Medical teachers in Australian Hospitals: Knowledge, Pedagogy and Identity

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Abstract

This research aimed to generate a better understanding of the teacher identities and pedagogical perspectives of medical teachers in hospitals. The study focuses on understanding the personal theories of teaching that the teachers bring to their teaching and the ways they think about themselves as teachers. These two factors, known to affect the environments that teachers create for learners, have received little attention in medical education research.

A qualitative methodology was employed featuring data collected from audio-recording twenty-five medical teachers in a range of clinical and classroom settings with medical students, as well as data from semi-structured interviews with all participating teachers. The interview and observation data were analysed and interpreted iteratively: through back and forth movements from specifics to general meanings and from the data to theory.

The study found that for these teachers, teaching is about knowledge and their pedagogical role in the students gaining a particular form of knowledge. They see this knowledge as deriving from work with individual patients who cumulatively and one-by-one provide the doctor (and student) with particular knowledge that is never forgotten. The teachers also perceive that this knowledge resides in the places where practice and teaching happens. It is intricate, messy, uncertain and dynamic. Thus conceptualized, this knowledge is regarded as superior to formal ('textbook') knowledge which is orderly, static and appears in the form of lists and stable sets of instructions. The teachers describe their engagement in contextualising and transforming students’ formal knowledge through making links and bridges between knowledge types and knowledge sources.

A second finding concerns pedagogy. The teachers in the study placed primary value on their knowledge, but emphasized and valued too the personal and interpersonal factors associated with teaching. The enjoyment in medical teaching is a reward in itself, and for some a pleasant change from the routine of clinical work. Key to that enjoyment is a preference for a connectedness with students and a commitment to pleasant and friendly interactions. In the absence of other professionalizing influences, many of the personal theories of teaching that these teachers developed when they were students persist into the present. There is a sense of teaching as a commonplace and a commonsense activity – important and pleasant but not complex or difficult. The thesis contends that this understanding is a potential obstacle to developing medical teachers’ understanding of and expertise in teaching.

On identity, the study identified four elements in these teachers’ ways of thinking about themselves as teachers. Firstly, central to the ways they think about themselves as teachers is their belief that they possess a particular form of clinical knowledge that is at the heart of being a doctor. Secondly, their teacher identities are connected to the enjoyment that teaching offers and the sense of being a teacher as natural, just a part of being a doctor. Thirdly, the low status of teaching and the inferior status of medical teaching relative to research – influences how they think about themselves as teachers. Finally, the value these teachers place on their relationships with students, contrasts starkly with a sense of disconnectedness from the university.
The thesis contends that these medical teachers have understandings of clinical knowledge and medical teaching that are not well appreciated in the literature or in medical education practices and discourses. This situation contributes to their feelings of being isolated – even alienated – from the university, and it also obstructs aspects of curriculum reform and affects teachers’ development as teachers.

The thesis suggests a need for revitalised descriptions of the intricacies of clinical knowledge and its construction – a need to re-value the places and the patients as sources of knowledge and to re-value the teachers. A new approach to judgements about medical teaching is also required, particularly an approach based on a broad understanding of the relational and technical aspects of pedagogy. Many of these teachers would respond positively to appropriate support to develop more informed approaches to their teaching and greater technical expertise. To be useful, that support and development requires an appreciation of the culture of heroic individualism in medicine and a fundamental sensitivity to medical teachers’ values, perspectives and teacher identities.
Declaration

This is to certify that

i. the thesis comprises only my original work towards the DEd

ii. due acknowledgement has been made in the text of all other material used

iii. the thesis is approximately 55,000 words as approved by the RHD Committee

Jenny Barrett

September 2013
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I acknowledge the doctors who participated in the interviews and generously allowed me to join them in their various teaching sessions in the hospitals. It is my hope that this research contributes positively to the lives of medical teachers – as well as to their students and their patients. Also, I acknowledge the administrators and academic leaders at the hospitals who assisted in recruitment for the study.

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Dedication

This thesis is dedicated to the memory of my mother, Alice Barrett, and my auntie, Joyce Barrett, and other women from earlier generations of my family whose circumstances did not afford them the opportunity to pursue a formal education.
Glossary

‘Medical teacher’: the term ‘hospital-based medical teacher’ is most accurate to describe the group of teachers in the study, but to avoid this clumsy phrase, I have chosen to use the term ‘medical teacher’. I do not adopt the more commonly used generic ‘clinical teacher’ that may refer to either doctors, nurses or other allied health professionals who teach. When that term is used in the thesis it is referring to other authors’ terminology, and punctuated thus, ‘clinical’.

‘Medical teacher’ highlights that these teachers are practicing doctors, teaching medical students and that they have come through the medical education and training systems themselves and belong to the medical profession.

