often made about students' lack of propositional knowledge and psychomotor skills. Only slightly less critical attention was focused on behaviours that were considered unprofessional or demonstrated poor communication skills. My data suggest that learners in ECE focus on trying to identify and meet the behavioural expectations of educators, but are less concerned with the grasp of propositional knowledge. I do acknowledge, however, that students' propositional knowledge would not be extensive in these case studies given the early stage of their internships. Interestingly, when Magda attempted to justify her knowledge and skills to her educator when teaching a patient to climb stairs she was considered argumentative. Sven had some difficulty in sustaining his preferred exploratory learning when faced with his educator's task-focused approach. These examples suggest that habitual dispositions endure in ECE, but are subsumed in recognition by students of the need to comply with the situated versions of practice of their educators.

Lalumandier *et al.* (2004) identify a benefit of ECE for learners in the grounding of abstract concepts in concrete experiences. This appears to be supported in these cases. Drago's experience of what he believed to be unethical practice informed his construction of future practice. James's experiences caused him to consider the nature of professionalism in practice. Their perspectives as newcomers perhaps focused the paradoxes between Discourses of the workplace and Discourses of professionalism. Yardley *et al.* (2013) suggest that meaning constructed in ECE can support learning in relation to propositional knowledge at a later stage. This appears to be supported by Rahim's observation that practice came first and "the reasoning comes later".

Yardley *et al.* (2013) identified ECE as beneficial for developing the practical know-how required by medical students for interacting in complex clinical environments. These six cases also demonstrated how students adapted their approaches to the context in order to support their progressive participation. James's social "chit-chat" and Drago's strategic withholding of his "optimal approach" until circumstances permitted both reflect attempts to negotiate participation in respect of the pervasive power relations that were a feature of those contexts. Sven learned that compliance rather than enquiry smoothed relations with his inexperienced educator. Magda learned to demonstrate time management practices in accordance with her educator's expectation of student engagement. Mark's reticence to voice an opinion was reduced by the structure offered by his role in handover, supporting his bid for recognition as a team member. These cases reveal examples of interactions between some of the individual features of participant habitus and the formalised structures of the field of clinical practice. Such interactions may be considered as micro-mechanisms that emerge as situated practices in social contexts (Blom and Moren, 2011).

### **Learning to participate in the changing conditions of physiotherapy practice**

The general atmosphere of uncertainty amongst staff where services were undergoing restructuring translated into a less than welcoming atmosphere for participants in some cases. James interpreted this as a malaise amongst clinicians who sometimes appeared indifferent to the presence of students. All participants described occasions when they consciously adapted their performances to accommodate changing conditions in practice. The delegation of supervision by James's educator caused him to feel that his experience lacked consistency and he sought interaction with others in the MDT. Rahim experienced his educator's absence as an opportunity to demonstrate his capability to other team members. Drago's situated knowledge of the context reduced the impact of change on his participation and he was able to contribute to the productivity of his time-pressed educator. These three cases demonstrate that whilst changing practice conditions were a feature of ECE, its meaning varied in terms of the learning opportunities experienced by each participant.

Newton *et al.* (2009) observe that staff shortages on wards result in nursing students having fewer opportunities for direct participation in practice. This finding is not supported consistently by these six cases. Micro-mechanisms that may influence participatory practices can be explored in terms of their influence on trajectories of participation in CoCP. Drago was more experienced in practice than Rahim, yet both had many opportunities for direct contact

with patients. This might be a reflection of the relative success of each in promoting an identity as a trustworthy and effective worker. Rahim said he felt trusted by colleagues who allowed him more responsibility and Drago's colleagues recognised him as a trustworthy assistant who helped with their workload. Eventually, however, both became concerned that they were not learning anything new. Drago's established identity as an assistant in a busy workplace led to his being given more of the same work rather than more responsibility. Both cases suggest that the demonstration of task-based competency in busy workplaces may frustrate learner attempts to extend identity and role-based competence as junior professional physiotherapists.

Student contributions to productivity are desirable in situations where educators delegate their work to students, for example, where a collaborative model of supervision occurs between one educator and multiple students (Declute and Ladyschewsky, 1993; Ladyschewsky, 1995). The learning benefit to the student, however, is uncertain (Moore *et al.*, 2003 ; Lekkas *et al.*, 2007; Morris, 2007). These six cases demonstrate that students can learn and contribute to productivity in situations of staff shortage. For learning to happen, students needed access to progressively more challenging tasks or greater levels of responsibility, but the ability of clinicians to monitor these situations is compromised by changing conditions in practice. If the task or responsibility cannot be made progressively more challenging then the learning value in routine practice should be made more explicit and recognisable to both parties. For Drago this could have involved acknowledgement of his support for colleagues who were more recent newcomers to practice. For Rahim the team's acknowledgement of how little supervision he was requiring was welcome and helped him to reflect on his progress. Whilst for Magda the lack of recognition was upsetting and disorientating for her sense of progress. Changing conditions in practice affected social relations and challenged the conditions for learning in the clinical setting. Educator absence led to fewer structured opportunities to interact with colleagues. James adapted by acting to expand his network, whilst Rahim's confidence enabled him to claim recognition as a productive team member. Student contributions to work productivity where teams were experiencing staff shortages appear to challenge the professional assertion that physiotherapy students are supernumerary to the normal staffing complement of clinical services.

Where changing conditions are features it is helpful to consider social participation in relation to fields of practice. Applying Bourdieu's (1977) concepts of habitus and field can support fuller consideration of power and the contested nature of relations in clinical environments. These

case studies demonstrate that participants compete for resources as learners and as workers. Further consideration of a micro-political theorisation of PBL may support an analysis that more readily reflects the experiences described in these cases of participation in ECE. As Lave and Wenger (1991) suggest, the possibilities for learning within a CoP are defined by its social structure, power relations and conditions that support participants' claims to legitimacy.

### **Recognising mutuality for learning as participation**

Hodkinson and Hodkinson (2004) propose that considering social participation broadly in the social fields that people inhabit may be helpful, and suggest that a field as defined by Bourdieu (1984) can include many overlapping CoP:

For Bourdieu, all human existence relates to the fields that people occupy. It is inconceivable to think of a person as not in a field. To claim that would be to claim that their existence had no social dimension – that they had no position in the social world, no dispositions towards it and no social interactions with others.

(Hodkinson and Hodkinson, 2004, p. 29)

Rather than being overly concerned with delineating CoP as the context for learning, I adopt the suggestion of Hodkinson and Hodkinson (2004) and view community membership as a condition for learning. Wenger (1998) identifies mutual relations as a feature of a coherent community. The relational dimensions of mutuality are commitment to a joint enterprise, shared repertoire of social practices and opportunities for engagement with others (Lave and Wenger, 1991; Wenger, 1998). Considering these dimensions of mutuality from the individual perspective of each participant can facilitate the exploration of mutuality as a micro-social mechanism of progressive participation. Such micro-mechanisms may be generative of participatory practices between learners and others in the field. Therefore, the establishment of mutuality in enterprise for these participants occurred broadly in relation to learning and working. Practices were generated in respect of whichever was perceived as predominating at the time. Mutuality in repertoire required learner and educator to be responsive to the nature of the enterprise, but also for identities and individual styles of learning to be acknowledged and accommodated. Mutual engagement was also relational with the other two dimensions and required subtle, often tacit, adjustments to responsibility and repertoire within the scope of practice.

In these cases, the deployment of practices was complicated by changing conditions of practice. In some cases, the changes were experienced in the formal roles that structure social

interactions. Sven and Rahim both wondered before their placements how they would be expected to act as “students or as employees”. Changing conditions cause roles to change and responsibilities to be redistributed. Change in turn influences the basis on which recognition can be claimed by clinicians and students in social interactions. Sometimes educator responsibilities were shared (Rahim), sometimes delegated (James); some clinicians were newcomers to student supervision (Sven), and some had different expectations of the enterprise (Magda). By exploring mutuality as a micro-mechanism for participation, I mean to draw attention to the ways in which social relations are initiated and maintained with the purpose of supporting dual objectives for learning and work. Recognition of mutuality requires these dual objectives to be identified and supported by educator and student.