The term ‘clinical knowledge’ is used to highlight that this form of medical knowledge is acquired in the clinical settings, not in the university.
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>UoM/the University</td>
<td>The University of Melbourne, Australia</td>
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<tr>
<td>FMDHS</td>
<td>Faculty of Medicine, Dentistry and Health Sciences at The University of Melbourne, Australia</td>
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<td>OP</td>
<td>Outpatient Clinic</td>
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Chapter One

An Introduction to Medical Education, the Literature and the Thesis
This is a study of hospital-based medical teachers in Melbourne, Australia that arose out of my academic work in health professional education in hospitals over two decades. It is a qualitative study that sought to understand the values and preferred pedagogical approaches of these teachers. The three initial questions this study was designed to explore were: How do hospital-based medical teachers think about teaching? How do they think about themselves as teachers? How do they go about teaching?

The first sections of this chapter describe the medical education context in which the study was conducted. Subsequent sections discuss particular concepts from the education and medical education literature that offered starting points for the study. The chapter concludes with an overview of the chapters in the thesis.

1. Medical education: Institutions and social influences

Internationally, medical education has been variously described as being at a point of crisis (Bleakley, Bligh, & Browne, 2011, p17-21.), heading for a crisis (Spencer, 2003), in a perpetual state of unrest (Cooke, Irby, Sullivan, & Ludmerer, 2006), constantly changing (Bloom, 1989) or, perhaps, at the crossroads (Bleakley et al., 2011). In Australia, there are significant challenges at both undergraduate (Ash, Walters, Prideaux, & Wilson, 2012) and postgraduate levels (McGrath, Graham, Crotty, & Jolly, 2006). Having emerged and developed over time rather than being specifically or intentionally designed, the system of medical education is complicated and is perhaps aptly described as a work in progress (van der Weyden, 2004) as can be found in other education sectors.

The system for the operation of a country’s medical education will include some or all of the following institutions: government departments, universities, medical colleges and hospitals (although the role of hospitals is determined by traditions and basic conditions for medical education) (Karle, 2004). As well, a system is affected by various social forces and developments. For example, the technology and information revolutions have contributed to a better informed and confident population of patients, students and medical trainees, creating a ‘commercial atmosphere’ for healthcare (Ludmerer, 1999, p.882) and for medical education. Further, there are many new influences on and emphases in education: new understandings of how people learn (Bransford, 2000; OECD, 2007); new conceptualisations of teaching, learning and assessment; newly theorised settings for learning in workplaces; facilitation of existing and novel ways of learning afforded by mobile technologies; an emphasis on learning through life; and, a focus on interdisciplinary and inter-professional approaches to teaching, learning and practice.
These forces and their impact vary particularly according to the resources available in a country. Within this broad and complex array of societal and educational inputs into the education of medical students, this study seeks to understand more about one group of medical teachers in Australia – doctors who teach medical students in hospitals.

1.1 The Australian medical education landscape

In the Australian system, responsibility for medical education and training is split. Responsibility for the 21 accredited medical schools ultimately rests with the Australian Medical Council’s (AMC) Medical School Accreditation Committee. The purpose of the AMC accreditation is “the recognition of medical courses that produce graduates competent to practice safely and effectively under supervision as interns in Australia and New Zealand, and with an appropriate foundation for lifelong learning and for further training in any branch of medicine” (http://www.amc.org.au/index.php/ar/bme/schools accessed 10/12/12). Responsibility for the subsequent training of doctors is further separated between two systems: the specialist medical colleges are responsible for the curriculum and governance of training and the training is undertaken in the government-funded health system. This is a complex and sometimes disconnected system.

In the mid 1990s, there was a sudden recognition of a medical workforce shortage. This was initially addressed by recruiting an increased number of doctors from overseas. In addition, ten new medical schools have been established since 2000, so that approximately 3500 medical students are now expected to graduate in Australia annually (HWA, 2012). Making capacity in the whole system to adequately teach these extra students and train graduating young doctors is a significant challenge. One response can be seen in the recent attention given to alternatives to the major hospitals as sites for student and junior doctor placements. In 2010, a national body, ‘Health Workforce Australia’, was established to explicitly address the challenges of providing a ‘skilled, flexible and innovative health workforce’ for Australia (HWA, 2012). Realizing the potential of relevant alternative settings – general practice, private practice, rural and regional services, and the range of community health services – is likely to precipitate a move of significant numbers of students from the traditional teaching hospitals to these new settings. This has implications for many aspects of the curriculum including the medical teachers. Medical schools are at different stages of this move into new settings, but the increased number of students will continue to impact on the health services and the teachers.
Given this context, it is not surprising to find that medicine, medical education and the subsequent training of doctors have been the subject of lively debate, and there have been many calls for reform (Dahlenburg, 2006; McGrath et al., 2006; Paltridge, 2006; Roberts & Conn, 2009). Debate ranges over the field: the participants in medical education (students, medical trainees and those who teach them); the places and institutions (hospitals, universities and medical colleges); and government structures and regulations for medical education (national curriculum and standards setting). Of concern are matters of not only the size of the workforce, but the composition, regulation, safety and location of the doctors in training and practice.