Rahim’s pursuit of his objective to become “work-ready” was welcome in an environment where managing work was a pressing concern, given the absence of his educator. Although he performed a repertoire competently, he experienced incongruence between his competence in his limited repertoire of practice and his future capability. His concentration on becoming a trusted worker had begun to eclipse his identity as a learner. His competence in managing his patient cases also limited his interaction with colleagues where his learning could be prioritised. The potential for learner independence to reduce the interaction between physiotherapy students and clinicians was noted by Ladyshevsky (2002) and Moore *et al.* (2003 ). Sven did not experience the degree of independent practice that Rahim did. His attempts to focus the enterprise on learning appeared to be at odds with his educator. The lack of mutuality in the enterprise frustrated both of them and only improved when Sven recognised and adapted to his educator’s objective. Research identifies that student presence is valued in the workplace when they are able to manage a caseload (Cross, 1999; Baldry Currens and Bithell, 2000). Indeed, productivity can benefit when a clinician can delegate a caseload to a student (Ladyshevsky, 1995; Holland, 1997; Öhman *et al.*, 2005). The work contributions of students at later stages on this work integrated learning programme have been identified in my previous research (Hargreaves and Malloch, 2012). What was unexpected in these six cases was the extent of work contributions at such an early stage of their student experience.

The concept of CoP has been challenged in its potential to account for the complexity of learning in contemporary workplaces (Eraut, 2002). The focus of healthcare is to provide clinical services and where they operate under difficult circumstances, student supervision is not a priority (Öhman *et al.*, 2005; Stalmeijer *et al.*, 2009 ). In such situations the invitational qualities known to be beneficial for learning may not be so apparent (Billett, 2001; Skøien *et*



*al.*, 2009). These cases demonstrate that achieving mutuality in the relations that support learning as the joint purpose of the enterprise for clinicians and students requires sensitive and ongoing negotiation of opportunities for participation in practice. In these situations, learners may benefit from learning objectives being carefully explicated at a micro- social level of interaction, be it in terms of learning how to work more efficiently, work as a team member, being an effective time manager or in trying to balance the quantity and quality of work, and so on. These cases demonstrate that participants exercise considerable agency to get involved in practice in difficult circumstances. The active learning involved in finding one's way into practice from the periphery is considerable, yet it remains largely unrecognised by educators or students. I will now turn to consider learner agency in relation to progressive participation and what is valued in practice and why it is considered to be worth pursuing.

### **What do they value in relation to their participation in early clinical experience?**

Personal values motivated the participatory efforts of each newcomer to achieve a sense of belonging in clinical practice. Wenger (1998, p. 55) describes participation as involving "active engagement in the social practices and relations that constitute the social world". Drago's habitual disposition for being efficient in his time management threatened the basis for mutuality with less organised colleagues and generated his critical perspective. His formulation of an "optimal approach" emerged from this dis-identification with the practice of some colleagues, demonstrating how Discourses may evolve over time. Drago's approach arose from the interaction between the structuring rule-based Discourses of his assistant role and his personal motivation to make a difference to patients. My relationship with Drago, as his personal tutor and programme leader of his course, perhaps enabled him to express his critical perspective to me, whilst power relations within the CoCP inhibited his disclosure. His decision to perform the Discourses of his educators, whilst reserving his own approach for future practice, demonstrates that his apparent sharing of repertoire was not based on a truly joint enterprise. His enterprise was driven by his desire to maximise his time in direct patient contact, whilst some clinicians appeared to be driven by an opposing enterprise.

James's approach to pursuing membership was different since he lacked Drago's cultural capital of recognised competence in the organisation. He responded from his position of strength in his ability to engage on a social rather than professional level at first and hoped to establish relationships with colleagues who could facilitate his access to more expansive

learning opportunities. Whilst his participation remained peripheral, his agency enabled him to develop a network of support that in turn might further his participation in the CoCP. Indeed, his agency may have been enhanced by his educator's absence, which prevented her mediating his interaction with the CoCP. James's emphasis on developing supportive relationships reflects Eraut's (2007) assertion of the importance of relationships for novices entering the workplace – relationships engendered by feelings of trust and support, which ultimately enhance confidence. The importance of supportive relationships was also identified by Kilminster and Jolly (2000) in the supervision of medical interns. All participants quickly recognised that a proactive approach was desirable in order to benefit from the many learning opportunities in clinical environments. These six cases involved mature students who were heavily invested in pursuing their future careers, which may indicate a predisposition on their part towards an agentic approach. Successful, progressive participation also required these individuals to develop a feel for the ways that power relations structured their relationships within their practice communities.

The process of professional socialisation directed at moulding novices into professionals has been presented historically in rather deterministic terms, according to Clouder (2003). Students are often portrayed as *tabulae rasae* on to which professional values, behaviours and attitudes can be projected. Novices are required to internalise professional Discourses rather uncritically in pursuit of the goal of community membership. Eraut (2004b, p. 263) is critical that the learning required of newcomers as they seek to become part of a professional practice community is greatly under estimated. Eraut goes on to suggest that awareness of the amount of learning involved is often unacknowledged because the behaviours required in practice are learned largely through informal, rather than formal situations. Billett (2004b) proposes participation predicated on relationships between personal goals and the community's objective to preserve its practice. Billett (2007) subsequently suggests a mechanism of agentic co-participation to explain the way in which learners make meaning of an experience in order to respond to it.

Clouder (2003), in her study of the socialisation of occupational therapy (OT) students, observes that professional Discourses of regulation and control exert powerful effects to conform. However, she differentiates between conformity and compliance:

Playing the game involves becoming aware of rules, both written and unwritten, and learning to conform to (or at least comply with) the systems in place.

(Clouder, 2003, p.217)

Agentic strategies expressed by students in Clouder's (2003) study present occasionally as acceptance of the status quo by "playing the game". Sven has applied this same term to his own act of compliance by not asking questions, but learning to play the game. Webb *et al.* (2009) describe the game playing metaphor as describing the practices which learners adopt when denied the opportunity to reflect or to engage meaningfully in practice. Meaningful engagement for Sven involved asking questions and being able to make mistakes and learn from them. Awareness of the need to comply with educator practices was ubiquitous in these cases, but student compliance was tempered by rejection of these practices from the future repertoires of some of the learners. Participants understand that performing proactively is important to achieving their goals of belonging, even though some Discourses remain contrary to their sense of the type of physiotherapists they wish to become. They recognise the need to sublimate their own versions of practice to those of their educators, which broadly supports Clouder's (2003) findings in relation to the professional socialisation of OT students.

These participants demonstrated thoughtful and reflexive approaches to managing contradictions in practice. The ability to "work around" problems was identified as an outcome of ECE for medical students, explained by Yardley *et al.* (2013) as the concept of *Métis*. Yardley *et al.* explain *Métis* as the meaning-making that arises from social processes in learning interactions, and which enables learners to improvise and handle competing demands. Walker (2001) suggests a similar value in considering expertise in terms of social participation that allows for consideration of learner agency in managing the complexities of practice. The cases in my study were of novice student physiotherapists, but not all were novice participants in clinical settings and they quickly demonstrated their understanding of the value of adopting proactive approaches to get involved in practice. These cases demonstrate how participants act on habitual predispositions to engage proactively in social relationships, which they are learning in the clinical workplace.

### **Negotiating responsibility for practice**

The concept of student responsibility in clinical practice requires some explanation. Educators delegate clinical duties to students in practice, but remain ultimately accountable for the welfare of patients in their care. Learners participate in practice in a tri-partite interaction of patient-student-educator. Whether the educator is present or not in this interaction, she or he remains accountable for patient welfare and student practice. In these cases, it was clear that participants prized direct interaction as "hands-on" practice with patients rather than contact

mediated by the clinical educator. Professional competence is part of the Discourses of physiotherapy practice and education. Predicated on the grounds of patient protection, competence might be construed in terms of student deficit or incompetence. Decisions about levels of responsibility will require the educator's assessment of the potential risks involved and their judgement of the student's competence. Consequently, these participants were aware of the need to perform recognisable and visible repertoires of practice for their educators in order to "get noticed". Negotiation of responsibility appeared to vary relationally with the experience of the educator, so that senior clinicians tended to permit greater independence, whilst less experienced staff tended to employ practices involving shadowing, observing and perhaps assisting. Opportunity to take greater responsibility was a powerful motivator for learning, but required trust by both parties. In these cases, the level of independence allowed for students did not appear to reflect a normative reference to their identities as first-year students. Rather, responsibility and independence of working seemed to emerge from complex relational interactions between learner, the educator and the local conditions of practice. Greater responsibility had the potential to increase confidence as well as undermine it. The outcome depends in part on the support available to the participant, the clinician's confidence in his or her own practice and the accuracy of his or her judgement of the student's abilities and readiness to accept responsibility. Determining a participant's ability to perform independently or with degrees of assistance is a difficult task. Eraut (2004b) describes a tri-partite relationship between challenge, support and confidence in relation to learning in practice settings. The ability to perform a task or role and to be confident in relationships that encourage feelings of trust and support were significant in Eraut's study and supported my observation in these cases.

### **Recognising learning in routine practice**

Participants sometimes spoke of practice as "routine", which seemed to mean the focus was on tasks in which the learning opportunities were not obvious. The time-constrained situations in which these tasks were performed further reduced opportunity for dialogue and clinicians were not always forthcoming with explanations of the task's purpose. Participants preferred opportunities where their involvement in decision making was possible and therefore made the purpose more clear. Morris (2010, p. 61) suggests that clinicians need to create opportunities where learning can happen "in parallel" with working. She suggests that this might involve making the learning value in routine practices explicit and so help learners make sense of these encounters. These participants valued being involved in the discussions and

decision-making processes by clinicians. They differentiated the benefit they derived from having the opportunity for hands on practice from the task-focused encounters where they were just “another pair of hands”.

There are many ways in which learners come to know the nuances and complexities of practice. Mark unknowingly recognised value in routine practice as a way of managing when it was very busy on the ward. The tacit nature of this knowledge was perhaps revealed in his observation that in carrying out routine practice he had “no time for learning”. Participants were generally unprotected from work pressures and expected to contribute to the team effort. For those new to clinical environments the time-pressured Discourses of work reduced their enjoyment of practices to which they were less able to contribute. The lack of prior experience of these newcomers perhaps offered little to clinicians in the way of benefit to their busy practice. By contrast, the participants with a therapy assistant background preferred a faster pace of work and expressed boredom if the pace of work slowed.

The participants tended not to recognise their participation in routine practice as contributing to their learning. These cases suggest that novice participants with little experience of clinical work did not grasp the meanings that might enhance learning in terms of more efficient working and time management. Eraut (2007) suggests that consideration be given to structuring and allocation of work in ways which support the potential for learning as well as working. Lave and Wenger (1991) identify potentially restricted possibilities for learning when it involves goal-directed pedagogy. They refer to competing forms of learning curriculum and teaching curriculum as:

A learning curriculum is a field of learning resources in everyday practice *viewed from the perspective of learners* [original emphasis]. A teaching curriculum, by contrast, is constructed for the instruction of newcomers. When a teaching curriculum supplies – and thereby limits – structuring resources for learning, the meaning of what is learned [ ] is mediated through an instructor’s participation, by an external view of what knowing is about.

(Lave and Wenger, 1991, p. 97)

The challenge for these participants in early clinical experience was to pursue a learning curriculum within a field that is necessarily constrained by respect for patient safety, yet expansive enough to allow learner exploration. This requires recognition and negotiation of trust and independence between learner and educator. This is a locus for negotiation of meaning in Wenger’s (1998) terms as recognising the mutuality in learning and working.

Participants recognised the value of being challenged by their educators or being put in challenging situations, even though they did not necessarily feel comfortable at the time. A lack of challenge in the interactions with more junior staff gradually came to outweigh the perceived benefit of their being more approachable. Participants' sense of contribution to the productivity of practice needs to be balanced by the opportunity to extend their scope of practice. The trajectory of participation is effectively flattened when repeating the same task at a level of proven competence. Such "routine" practice tended eventually to reduce motivation, since its potential to further their participation eluded them. When students are continually challenged, with little opportunity to understand the intention or repertoire of practice, confidence can be eroded. Eraut (2004b) described the relational tri-partite between challenge, support and confidence as important for learning in work situations. I propose that greater analytical power may be achieved by superimposing Wenger's (1998) conditions of mutuality on to Eraut's (2004b) tri-partite model. It can then be seen, for example, that Rahim was confident in his repertoire, but lacked the mutual engagement that could have challenged him to extend it. Furthermore, when James worked with Peter he was challenged by the speed of practice (repertoire), but lacked confidence in the purpose of the enterprise to know what could be prioritised or left undone whilst still achieving the desired outcome.

In these six cases, the dominant enterprise of the CoCP was to care for patients effectively and efficiently with the resources available. In these time-pressured environments, the ability of students to contribute to work productivity was valued by teams. Where learners were able to contribute jointly to the enterprise of the CoCP there was potential to engage with an extended practice repertoire and progress their participation. In these cases, it appeared that the potential to contribute to workplace productivity was relational with the local situation and the capacity of formal social structures to accommodate the presence of novice students.

### **Which identities do they bid to have recognised in the context of their early clinical experience?**

Wenger (1998) sees the recognition of mutuality in participation as involving a process of identification as a potential member of a CoP. Tusting (2005) describes a process occurring over time, which involves participants developing a shared repertoire of discursive practices, understandings, tools and memories. I chose to apply Gee's (2005, p. 26) concept of secondary Discourses as conveying socially accepted ways of using language, acting and interacting, which enable individuals to be identified as the "right" type of participant in a particular CoCP.

I believe this aligns quite closely with Wenger's (1998) reasoning that in recognising mutuality, we recognise something of ourselves in each other. Recognising qualities of ourselves in others at a personal level requires individual awareness of one's beliefs, attitudes and values.

Dispositions as enduring properties of one's primary Discourses develop over time and are influenced by social and cultural aspects of upbringing within the family and intimate social networks. These enduring dispositions influence the degree to which an individual might seek affiliation with the secondary Discourses of a CoCP.

Mutual recognition is proposed here as a related, yet distinct, concept to recognition of mutuality. Mutual recognition refers specifically to the recognition of one's identity as legitimate participant in a CoCP. Some aspects of habitus were of more value than others when they positioned participants more favourably to access the sociocultural resources in clinical situations and supported the achievement of identities as a good worker, trustworthy and engaged student or junior physiotherapist and future member of the CoCP.

Wenger's (1998) discussion of the possibility of mutual recognition arising from the negotiation of participation in CoP follows a similar line. He explains that the potential for us to recognise certain of our own characteristics, attitudes and so on in others that we meet, and for them to recognise aspects of themselves in us, supports mutual recognition. Mutual recognition is supported by the newcomer's possession of certain forms of cultural capital, which are valued in the CoCP. Recognition is possible because the newcomer's identity resonates with values and dispositions of other members of the CoCP. Participants learned to recognise the basis on which they might claim recognition. Mark and Rahim acknowledged the value of recognition, describing the need to be noticed. Negotiating recognition as a member of the CoCP was dependent to an extent on a participant's contribution to the productivity of a clinical team. The student presence is sometimes the focus of objection from clinicians on the grounds of being detrimental to the provision of patient care (Maxwell, 1995; Holland, 1997; Öhman *et al.*, 2005). The student contributions to practice in this study were considerable. Nonetheless, Magda's efforts were barely acknowledged by her educator, whilst Sven's performance was criticised by his educator if he attempted to divert from her specific direction, ask questions or discuss practice.