The content and pedagogy of medical courses has been debated and a large national study sought to find what makes for success in medical education (Lawson & Bearman, 2007). That report identified challenges existing at every level of education for medical students and junior doctors in training. At a practitioner level, though, the discourse about the education of medical students seemed to focus on Problem Based Learning (PBL) which was blamed for the many knowledge gaps that doctors observe. Something of the tenor of the debate is captured in a colourful appeal from the editor’s desk in the leading general medical journal in Australia:

Medical education in Australia is a work in progress. Self-directed and problem-based learning have all but displaced didactic teaching … Curricula have been trimmed … The hard sciences — anatomy, biochemistry, physiology, pathology, pharmacology and microbiology — now make room for behavioural and social sciences … But what do doctors think of all this? … At a crowded session at the national conference of the Royal Australasian College of Surgeons … a medical student’s account of his limited exposure to anatomy, his questioning of social sciences, and his sharing of the charades of problem-based learning was followed by thunderous applause clearly reflecting the audience’s sentiments on modern medical education. Accommodating the wishes of medicine’s many splinter groups is unrealistic, but academia needs to consult with the profession more widely and counter the scepticism with solid educational evidence garnered not with soft but hard science (van der Weyden, 2004, p.601).

This editorial highlights some of the concerns in the hospital/practitioner environment: the teaching of bioscience and clinical medicine compete for status, and ‘modern medical education’ is excluding those who have traditionally conducted the teaching, leaving them uninformed and sceptical. Also, evident here are the strong voices of the twenty medical and
surgical colleges in Australia, key players in the tripartite system of hospitals, universities and colleges. While much of the ferocity of this debate has subsided, in hospital-based medical education, the medical teaching workforce is still not well informed about the educational rationale for curriculum reform.

1.2 The University of Melbourne setting
The medical curriculum at The University of Melbourne (UoM) in the Faculty of Medicine, Dentistry and Health Sciences (FMDHS) has been reformed twice since 1999. At the time of this study, the course was a bachelor degree consisting of a six-year hybrid problem-based learning (PBL) programme that began in 1999, enrolling both school leaver and graduate students and graduating approximately 300 students each year. For the duration of the course, students were allocated to one of the six clinical schools and also spent time in other (smaller and specialist) metropolitan and regional hospitals, GP clinics and health services. The curriculum included problem-based and small group learning, early clinical experience and broad social, professional and population health content; there is some integration of bioscience and clinical knowledge.

The students participating in the tutorials and lectures observed in this study were at the beginning of their first full-time experience in the hospitals, undertaking rotations of six-week ‘blocks’ of medical and surgical specialties. The blocks at each of the clinical schools offer students both classroom and medical teaching by clinicians in each specialty as well as unstructured time (mostly with junior medical staff to whom they will be ‘attached’ for their time at the hospital). Responsibility for student administration, scheduling and pastoral care is largely devolved to the administrative and academic staff of the clinical school.

In 2011, as part of an institution-wide move to postgraduate degrees, a new medical course was introduced at UoM. This means that the course that was implemented in 1999 will graduate its last students in 2013. Students now study a four-year post-graduate MD programme (http://medicine.unimelb.edu.au/study-here/md accessed 10/12/12). This reform forms part of the context for this study. As the teachers were participating in the study, they were also being provided with information about the imminent curriculum change.

1.3 The hospital-based medical teacher in Melbourne
Through a combination of history and opportunity, medical students have traditionally undertaken most of their ‘clinical’ education in large teaching hospitals. As discussed above, this situation is changing. Together with the pressure of increased numbers of students, there
is a new aspiration in the field towards ‘socially accountable’ health professional education, including a movement of students to rural, community and primary care settings. This move is happening with different emphases and at varying speeds across the sector and, at the time of this study, most of the medical students at UoM continued to undertake the majority of their clinical education in the large teaching hospitals.

In these teaching hospitals, most medical student teaching is undertaken by doctors who have completed their medical college training in a particular specialty. It is not uncommon, though for a senior doctor to delegate one or more of their teaching commitments to a junior colleague, and junior doctors often provide much of the on-the-job teaching of medical students as part of their clinical work. Thus, the teaching workforce upon whom the University relies to implement its medical curriculum is large and distributed. There are in excess of 1500 doctors who teach the students across more than 20 sites. In this situation, it is common to find individual teachers variously informed about aspects of – and their responsibilities towards – the curriculum.

Given the distribution of the sites and this diversity within sites, there are some doctors who conduct teaching for medical students without having a University appointment. Their employment is with the Hospital, sometimes at a number of hospitals, and sometimes also with an attached research institute. Typically, in the complex and busy environment of large teaching hospitals – where many staff have multiple roles, multiple employers and a range of commitments – the composition of the medical student teaching workforce is not clear or officially known to the University. Approximately 30% of the teachers will be officially recorded on timetables. This record sometimes but not always implies that the teacher is paid for the time that they teach; for example, those with ‘honorary’ positions with the University, for instance, will usually not be paid for the teaching they do. Decisions related to teaching and teachers – who teaches and whether they are paid, the timetable for the students and the arrangements for students with the hospitals – are made by academic doctors and their administrative staff at each major teaching hospital, usually called a ‘Clinical School’. Many of the medical teachers, the group of interest in this study, have no direct contact with the University although some are involved in curriculum planning activities. For some, involvement in research will bring them in contact with other University academics and processes.

The more direct professional relationship for medical teachers is with their specialty medical colleges, the institutions with whom the doctors have undertaken lengthy training in a specialty area and been examined and certified as a specialist. Over the last two decades, most
of the Colleges have also been involved in their own curriculum and training system reform and their members (fellows) have been affected by and participating in these reforms alongside changes to the medical student curriculum. This is an important feature of the context in which my study was undertaken: in relation to the teaching of medical students, there are often no effective links between a large number of the hospital-based teachers and the University.

Looking more specifically at the people who conduct the teaching of medical students, each teacher may be timetabled for only a few hours of teaching per year, perhaps teaching the same topic for each of four groups of students that come to the hospital. This teaching is in the form of lectures, tutorials or bedside tutorials; they may also teach students ‘on the wards’ and in outpatient clinics (OP) while their clinical work is being done. Teaching is sometimes planned and sometimes spontaneous.

Given this context, it is not altogether surprising that these teachers have a limited profile in documents related to the course. For example, in the Tutor Guide there is no explicit mention of the teacher. Under the heading ‘Teaching and Learning Methods’ the guide states:

> Student involvement in activities related to inpatient and outpatient care such as outpatient clinics, operating theatre sessions and patient receiving is expected. This learning is complemented by a number of small group tutorials and some large group teaching … (UoM Tutor Guide, 2011, p.5)

And, later:

> Small group bedside teaching makes a major contribution to the student’s learning … These tutorials are central to the development of their long case presentation skills (UoM Tutor Guide, 2011, p.6)

Here, the teachers are present only by inference in the ‘involvement’, ‘learning’ and ‘activities’ that the students can ‘expect’. There is ‘teaching’ and there are ‘tutorials’ but not specifically ‘teachers’ or ‘tutors’. The ‘teacher’ is officially missing here.

In considering how the teachers are referred to, local nomenclature requires some explanation. The medical teachers who participated in this study are all college-accredited doctors, referred to as ‘consultants’ in Australian hospitals and ‘attendings’ in the USA. Those who teach are sometimes called ‘medical teachers’ or ‘clinical teachers’ and recently, ‘clinical educators’. For the purposes of this study, ‘clinical’ was regarded as blurring the distinction
between medicine, nursing and allied health teachers. Thus, the participating doctors are referred to as ‘medical teachers’ and their work as ‘medical teaching’ or sometimes ‘clinical teaching’ to emphasise the setting.

This particular arrangement of institutions and the recent period of rethinking the goals and implementation of the curriculum and the place of hospital-based medical teachers in the Australian system, is the broad context for this study.

2. Medical teaching and the literature

This research project is focused on understanding more of the perspectives of medical teachers in hospitals in Melbourne. Much of the existing literature in the medical education field is concerned with other groups – medical teachers in universities or clinical settings other than hospitals, or teachers in other national settings – or with other purposes – for example identifying examples or hierarchies of good practice. In the broader fields of university teaching and adult education, however, there is a more noticeable attention to the kinds of questions about practitioner thinking and identity that are the concern of this thesis. In this section, then, I provide an overview of some of the relevant literature from these three fields which informed my initial approach to the study. The project itself was designed to be inductive and open-ended, using methodologies allowing for relevant literature to be investigated not just at the beginning of the study design, but also revisited as themes begin to emerge.

The study keeps the focus on ‘the teacher’ in medical teaching. A focus on the teacher has been criticised by some as misdirected, seen to inappropriately draw attention away from the students who are regarded as having more to do with effectiveness of the education than does the teacher (Jolly, 2006). However, others share my interest in the teacher and their place close to the centre or the core of research and practice because of the range of encounters that students have with them (Prideaux et al., 2000; Ross & Stenfors-Hayes, 2008). Others too, see that a new focus on teaching and the teacher is required because for instance, the pendulum is seen to have swung too far towards the learner (Biggs & Tang, 2007) and also, the conditions for these teachers are changing (Peadon, Caldwell, & Oldmeadow, 2010).

One of the prevailing emphases in the medical education literature (and a theme in the local discourse in which I work) is a presumed deficit in the quality of the medical teaching workforce in hospitals. Explicitly or implicitly, these teachers are thought to be too busy to teach, lack teaching skills, are unfamiliar with contemporary approaches to teaching and
learning, and not interested in changing or developing (Bleakley et al., 2011; Cooke, Irby, & O’Brien, 2010b; Knight & Bligh, 2006). The recent call to reform – resulting from a large system-wide review of medical education in USA (Cooke et al., 2006) and associated with the celebration of the 100th anniversary of the last major system reform – issued a challenge to the field. The authors claimed that those teaching medical students cannot go on teaching in the ways they have been teaching in the past.