Magda's experience provided an example of negotiating recognition. Magda's habitus disposed her towards being proactive and seeking opportunities for involvement with the clinical team. Her training abroad as a physiotherapist and her experience as an assistant supported her recognition by colleagues on acute wards as a productive team member.

However, the field of practice on the elderly care ward was different. The pace of work was slower and there was less opportunity for her to contribute to familiar work that she understood. Magda's industrious approach meant that she could work quickly, but this just left her with more time to fill and speed was not valued so highly on the slower paced ward. The result was that Magda felt that her contribution went unnoticed by her educator who told her to utilise her spare time for study. The organisation had a clearly defined hierarchy and students were expected to demonstrate behaviours of engaged and studious novice professionals. This resulted in an unhappy situation for Magda and frustration for her educator.

Some of the inherent complexities of establishing recognition in clinical environments have been considered in other studies. Boor *et al.* (2008) explored the interactions between different learning climates and the type of learner participation in these situations for medical students. They concluded that differences arose because of the interaction between individuals and the learning climate. In relation to early clinical experience, Cole and Wessel (2008) identified that physiotherapy students valued opportunities to be involved in patient care and of being challenged by educators, but also valued having their contributions respected. From the educator's perspective, a study by Hayes *et al.* (1999) identified behaviours that concern physiotherapy educators such as students being unprofessional, lacking knowledge or being poor communicators. These behaviours concur with the educator-centric view of student involvement expressed by Magda's educator where being professional involved agreeing with the educator, recognising the knowledge of the educator and communicating using the same method of documentation that the educator used. These studies locate responsibility for participation with the learner, but do not acknowledge the power relations that enable or constrain the agency of learners in practice environments. My study attempts to explore some of these issues, whilst recognising the limitations of an exclusively learner-centric perspective.

### **Secondary Discourses of participation**

Lave and Wenger (1991) argue for participation as a process of becoming, which supports the quest for legitimacy within a CoP. The usefulness of an identity in enabling a participant to be recognised as a legitimate member of the clinical community is dependent on the extent to which it "fits", or conveys recognition, within a particular CoCP. Recognition of mutuality in



this enterprise will contribute to formation of participant identity and mutual recognition with other members' seeing the participant as "one of us".

A number of secondary Discourses were evident in these cases of learning as participation. Their performance was the result of varying degrees of complicity or contestation with individual habitus and their other secondary Discourses. Participants negotiated degrees of mutual recognition through their performance of these structuring Discourses of physiotherapy practice. Four participant identities that emerged in the performance of secondary Discourses were:

- 1) Productive worker
- 2) Trustworthy student
- 3) Engaged student
- 4) Junior physiotherapist

Identities presented aspects of habitus in the practices, knowledge and skills that participants brought. They also brought secondary Discourses previously acquired, which were less recognisable as the qualities of potential members of a CoCP. Performed Discourses developed over the course of the early clinical experience in relation to the fields of elderly care, rehabilitation and orthopaedic trauma.

Rahim performed as a trustworthy student and a productive worker in the elderly rehabilitation ward. Whilst his educator was absent, the other clinicians were happy to delegate some of the work to him. Rahim understood what was expected of him, and he responded confidently to the trust placed in him. Secondary Discourses of trustworthiness were successful in securing a degree of independent action for him and clinicians delegated responsibility because they felt secure in his performance. These included his demonstrating willingness to recognise the limits of his own competence and seek support when required.

Gee (2005) refers to mastery of given Discourses as literacy. Rahim appeared to be literate in his performance as a trustworthy student and productive worker, which defined competence in that situation. Colleagues had also complimented Rahim saying that he they had forgotten he was a student at times because he was working like a junior physiotherapist. Rahim was very pleased with this but his confidence was shattered when he realised that his knowledge was lacking in certain respects. Gee (2005) states that acquisition of Discourses without meta-reflexive challenge can lead to competent but narrowly defined performance. At his early stage Rahim appears to have achieved competence in a defined aspect of practice, the limitations of which he subsequently recognised in comparison with the other student's more

extensive repertoire. The effect was that Rahim became less confident for a while and perhaps readjusted his concept of self to that of competent student rather than a junior physiotherapist. It can be seen in Rahim's case that his achieved Discursive identity changed over time. When his perceived literacy in his secondary Discourses was challenged, he subsequently adjusted his mode of participation becoming less confident of his identity describing himself as "feeling like a spare part".

Drago performed discourses of trustworthiness and productivity valued in his work setting, which meant that Peter allowed him to see some patients independently. Although Drago's demonstrable literacy in these Discourses had value, it was rather eclipsed by his established identity as an assistant therapist, which resulted in some educators giving him "routine" tasks. Drago wanted to engage with the Discourses of junior physiotherapist and engaged learner, which would involve him in developing the clinical judgement that differentiates physiotherapist's practice from an assistant's protocol-based practice. Drago's apparent success in 'pulling off' the secondary Discourses of productivity and trustworthiness had the effect of strengthening his institutionally attributed as assistant therapist, which appeared to compromise his progression towards achieving a junior physiotherapist identity.

Mark's reticence, which was a feature of his previous assistant's Discourses, faded when he performed the physiotherapist's Discourses in handover. This enabled Mark to differentiate his repertoire of practice from that of his more vocal learning partner and achieve greater recognition within the CoCP. The requirements of his role provided an authoritative institutional Discourse, the performance of which supported Mark's bid for recognition and helped to get his "face noticed" on the ward. In contrast to Drago's experience it appeared that acquiring an institutional identity through the Discourses of 'hand-over' supported his bid for recognition of secondary Discourses of an engaged and trustworthy participant.

James was frustrated to some extent by his disjointed experience of practice in his attempts to access the discursive repertoires of practice. Nonetheless, his literacy in the Discourses of a team member supported his bid for recognition as the friendly and engaged team player. In a sense, James's performance of "non-technical" Discourses enabled him to achieve legitimate access to the more technical Discourses of professional practice.

Clouder (2003, p. 218) suggests presentation of self, involved students being aware of and presenting an identity that was acceptable to others for the specific purpose intended. Aspects of this self-presentation, identified by O.T. students, included "looking keen and enthusiastic",

being polite and “keeping busy”. These were clearly present in the Discourses of participation identified in these cases.

Discourses are generative of practices that exist at individual and extra-individual levels. As the property of a CoCP or a field, they give collective meaning to practices, values and beliefs (Kemmis, 2005). Discourses are therefore both ideological and strategic because they enable people to act in the world; they can be regarded as generating real effects (O' Regan, 2012). Discourses represent the normative views, values, and behaviours of a group about how the world is, and so go largely unnoticed as the doxa of the field. Secondary Discourses therefore enable participants to co-ordinate themselves with their CoCP. Being well co-ordinated at this early stage of clinical experience suggests the possession of capital, which as an aspect of habitus can support a participant's negotiation of recognition within the CoCP. Wenger's negotiated mutuality, Gee's secondary Discourses and Bourdieu's concept of doxa as “fit” between field and habitus appear to refer to similar things. In essence, all refer to the degree of fit between the individual and the collective of which they seek to be a part. Gee (2005, p. 31) states that Discourses are defined in “relationships of complicity and contestation”, and rendered visible from the perspective of competing Discourses. Some Discourses were disrupted in these early clinical experiences. Some individuals were more attuned to the Discourses that were the doxa of the field, whilst others took time to accommodate and adapt their practices. Some performed Discourses, which they recognised as orthodox, and others recognised competing Discourses only in the possibilities for their future practice, where power relations prevented their performance in the current settings. Yet for others the secondary Discourses that supported their mutuality in one CoCP were unrecognised as legitimate in another.

### **Contested Discourses and dis-identification**

The potential for divergence in enterprise, repertoire and engagement is something that participants began to recognise in their ECE. Wenger (1998) qualifies that mutuality should not be misunderstood as implying equality, since inequality and power differentials are integral features of social interaction and powerful stimuli for learning. However, these cases suggest that the meaning of practice is difficult to grasp when negotiation is not possible. James found Peter's time-pressed Discourse difficult to accept until his own responsibilities, for a small caseload of patients, required him to manage his time more efficiently. These participants did not always agree with practice recognised in the field. Nevertheless, they came to recognise

the need for mutuality in practice in contextual or time specific dimensions, whilst retaining the potential to explore an alternative in their future practice.