### 2.1 Conceptualisations of teaching in the education literature

Increasingly, those involved in medical education are considering the literature from other education settings, possibly in recognition that ‘[a]lthough doctors like to think they are special, in the areas of teaching, they share the same problems as other professions’ (Buckley, 1998, p.178). An initial appreciation of ways of thinking about medical teachers for this study was arrived at through reading some seminal education literature on university teachers, teachers in the adult education sector and teachers in workplaces.

In the literature on university teachers and teaching one focus has been on differentiating and classifying types of pedagogy and types of learning, and the relationships between these. One of the concepts in this field that continues to influence education is the distinction between ‘deep’ and ‘surface’ approaches to learning (Marton & Saljo, 1976). From that research, we understand that if a student has a surface approach to learning, they will concentrate on surface features of texts and tasks and therefore tend to focus on memorizing for examination purposes. In contrast, a student who takes a deep approach concentrates on the underlying meaning of text or tasks resulting in more enduring understandings. This research is still considered important in teaching and learning in universities given its particular relevance to understanding how ‘complex academic material’ is taught and learned (Entwistle, 2009, p.26).

Following that original 1970s work, broad orientations to teaching were later dichotomised as ‘transmission’ or ‘facilitation’ approaches (Gow & Kember, 1994) and these approaches were found to correlate with the deep and surface approaches to learning that students adopt. Later, researchers further dichotomised these orientations to teaching as either ‘student-focused’ and therefore ‘learning-oriented’ or ‘teacher-focused’ and therefore ‘content-focused’ (Trigwell & Prosser, 2004). Students’ approaches to learning are seen to be affected by the teacher’s orientation, by what the teacher does and by other factors in the environment.
This literature provides a starting point for thinking about medical teaching and medical teachers from the perspective of students’ learning. However, the direction and design of this study were more directly and profoundly influenced by research into how teachers think about teaching (Biggs & Tang, 2007; Gow & Kember, 1993; Prosser & Trigwell, 1998). Simply stated, the interest is in the notion that all teachers have a theory of what teaching is and this theory affects what environment they create for the learners (Biggs & Tang, 2007). This captures my essential interest in the medical teacher that shaped this study.

In research into teaching and teachers in university, there is also an understanding that a single focus on the individual teacher is too narrow (Ramsden, 2007). From this position, it is important to view the teacher as one player in a complex education environment, and Entwistle’s model captures the dynamics and complexity of this environment as it is relevant to teaching of medical students (Entwistle, 2009). The model highlights the need to appreciate how teachers’ theories about teaching and the roles they adopt as teachers are in dynamic interaction with other features of the environment such as course structure and course management. This understanding influenced the design of my study, particularly in locating it right where the teachers are located and where they conduct their teaching, regarded as a particularly challenging educational environment (Hoffman & Donaldson, 2004).

The literature from the field of teaching in the adult education sector also provided valuable starting points for the research with medical teachers. The intention of the study was to be open to what was to be seen and heard rather than to make judgements about what was good theory or good practice. The importance of this approach became clear in reading others’ emphasis on the need for a pluralist approach to thinking about ‘good’ teaching (Pratt, 1992, 2002). The foundation of Pratt’s continuing programme of research is the description of a set of five ‘perspectives’ that teachers may hold: Transmission, Apprenticeship, Developmental, Nurturing, Social Reform. Pratt found that each teacher has a certain perspective that they have formed through an interaction of their beliefs, intentions and teaching actions (Pratt, 1998) and this perspective guides and directs their teaching, influencing how they enact any particular teaching methods.

Pratt’s research influenced this study because of the emphasis it gives to the importance of teachers’ own perspectives, resisting a narrow conceptualisation of teaching, and also because more recently, some of his research has been conducted with medical teachers. In studying teachers in adult education, he found that each teacher has a viewpoint about what criteria comprise effective teaching and it is the way they enact that perspective that makes their
teaching effective or not. His research led him to argue against a ‘one size fits all’ notion of what makes for effective teaching (Pratt, 2002). Instead, he calls for a more open, pluralist attitude, and promotes the importance of understanding both how teachers think about teaching and how they go about their teaching and that such an understanding should be the basis of judgments about how ‘good’ their teaching is (Pratt, Arseneau, & Collins, 2001). More recently, both Pratt and others have taken these understandings into research with medical teachers (Hubball, Collins, & Pratt, 2005; Taylor, Tisdell, & Gusic, 2007). My study design and approach was influenced by the value of seeing teaching and teachers from a pluralist approach but I did not explicitly take the formulations or the measurement instrument into the study – I did not want to foreclose how the particular group in my study would define their perspectives.

Literature from another education setting, workplace learning and training, offered other ways of thinking about the proposed study of medical teachers – the ‘workplaces’ being the hospitals where the teachers conduct their teaching and gain on-the-job experience as teachers. The many roles that teachers undertake in Australian hospitals have been described (Prideaux et al., 2000) but the hospitals are seen as sites of learning and the focus is on students (Sheehan & Wilkinson, 2005; Sheehan & Wilkinson, 2007). Only recently has there been an interest in the hospitals as a site of learning for their teachers (Cooke, Irby, & O’Brien, 2010a; O’Sullivan & Irby, 2011).