Habitus positions and may contribute to the recognition of individuals through the practices that it generates, but where practices lack mutuality a critical perspective may be generated through which practice may be challenged. Such situations challenge the ontological complicity or doxa, identified by Bourdieu (1977) as a feature of the power relations between field and habitus. One example of this occurred in relation to participants' identified intentionality to join a caring profession. Some practices, however, caused participants to reflect on the nature of care in physiotherapy. Their legitimate participation in practice required them to accommodate these differences and this was a challenge for some of them. These paradoxes in practice have not been widely researched, although Toms and James (2011) identified an impact on students' developing sense of professional identity when they perceived their educator to lack care. Reilly (2007) cautions that in medicine, the nature of clinical teaching itself mediates against the demonstration of care by placing greater value on the educator's demonstration of confidence. In physiotherapy interactions between educator and student have been noted to peripheralise the participation of the patient in practice (Laitinen-Väänänen, 2008; Kell, 2013). It appears in my case study that the notion of patient-centred practice was at times somewhat rhetorical. When habitus was challenged by practice, participants were strategic in demonstrating compliance with the practice expected in the field. These cases suggest that, at least in the context of ECE, habitus was enduring, though the need to demonstrate compliance at a particular point in time and context was understood. Rahim observed risk taking as a failing of others, whilst feeling unable to act. James performed "a version" of his educator's time-pressed Discourse, whilst maintaining a sense of his own integrity as a caring person by differentiating this from his own "future" practice.

Participants make decisions about the extent of their engagement with practice that are discerning when they perceive practice to be uncaring. Hodges (1998, p.279) suggests historicity (change in participation over time) can shift the focus of learning from an epistemological concern with knowledge construction to an ontological concern with identity, "Who are you becoming?" This ontological concern pervades these six cases, supported by the theoretical analysis. Rather, it was a concern about remaining committed to a type of physiotherapist that each individual wanted to become that motivated individual decisions to comply or conform. Claims to legitimacy depended on mutual recognition of identities that would support access to the CoCP. Participants accommodated their own concerns by continuing to perform Discourses of physiotherapy practice that reflected those of their

educators, whilst recognising the lack of mutuality with the practices generated by individual habitus. This strategy for claiming legitimacy in the CoCP, whilst not committing to mutuality in the enterprise and repertoire of practice, resonates with what Yardley *et al.* (2013, p. 47) identify as “chameleon identities”. This strategy allows the participant to manage competing and challenging expectations of performance in practice. Hodges (1998, p. 272) describes this as a form of “non-participation” or “rupture” between what the person is doing and how the person positions him or herself in the community:

Non-participation is an identificatory moment where a person is accommodating in participation and yet is experiencing an exclusion from any “normative” or unproblematic identification with practice.

Participants reflected on the dissonance between the secondary Discourses to which their habitus disposed them and the secondary Discourses that were recognised in the field. Whilst challenged by this situation, they continued to convey their identities in positive terms in their learning journals. For these participants the performance of secondary Discourses did not necessarily equate to conformity and they found that understanding another person’s reasons for practice could be challenging. Clinical educators must be willing and able to explore and explain their own practice if mutuality is to be supported. The inherent difficulties faced by clinicians in exposing their thought processes can challenge learning for newcomers to practice (Eraut, 2007; Reilly, 2007; Webb *et al.*, 2009). The doxa of professional practice, explicated through professional education, can only really be exposed as a result of negative constitution (Bourdieu, 1977, p.168). The relative extent to which these competing discourses and disagreements are negotiated influences, and is influenced by, their status as heterodox or orthodox Discourses of physiotherapy practice.

Knowledge exists not only in the individual’s mind but in the possibilities for knowing that are shaped by Discourses and by historical and institutional conditions that are experienced by persons (Kemmis, 2005). For these participants, habitus contributed to individual meaning-making that evolved over the life course up to and including this period of experience in practice. The degree to which they pursued and achieved affiliation through their performed Discourses as members of their CoCP, was a result of their recognising a degree of mutuality that was sufficient to want to be identified as that type of physiotherapist.

I have tried to provide a view of how novices first begin to engage with learning as participation in practice. I do not propose these cases as normative or generalisable. They are

illustrative of the variety of meanings that novice student physiotherapists attach to their participation in early clinical experience.

## **Limitations**

The unique opportunity provided by this work integrated learning programme for the study of participation in practice is also a limitation. The conditions that supported its implementation and evolution were specific to the context and time. It may be that the conditions for establishing similar programmes will occur in other places and times. Indeed, its similarity to recent developments in teacher training in the UK is striking, with the move to locate teacher training primarily in practice supported by Higher Education. I am interested in watching the progress of this development.

The student sample for this study being predominantly mature male students is not typical of the physiotherapy student profile in the UK. However, I believe that this somewhat atypical profile provides an intrinsic feature of interest. My theorisation of the research has pursued a social learning approach and I have not engaged with other educational theory more commonly considered in relation to professional education. Whilst this may attract criticism, I argue that it is important to introduce a different perspective to understanding practice-based learning. I believe that this study, for all its limited scope and generalisability, represents my attempt to open up a critical dialogue around social learning as an intrinsic part of professional practice.

The data collection methods were as comprehensive as was feasible in the context of working practice for these students. However, I recognise that students were documenting events for me as the reader, and this will mean that my interpretation is based on their first-hand interpretations of events. I chose not to obtain data, on this occasion, which represented the educator or clinician's perspectives. This was a conscious decision in my exploration of meaning from a learner perspective. This may be seen as an imbalance by physiotherapy educationalists, but I would argue that it is one attempt to redress the under-representation of the learner's voice in clinical education research.

## **Chapter Seven    Conclusions and Implications for Practice**

Through this exploration of student participation in clinical practice, I hope to illuminate the micro-social interactions and power relations that structure the newcomer's experience. My exclusive focus on learner participation as an aspect of social practice is intended to provide a counter to the traditional cognitive perspective that predominates in the clinical education literature. The potential for the social theorisation of learning to reveal paradox in clinical education has been suggested (Egan and Jaye, 2009). I believe that its application to the study of learning in professional physiotherapy practice contributes a more granular view of the challenges of learning in authentic work situations.

The overarching purpose of this thesis was to consider what participation in ECE means to novice student physiotherapists. Two sub-questions intended to probe what students feel is worth getting involved in, and how they claim recognition in the practice community. I will conclude by summarising my findings in relation to the sub-questions before considering the broad meaning of learning as participation in early clinical experience.

### **The value of participation in early clinical experience**

It is perhaps not surprising that agency comes to the fore in these six cases, given the very individual focus on each participant. However, I believe this individual focus on each participant begins to redress the under representation of the learner perspective in the physiotherapy literature. My intention is expressed more succinctly by Billett (2007, p.65) who states that:

While a phenomenon may have some common meaning, its construal by individuals is shaped by particular sets of values, subjectivities and the discourses to which they have access.

My claims to knowledge are offered with recognition that their meaning is shaped by individual engagement at a particular time and place in the undergraduate experience.

Learners value agency in their participation and are proactive in seeking opportunities to get involved in many aspects of practice. Students soon appreciate the need actively to seek involvement in busy workplaces because clinicians did not always have time to present carefully structured learning opportunities. These cases demonstrate that novice students learned to initiate opportunities for participation which were very similar to those identified in

other studies of interns in clinical environments (Sheehan *et al.*, 2005). An important learning outcome for students in ECE is recognising the benefits of taking an active role in initiating their participation in practice. Whilst learner agency is usually welcome, it is not always fully acknowledged by busy clinicians who can appear to take it for granted. In these cases, when students could act on their prior knowledge and skills as therapy assistants, there was a tendency for learner identities to be eclipsed in time pressed environments. Providing ECE for learners can help them to appreciate the range of learning opportunities and resources available in clinical practice, as well as to recognise the skills required to access their use.

Learners value interaction with a range of colleagues for a variety of reasons. The sociability of relationships with junior colleagues can provide an environment in which learners are more willing to expose their own deficits. Interactions with colleagues from disciplines other than physiotherapy are valued for the different perspectives they offer on practice. Interactions with senior colleagues are more likely to challenge learners and present opportunities to progress participation.

A more detailed analytical framework for considering the nature of learning interactions might be achieved by superimposing Wenger's (1998) conditions of mutuality in enterprise, engagement and repertoire on to Eraut's (2004b) tri-partite framework of challenge, support and confidence. Whilst beyond the scope of this study, this combined framework may facilitate consideration of the possibility for participation in a CoCP through the achievement of mutuality in enterprise, engagement and repertoire in relation to the degree of challenge involved and the requirements for support and confidence possessed by the participant. Learners value opportunities to participate when they offer potential to extend scope of practice. The trajectory of learner participation can flatten when practice repertoire lacks sufficient challenge, for example, when practice involves repetition at a level of proven competence. Repetitive participation in practice that is considered routine is de-motivating for learners. Participating in a more challenging enterprise, for example, when assuming greater responsibility, can increase learner confidence and motivation, so long as the clinical educator recognises the learner's effort.

These cases demonstrate that thoughtful and reflexive approaches are achievable by novice students in ECE in order to manage the demands of learning in work environments. The ability to work around problems was identified as an outcome of ECE for medical students (Yardley *et al.*, 2013). A more overt recognition of these pragmatic team working and self-management skills can promote the development of learner confidence and adaptability in changing work



environments. The learning that arises from finding ways into practice from the periphery is considerable, yet it often appears to be unrecognised by learners as well as educators. Clinical educators can help participants to recognise and value the learning involved in developing competence to participate in busy and changing work settings.

### **The identities with which learners bid for recognition in early clinical experience**

Participants describe performances that are recognisable as secondary Discourses in the construction of their respective identities in the CoCP. In ECE, students are pursuing goals of becoming junior physiotherapists and seeking to belong within a CoCP. These goals involve bidding for recognition through their participation, which is both an incentive to learn and the means by which learning occurs. To this end, their performance of secondary Discourses of productive worker, trustworthy student, engaged student and junior professional signal their achieved identities in their attempts to be seen to be making meaningful contributions to the CoCP. Their performed identities are emergent from the synthesis of Discourses already acquired in other fields, institutional identities ascribed by higher education and clinical institutions and habitual dispositions to become a certain type of physiotherapist. The usefulness of Discourses in supporting membership is contingent on their potential to confer recognition of the learner as “one of us”. In recognising the value of these Discourses, participants learn what is required in order to participate effectively. They learn that they must contribute to the productivity of the team, demonstrate that they are interested in learning about practice and must display the values, behaviours and attributes of nascent professionals in order to be entrusted with patient care.

Recognition by the CoCP does not imply conformity for novice entrants. Participation may be discerning in their recognition and acceptance of Discourses, particularly where these were felt to be in conflict with habitual dispositions, values and beliefs. Learners rejected practices they identified as reckless, lazy or lacking in care. Where micro-mechanisms of power prevent them from overtly rejecting practices, participants are strategic in both demonstrating their compliance with the practices in the present, whilst stating their intentions to exclude the troublesome practices from their own future repertoires of physiotherapy. This represents a considered dis-identification with the CoCP, at least at a level of principles if not in practice. Dis-identification is suggested by Hodges (1998, p.279) as having the potential to occur when individuals begin to question practices that challenge their sense of self. These cases demonstrate that nascent professionals are prepared to make judgements about practice

where they perceive it to be unprofessional or unethical. In such cases, students are not always able to act on their concerns. Rather, they comply with the expectations of the CoCP, whilst excluding the practice from their own future repertoires.

### **The meaning of learning as participation in early clinical experience**

Students embark on their ECE, enthused by the possibility of learning on the job. These cases reveal the process of learning to be both challenging and rewarding. It is clear in the cases that, even at this early stage of student experience, participation involves genuine contributions to productive practice. Learning on the job means learning to work and learning from work. Healthcare services, faced with pressure to maintain productivity with reduced resources, have sometimes cited these as reasons for not being able to support students in practice. These cases demonstrate that even in difficult situations where the conditions of practice are changing, beneficial learner participation can occur. Where changing conditions in the workplace appear to threaten mutuality, the threat may be countered by adaptive practices that support mutual engagement, shared repertoire and joint enterprise. The contributions that students make to the work of practice at later stages of their experience have been identified previously (Hargreaves and Malloch, 2012). These cases show that contributions to practice can also be of benefit in the context of ECE.

Acknowledging learning as participation in the workplace invites consideration of learning, as Morris (2010) urges, in parallel with working. These cases demonstrate that to achieve mutuality in the conditions that support these dual objectives requires sensitive and ongoing negotiation of opportunities for involvement. Recognition of mutuality by definition requires learner and educator to acknowledge and support these dual objectives.

My claims to knowledge and understanding emerge from my findings in this thesis. Learning as participation in ECE means student physiotherapists recognising and negotiating degrees of mutuality between themselves, their co-participants and the specific circumstances in which they are required to perform as students in clinical practice. The values, beliefs and understandings as products of prior experiences conditioned the choices made by these individuals. These novice student physiotherapists were discerning about the degree of mutuality they sought with others and the degree to which they wished to adopt certain repertoires and intentions of clinical practice. They actively 'dis-identified' themselves from Discourses which they believed might construct their identities as uncaring or unprofessional clinicians. Their relative powerlessness in the clinical setting meant that these students did not

always feel able to act on their concerns by overtly rejecting these problematic Discourses. Rather, they performed them as acts of compliance whilst envisaging the exclusion of such Discourses from their 'future' repertoires of practice.

These novice participants all understood the need to be proactive in seeking opportunities to get involved in practice. Individual agency was mediated in part through institutionally ascribed identities as students and employees, as well as through their achieved Discursive identities by displaying the traits of engaged, trustworthy students, productive workers and junior professionals. These novices developed the ability to recognise what others expected of them as participants and understood the need to construct actively, those identities which supported their recognition as legitimate members of a CoCP. Success in this endeavour was dependent on these students recognising the power relations operating in a CoCP and they valued interactions with a range of co-participants for a variety of reasons but particularly for the degree of responsibility and active participation that the relationships enabled.

### **Theoretical perspectives**

Learner intentionality is the basis of the power that drives individuals to make choices and interact. These powers are mediated through micro-social interactions between individuals, and also through social structures of role, language and so on, which form part of micro-social mechanisms (Blom and Moren, 2011, p.64).

Eraut (2002) questioned the appropriateness of CoP to explain the diversity of professional learning in the workplace. I contend that by considering the CoP as a condition for participation it is also possible to explore the cultural contexts where this condition might be unmet. Indeed, Egan and Jaye (2009) identify LPP in CoP as a powerful framework for exploring paradox and incongruity in learning as social participation.

Where changing conditions are a feature, it is helpful to consider social participation in relation to fields of practice. Applying Bourdieu's (1977) concepts of habitus and field supported a consideration of power that facilitated my analysis of the challenging nature of progressive learner participation in CoCP. Consideration of power in the context of these changing conditions of practice has helped to explore the possibilities for participation presented to learners, when change disturbed the micro-social relations in clinical practice. These cases reveal examples of interactions between some of the structuring features of participant

habitus and the formalised structures of the field. These interactions function as generative micro-mechanisms that lead to the emergence of situated participatory practices, tailored to the specific workplace conditions experienced by participants.

## **Reflexive Statement**

Through my exploration of learning as a process of progressive participation in clinical practice, I have attempted to illuminate some of the inequities of power that students experience. However, I confess that I was heartened to see the resilience shown by these newcomers as they adapted and accommodated to the micro-politics of professional practice.

Significant power relations also enabled and constrained my relationship to these six individuals as researcher to participants, programme leader to students, tutor to learners and educational mentor to employee.