New ways of thinking about what a workplace teacher does as a ‘coach’ (Eraut, 1994) or a ‘guide’ (Billett, 2001) (Beckett, 2004) have emerged in this field as has a new status for the knowledge gained from work (Beckett, 2001). These understandings connect back to earlier notions of the importance of reflection as a source of learning in and from work (Schön, 1987). Such understandings have implications for how ‘the teacher’ is conceptualised and how their professional development might proceed. There is an emphasis on becoming a reflective practitioner in medical education at all levels (undergraduate, postgraduate and continuing medical education) as there is in other professions. However, the practicality of reflective practice in teaching has been questioned given the busy-ness of teaching and learning situations (Day, 1999; Eraut, 1994). Also, in studies in schools, the varying expertise, different responsibilities and individual dispositions and concerns among teachers are thought to make it difficult for them to undertake reflection either alone or collaboratively (Day, 1999). Further, Day suggested that reflection should have a critical function, that in reflecting we should be questioning the institutional structures and values upon which teaching is organised and
occurs. These understandings about teaching and learning in the workplace suggest the value of a project that would seek to observe and hear how the medical teachers themselves explained their views, and to investigate the ways in which their particular workplace was a shaping factor in this.

This discussion has shown that the university, adult education and workplace education literatures suggest the value of research that tries to understand the views that teachers bring to their practice. This value lies in the understandings that teachers’ views influence the environments they set up, and in the understanding that a pre-determined single hierarchy of good practice may not be the best way to embark on the study. Also, workplace sites are part of the views that teachers construct and learn from, so workplaces also need more attention. My study is designed with these points in mind.

### 2.2 Conceptualisations of medical teaching

There is a substantial literature on medical teaching and one focus has been on describing, identifying and developing ‘excellent’ teaching. More recently, there have also been efforts to understand medical teachers and some of these have been conducted in the Australian context (Ash, 2010; Beckett & Gough, 2004; Gough & Beckett, 2006; Lyon, 2003; Walters L, 2009). However, the literature in medical education has been somewhat dominated by a prescriptive and reductionist agenda: many studies are concerned with identifying and describing what teachers know and should know, what they do and should do, what they do well and do poorly (Copeland & Hewson, 2000; Griffith, Georgesen, & Wilson, 2000; Marriot & Litzelman, 1998; Roop & Pangaro.L., 2000; Stern, Williams, & Gill, 2000). While my study is not related to such prescriptions, there are elements in this literature which my research, focused as it is on a particular group, may extend our understanding.

David Irby’s sustained work in this area continues to influence practice and research in medical teaching. In an early review of studies of classroom and clinical teaching by health practitioners, Irby identified seven factors in clinical teaching and he took these into a further survey-based study of medical teachers (Irby, 1978a, 1978b). When teachers, students and junior doctors rated their best teacher, the best teachers were described as being enthusiastic, clear, and well organised in presenting material and skilful in interactions with students. The worst teachers were characterised by their personal attributes such as arrogance. In a subsequent study (Irby & Rakestraw, 1981), medical students rated a group of specialist teachers on overall effectiveness and other items reflecting the factors identified in the previous study. Based on this work, Irby proposed four categories upon which judgements
about medical teaching can be made: clinical supervision skills, knowledge and clarity, interpersonal relations, and demonstration of clinical skills. Thus, Irby’s work highlighted the importance of the technical, but also the interpersonal aspects of medical teaching and this is a subject that will be taken up further in the light of the findings in this study.

In a subsequent commentary, Irby noted that some of the ‘problems with clinical teaching’ (Irby, 1986, p.37) were associated with the hospital as a setting for learning, thus pointing to the importance of the environments in which the teachers’ practices can be observed and considered. Later, he proposed a model of six domains of knowledge that these teachers require (Irby, 1994). These domains encompass knowledge of medicine, learners, individual patients, groups of patients, general principles of teaching and case-based teaching scripts. He added that ‘clinical’ teachers also need knowledge of the curriculum and knowledge about particular communication skills – compassion, sensitivity and intuition. Irby thereby claimed pedagogical knowledge as a requisite domain of knowledge for medical teachers in addition to the taken-for-granted medical knowledge. This was an important landmark in the development of thinking about medical teachers.

Irby subsequently summarized the findings of his own and others’ studies. ‘Excellent’ medical teachers, he said, share the following characteristics and behaviours: have a passion for teaching; are clear, organized, accessible, supportive, compassionate and establish rapport; provide direction and feedback; exhibit integrity and respect for others; and, demonstrate clinical competence (Irby & Papadakis, 2001). In reviewing a number of studies of clinical teaching and the outcomes for medical students, these authors also concluded that ‘good clinical teaching really makes a difference’ (Irby & Papadakis, 2001, p.231). The teacher has thus been solidly placed in the medical education landscape and the ‘good’ teacher can be recognised there.