My own perspective has not remained constant, but has changed and evolved as a reflection of my changing situation. Accordingly, my responsibilities and relationship to the host university to the physiotherapy programme and students has changed. Drake and Heath (2011) suggest that the challenge for doctoral researchers investigating professional settings from the inside is in the complexity of positioning oneself as an insider/outsider “that is consistent with expectations of critical purchase on the process of research”. I have experienced this complexity since I envisioned this research as part of my commitment to demonstrating the value of ECE to initial professional education, but by the time data collection commenced it was already clear the NHS funding body, which ceased funding the programme, did not share this commitment. As I complete my thesis, I find myself employed by a different university, working in a different discipline and consequently less invested in physiotherapy or physiotherapy education. My outward-bound trajectory from this professional CoP means that I no longer practice as an educator of student physiotherapists. This thesis represents aspects of my professional habitus and reifies the meaning of my participation in professional education, as much as it attempts to present the meaning of each student’s participation in ECE. I present this reflective statement, not for the sake of personal indulgence or professional rumination, but as a process of personal clarification and meaning making. I have attempted to engage reflexively with the research process as a co-participant and learner and find that theory and practice seem to be converging.

## Implications for practice

What was perhaps surprising in these six cases was the degree to which students were able to contribute to the enterprise of work at such an early stage of their clinical experience. The learning value in work practices could be more clearly explicated in order to maximise the potential for learning to be recognised in the workplace. Discussion of how to work more efficiently, or to contribute as a team member, be an effective time manager, or in terms of how to balance the quantity and quality of work, are examples of how the focus of learning may be beneficially directed to progress learner participation in a CoCP.

The concept of CoP has been challenged in its potential to account for the complexity of learning in contemporary workplaces (Eraut, 2002; Hodkinson and Hodkinson, 2004). Yet more recently there has been a growing movement to apply social learning theorisation to explore the complexities of learning in clinical environments (Swanwick, 2005 ; Bleakley, 2006; Egan and Jaye, 2009; Swanwick and Morris, 2010). This thesis points to the potential offered by considering learning as an aspect of social practice in complex clinical workplaces.

These six cases demonstrate that participation in clinical practice is not passive and the clinical workplace cannot be considered a neutral environment where learning and patient care enjoy equal prominence. Learners are not free to explore practice as supernumerary visitors.

Learning in ECE has less to do with the application of theoretical knowledge and more to do with getting involved in things that matter to the learner, the educator and the patient.

Problematising practice through workplace, as well as professional Discourses, might enable a more informed analysis of the learning that occurs through their performance. Seeking a more detailed understanding of the workplace as a CoCP, as well as a site of professional practice constituted in relations of power between social agents, is now timely.

I introduced chapter two with a quotation from Jerome Bruner who spoke of the interrelatedness of education and culture. I end this thesis with a quotation that conveys the sense of participation as an active and reflexive activity for these six individual students who sought to establish a legitimate presence in practice:

Trying to figure out and then meet the expert participant's expectations is sometimes the only way to initiate the long process of individualisation of discourses. [ ] To turn the discourse for others into a discourse-for-oneself, the student must explore the other people's reasons for engaging in this discourse.

(Sfard, 1998, p.31)

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## Appendix 1

### Interview schedule

The pre-placement interview will allow for the development of a narrative through which students can tell of experiences that have influenced their approaches to learning and their preferences for experiential learning.

Interview themes:

1. Student's interpretation of the public image of physiotherapy and physiotherapists and how well they relate personally to this image.
2. Their self-knowledge as learners, their trials and tribulations and how this has influenced and been influenced by their experiences.
3. The place of work in their lives (brief work history), the workplace and how this has been shaped by experience. How they view the clinical environment as a workplace (pros and cons).
4. Their feelings at the start of their clinical placement, how they think they will cope and how they think they will feel/be different by the end of their first placement.

### Interview questions:

Pre-placement:

1. Tell me how you came to decide that physiotherapy was the right career for you.
  - a. What sort of work have you done in the past?
2. What sort of image do you think physiotherapy and physiotherapists have?
  - a. Do you see yourself as fitting with this image? Why/not?
3. What has been your experience of learning in the past? Tell me a bit about your successes, trials and tribulations as a learner.
  - a. How do you learn best? What helps you to learn?
  - b. What can get in the way of your learning?
4. Tell me how you came to choose the situated learning programme.
5. How are you approaching your first assessed placement?
  - a. What do you think it will be like, being on a clinical placement?
  - b. How do you think clinicians view students?

## Appendix 2

E-mail sent to participants prior to the second interview. They were asked to consider and reflect on these questions as preparation for our meeting.

### Post-placement Interview questions:

- 1) How was your placement, was it as you expected?
- 2) In relation to the reflection line, tell me about a good and bad experience you had on placement. What made them good or bad?
- 3) How do you think you have changed over the course of this placement?
- 4) Do you think your clinical colleagues and learning partner see you differently now, compared to the start of the placement?
- 5) What would you see as the main opportunities and challenges to your learning in clinical practice?

### Post-placement Interview questions used by the interviewer:

- 6) How do you feel your first assessed placement went?
  - a. Was it as expected? (Expose any challenges to expectations or contradictions)
- 7) Tell me about this reflection line – **what went well/not well?**  
 Intention here is to identify episodes of 'learning' & 'not learning' and why? (May need to differentiate focus of learning/working)
- 8) Tell me about a 'good' experience you had (explore sociality, sensitivity, functionality)
  - a. Sensitivity
    - i. Explore motivations
      1. Wanting, needing to be there
      2. Purpose of activity – working/learning
    - ii. Explore sense of agency
      1. Degree of responsibility/passivity
      2. Sense of 'risk'
    - iii. Explore feelings & emotions
      1. Enjoyment/not
      2. Sense of legitimacy
  - b. Sociality
    - i. Explore focus of 'action'
    - ii. Explore interactions with others co-operation, collaboration (**including learning partner**)
      1. Feeling involved or not – how?
      2. Sense of legitimacy
    - iii. Explore communication strategies

## c. Functionality

- i. How did your abilities develop? What can you do now that you couldn't before?
- ii. How did your knowledge, skills develop?
- iii. How did your understanding develop?
- iv. What meaning does that experience have for you now?

9) Tell me about a 'bad' experience you had and why you think it was a bad experience. (Explore sociality, sensitivity, functionality as before.

10) How do you see yourself now?

- a. How have you changed over this period? Why do you think that is?
- b. How has your involvement in practice changed?

11) How do you think your clinical colleagues and your **learning partner** see you now? Why?

12) What is your image of physiotherapy practice now, how has it changed?

13) What do you now see as the main opportunities and challenges of learning in a practice environment?



## Appendix 3

### REFLECTION LINE (SEM B)

**Record your experience of placement each week on this grid. Add brief comments below and more detailed ones in the learning journal on [VLE].**

1. Mark each row with a tick ✓ where you gauge your experience of learning, participation and enjoyment of placement-to-be for that week.
2. Comment briefly on the week in the boxes below. These will help you to reflect back and learn more about your development at the end of the placement. For example: what did you learn (a lot of) that week? Why did you feel involved in practice? What made placement enjoyable for you? Etc...