A recent review of the literature seeking to identify what makes a good clinical teacher recommended that ‘non cognitive attributes’ should be the focus of professional development for teachers as much as the technical skills (Sutkin, Wagner, Harris, & Schiffer, 2008). Another new emphasis proposed for research into medical teacher development is on the need for the field to move beyond its traditional focus on individual teachers towards an approach informed by research in other fields including teacher education, workplace/community learning and learning over time (Cooke et al., 2010a; O’Sullivan & Irby, 2011). The proposed new focus is on ‘how teachers learn and co-construct meaning in the context of everyday teaching practice’ (O’Sullivan & Irby, 2011, p.423). This focus is consistent with contemporary
approaches to understanding and developing teachers in other fields. The approach emphasizes that all work intended to support and develop teachers needs to take place in the context in which the teachers work and also needs to be based on relationships both with and between the teachers.

While Irby’s work with medical teachers has largely been conducted in Canada and USA, other seminal work has been contributed by scholars in the UK. One influential model was developed by Harden and colleagues in their comprehensive description of the different roles in which medical teachers may be involved (Harden & Crosby, 2000). They formulated a description of twelve roles for the medical teacher presented within six areas of activity: information provider (lecturer, medical teacher), role model (teaching, medical practice), facilitator (mentor, of learning), assessor (individuals, evaluate curriculum), planner (curriculum, course) and finally, resource developer. Just as one of Irby’s contributions was to make explicit the need for medical teachers to have pedagogical knowledge, Harden et al succeeded in describing the wide range of education activities that many teachers are (or could be) involved in beyond the immediate teaching encounter. Like Irby, Harden and colleagues suggest that their framework could be used for assessing staff needs’ regarding curriculum implementation, for appointment and promotion, and for organizing staff development. In considering how judgments might be made about ‘good’ medical teaching, they draw on the distinction between student-centred and teacher-centred teaching. While this distinction is reasonable given its foundation in the early education research of which the notions of deep and surface approaches to learning emerged, there is a tendency elsewhere in the discourse for ‘teacher-centred’ to be used pejoratively, to associate it with traditional approaches that are presumed not to be student-centred.

The prevailing emphasis on identifying good, effective and excellent teaching in the medical education literature is increasingly matched with an interest in developing these teachers, a recent interest similarly found in other higher education fields (Wilkerson & Doyle, 2011) and there are many studies of local interventions to improve expertise (Foster, 2013; Gough, 2006). In Australia, this is usually thought of as ‘professional development’ (or ‘staff development’), but the term ‘faculty development’ is dominant in the literature from North America. While much of this literature relates to single or local programmes and associated evaluations, a systematic review was undertaken for the international organisation called Best Evidence Medical Education (BEME) to synthesize the evidence of the effects of faculty development of health professionals related to teaching (Steinert et al., 2006). Although the
value of the results of systematic reviews in (medical) education are still being debated, (Morrison, 2005) two findings of this review are relevant to the study of medical teachers in Australia. First, the authors recognise the need ‘to better understand teachers’ educational practices and the real problems that teachers encounter’ in order to construct appropriate faculty development; second, they suggest that the field needs faculty development programs ‘that stimulate reflection and learning among participants, raising awareness of themselves as teachers’ (Steinert et al., 2006, p.40). As this literature was being considered in the early stages of conceptualising a study of medical teachers in Australian hospitals, it was instructive to find these emphases as they reflect some of the same emphasis on understanding teachers that was found in literature from other education settings.

Until recently then, in the medical education literature, there has been little emphasis on understanding the person who is the teacher, and only recently have researchers explicitly considered this gap (Stenfors-Hayes, 2011). In Australia, there has been a successful national effort to inform and develop medical teachers (Lake & Ryan, 2006) and a recent study specifically aimed to understand medical teachers in the context of contemporary change in medical education in this country (Ash, 2010). However, there is value in understanding more about the personal theories of teaching that hospital-based medical teachers in Australia bring to their teaching of students. Such insights can be gained from listening to these teachers and by observing them in action.

2.3 The concept of ‘teacher identity’

The review of faculty development mentioned above identified that programmes for medical teaching need to draw teachers towards more ‘awareness of themselves as teachers’ (Steinert et al., 2006). While the importance of understanding how teachers think about themselves as teachers has been comprehensively studied in other education sectors, this concept has been the explicit subject of only a small number of studies in medical education.

2.3.1 Teacher identity in the education literature

Notions of identity and teacher identity are complex and contested particularly because the concept is considered from different perspectives in different disciplines. Psychologists may understand identity as innate characteristics, sociologists may see identity as socially constructed in various ways and other emphasise discourse and the discursive construction of identity (Maguire, 2008). This study is not interested in identity broadly, but in the more specific matter of ‘teacher identity’.
In the education literature, the notion of ‘awareness of oneself as a teacher’ is discussed in terms of ‘teacher identity’ and studied as a distinct research area (Beijaard, Meijer, & Verloop, 2004). Understanding how teachers think about themselves as teachers is seen to be important because these identities are said to shape the dispositions they bring to teaching, to affect where they place their effort, to determine how they seek out professional development opportunities and to influence the obligations they may see as intrinsic to their role (Hammerness et al., 2005).