Learned a lot this week											
Learning steadily	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Didn't learn much this week											
Really felt involved in practice											
A routine week, no challenges	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Did not feel involved in practice											
Enjoyed placement this week											
Routine week, no real worries	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Not happy with placement											
Week beginning	16 <sup>th</sup> Jan	23 <sup>rd</sup> Jan	30 <sup>th</sup> Jan	6 <sup>th</sup> Feb	13 <sup>th</sup> Feb	20 <sup>th</sup> Feb	27 <sup>th</sup> Feb	5 <sup>th</sup> Mar	12 <sup>th</sup> Mar	19 <sup>th</sup> Mar	26 <sup>th</sup> Mar

Week	Brief Comments
16 <sup>th</sup> Jan	
23 <sup>rd</sup> Jan	
30 <sup>th</sup> Jan	
6 <sup>th</sup> Feb	
20 <sup>th</sup> Feb	
27 <sup>th</sup> Feb	
5 <sup>th</sup> Mar	
12 <sup>th</sup> Mar	
19 <sup>th</sup> Mar	
26 <sup>th</sup> Mar	

## Appendix 4

### RECRUITMENT E-MAIL

Dear [name],

I am writing to ask if you will consider participating in a research study at the University of East London. You are being asked because you are a first year physiotherapy student. The title of the study is:

**'Learning to work and working to learn: Experiences of first year physiotherapy students in clinical learning environments.'**

*Before you decide whether to take part, it is important for you to understand why the research is being done. Please read the information sheet attached to this e-mail. If you would like to take part then reply to this e-mail stating that you are happy to be contacted again. If you have any further questions that you would like to ask, or if you would like some more information please contact me by e-mail or by phone.*

E-mail -----.ac.uk      Tel: 0208 -----

*Thank you for taking the time to read the information about the study.*

*Kind regards,*

*Julian Hargreaves*



## **PARTICIPANT INFORMATION SHEET**

**[sent with recruitment e-mail]**

Study title

Learning to work and working to learn: Experiences of first year physiotherapy students in clinical learning environments.

**You are being invited to take part in a research study because you are a student physiotherapist. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.**

What is the purpose of the study?

Students on physiotherapy qualifying programmes undertake a significant part of their education in clinical practice. Learning in a practice environment can be challenging, but students bring their unique experiences and histories as learners. This study will seek to investigate the influences on students' learning when they first enter clinical practice.

Why have I been invited to participate?

You have been selected because you are entering your first year of study on one of the physiotherapy programmes at the University of East London.

Do I have to take part?

It is up to you to decide whether to take part.

If you decide to take part, you will be given this information sheet to keep and asked to sign a consent form. If you decide to take part, you are still free to withdraw at any time and without giving a reason.

Whether you choose to take part or not, your decision will not have any impact on your marks, assessments or future studies.

What will happen to me if I take part?

You will be interviewed before you start your first clinical placement, and again shortly after it finishes. Each interview will take about an hour and will be conducted in private at the UEL campus. Whilst on placement all physiotherapy students are required to keep an electronic diary (learning log) on UEL Plus. If you participate, you will be asked to submit a copy of this learning log to the researcher. The learning log and interview will provide the information (data) required for the research.

What are the possible disadvantages and risks of taking part?

There will be no financial cost to you. The research has been designed so that it fits in with your normal learning activities as a student physiotherapist at UEL. As a study participant, you would not be required to spend any more time on these activities than you would as a physiotherapy student. There are no identifiable risks that may arise as a result of your taking part.

What are the possible benefits of taking part?

The discussion (interview) and diary keeping activities will help you reflect on your learning. All physiotherapy students are required to keep a learning log on their first clinical placement. The log and discussions with your tutors are intended to help you become more effective at learning in a practice environment. This research is intended to help us better understand and support students in their learning.

Will what I say in this study be kept confidential?

Yes. All information collected about you and your learning will be confidential (subject to legal limitations). Only the researcher will know that you have participated, unless you yourself discuss it with anyone else. Your UEL e-mail account will be used for any communication related to the research.

Interviews will be audio recorded as MP3 files on a digital voice recorder. Recordings will be transcribed into MS word documents, at which point the recordings will be deleted from the recorder. Transcripts will be anonymised and any reference to individuals or organisations will be removed. The transcripts form the raw data for this research and must be accessible by others, if so required, as part of the research process. Word files will be password protected, whilst stored on the Sussex University Server.

What should I do if I want to take part?

If you would like to take part in the study, simply sign the 'consent form', which accompanies this information sheet, and return it to Julian Hargreaves at the address provided

#### What will happen to the results of the research study?

Findings from this research will be presented as part of a Doctoral Thesis. Some of the findings may also subsequently be presented at conferences or published in an academic journal. The anonymity of all participants will be maintained. If you would like to receive e-mail notification of any future publications related to this research, complete the request on the 'consent form' that accompanies this information sheet.

#### Who is organising and funding the research?

The researcher Julian Hargreaves is carrying out this research as part of a Doctorate in Education at the University of Sussex. Financial support is being provided by the University of [name]

#### Who has reviewed the study?

The research has been approved by the University of Sussex Social Sciences Cluster, Research Ethics Committee (C-REC) and the University of [name] Research Ethics Committee.

#### Contact for Further Information

If you need any further information about this study or if you have any concerns about the way in which the study has been conducted, you should contact John Pryor in the first instance at [j.b.pryor@sussex.ac.uk](mailto:j.b.pryor@sussex.ac.uk).

Thank you for taking the time to read this information sheet

Date

**Appendix 5****CONSENT FORM FOR PROJECT PARTICIPANTS**

**PROJECT TITLE:** Learning to work and working to learn: Experiences of first year physiotherapy students in clinical learning environments.

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**Project Approval**

**Reference:**

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I agree to take part in the above University of Sussex research project. I have had the project explained to me and I have read and understood the Information Sheet, which I may keep for my records. I understand that agreeing to take part means that I am willing to:

- Be interviewed by the researcher
- Allow the interview to be audio taped
- Make myself available for a further interview should that be required
- Use a computer to complete a reflective diary whilst on clinical placement
- Allow the researchers to have access to my academic records

I understand that any information I provide is confidential, and that no information that I disclose will lead to the identification of any individual or organisation in the reports on the project, either by the researcher or by any other party.

**AND**

I understand that I will be given a transcript of data concerning me for my approval before being included in the write up of the research.

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the Data Protection Act 1998.

Name:

---

Signature

---

Date:

---

Would you like to receive notification of any conference presentations or publications in Academic Journals, which arise from this research?

Delete as appropriate:            YES            NO

Independent witness to participant's voluntary and informed consent (if this is necessary for your project, for example, where there is a relationship between the participant and the researcher which might be deemed to unduly influence the participant's voluntary consent).

I believe that \_\_\_\_\_ understands the above project  
and gives his/her consent voluntarily.



Name:

---

Signature

---

Address:

---

Date:

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## Appendix 6

### Transcription convention

Adapted from Gail Jefferson (1985), cited in Potter and Wetherell (1987, p.188). My transcription conventions have been adapted from Jefferson. I have used symbols to add to the interpretation of the text, whilst trying to avoid detracting from its readability. I have therefore avoided too fine grained an approach to notation. Rather, my aim is to convey a sense of my overall approach of “big ‘D’ discourse analysis” (Gee, 2011) The conventions adopted are intended to bring attention to features of the utterance which might add meaning to the text. I have therefore adopted symbols to indicate where the speaker has placed additional emphasis or volume on words, or paused, or where conversation overlaps, in such a way that it may be interpreted as adding meaning without detracting from the readability.

- Empty square brackets indicate that some transcript has been deliberately omitted. Material in square brackets is presented for clarification information, e.g.:

James: [ ] because it was so disjointed

- Open square brackets mark overlap between utterances, e.g.:

James: so I thought [I would  
Julian: [ yeah

- One or more full stops are used in brackets to indicate pause lengths, e.g.:  
(..) a pause of less than a second  
(...) a pause of about one second  
(...) (..) a pause of longer than one second
- An equals sign at the end of one speaker’s utterance and at the start of the next utterance indicates the absence of a discernible gap, e.g.:

James: my educator who wasn’t there very often =  
Julian: = yeah yeah

- Boldfacing indicates that words are uttered with added emphasis. Words in capitals are uttered louder than the surrounding talk, e.g.:

James: and I **actually learned** different things from him  
Rahim: Uhm WELL I **resolved** it by

- A full stop before a word or sound indicates an audible intake of breath, e.g.:

James: .uhm Physios are a lot (...) uhm I'm not going to say lazier

- Round brackets indicate that material in the brackets is either inaudible or there is doubt about its accuracy, e.g.:

Magda: I don't like just learning (pure theory)

- A question mark indicates a rising tone at the end of a word  
Rahim: sometimes you don't have to think?