In this study, my approach to teacher identity is influenced by Maclure’s position that teachers’ identities can be seen as more than sets of characteristics (MacLure, 1993). Rather, they are more like struggles and arguments, ways that teachers defend or justify certain claims and actions and particularly employed for these purposes amidst change and conflict. Also, another understanding of the concept of teacher identity highlights the need to recognise the broad political environment within which teachers’ identities are made and considered. From this perspective, teacher identity needs to be taken as problematic rather than presumed to be a set of externally ascribed attributes that simply serve to differentiate one group from another (Sachs, 1999).

So there is not an explicit definition of the concept of teacher identity in the literature (Beijaard et al., 2004). For the purposes of this study, I assume that identity may be revealed indirectly by what teachers say about (their) teaching and about themselves as teachers as well as by what they do – not just by asking them directly about their ‘teacher identity’ or using a questionnaire. Following Maclure (MacLure, 1993) teacher identity may also be seen as in process or an argument. Thus, by listening to a teacher talk about teaching, about him/herself as a teacher, about the environment for the teaching and about others in that environment – combined with observing the teacher in action with students – it is possible to infer how that teacher thinks about the self as a medical teacher at that time and in that place. The inferred pictures become the understandings of the teachers’ identities developed in this study.

2.3.2 ‘Teacher identity’ in the medical education literature

The concept of teacher identity has not been widely studied in medical education, and not studied in Australia. Recently, Stenfors-Hayes and colleagues published reports of studies that reveal valuable understandings of medical teachers’ ways of thinking (Stenfors-Hayes, 2011; Stenfors-Hayes, Hult, & Dahlgren, 2011; Stenfors-Hayes, Hult, & Dahlgren, 2010; Stenfors-Hayes, Weurlander, Dahlgren, & Hult, 2010). The focus of that work was medical teachers’
different understanding of what it means to be lecturers, clinical supervisors and mentors. The work offers insights into medical teachers’ conceptions of teaching and being a teacher in different settings, although the authors do not specifically locate their work in the area of ‘teacher identity’.

There have been studies of medical teachers’ identities in the USA. Those studies were motivated by researchers’ concerns with the challenges of attracting, retaining and professionally developing medical teachers. Stone and colleagues interviewed a group of ten medical teachers who had been identified by others as ‘excellent’ members of the medical school faculty (Stone et al., 2002). The researchers anticipated that if these ‘excellent’ medical teachers identify themselves as teachers, this may increase their desire to teach, their satisfaction in teaching and, ultimately, affect student learning. In this study, I do ask participants directly whether they see themselves as teachers, but also, as indicated earlier, I investigate their tacit perceptions of themselves and their teaching.

Stone et al used interviews to understand what the participating doctors perceived to be important to their identities as teachers. They found four themes in the interview data:

- There was an underlying humanitarianism in the ways teachers talked about themselves as teachers, a sense of being involved with humanity and a desire to connect with the learner.
- The sense of being a teacher was associated with having a familiarity with adult learning principles including identifying students’ learning goals and fostering a love of continuous learning.
- Being a teacher means understanding both benefits and drawbacks of teaching but the benefits were seen to outweigh the drawbacks (including seeing teaching as a way of updating doctor’s own knowledge).
- A strong image of the self as teacher was discovered and this was interwoven with the identity as a physician with the teachers first seeing themselves as doctors.

In addition to these emergent themes, the report discusses three further issues. First, the teachers have strong feelings associated with their identity as teachers especially the enjoyment they get from teaching. Second, the researchers were concerned that the teachers do not associate their teacher identities with student learning as teachers do in other settings (Angelo, 1996). They suggest that this lack of association with students’ learning may be explained by the short periods of time that medical teachers have contact with medical
students and are not involved in student assessment. The third issue is that the medical teachers’ identities were associated with a perceived integration of the roles of doctor and teacher which the researchers regarded positively. In the light of these findings, they recommend that novice medical teachers should be mentored and that faculty development programmes should foster teacher identity development. They also recommend that further research is needed to establish the degree to which teachers other than ‘excellent’ teachers identify with the same priorities.

In the same medical school, Starr et al studied another group of medical teachers (Starr, Ferguson, Haley, & Quirk, 2003). The participants in their studies were community preceptors, probably akin to general practitioners in Australia. Like Stone et al, this research group was particularly interested in knowing how the teachers’ identities can be made stronger as a means of improving recruitment and retention of high quality teachers (Starr et al., 2003). They involved 35 community/primary care preceptors in focus groups; all of the participating teachers had previously completed the institution’s faculty development. The researchers identified themes and found the most common expression of teacher identity was the feeling of intrinsic satisfaction that teaching offers. The other themes related to the importance of having knowledge and skill about teaching, having a sense of belonging to a group of teachers, and thirdly, about receiving rewards. As well, the teachers in this study placed some importance on the idea that being a physician means being a teacher, suggesting a strong sense of responsibility to teach medicine. The researchers discuss the systemic threats to the feelings of intrinsic satisfaction that are central to a teacher’s sense of self as a teacher: the many demands on doctors in hospitals may erode the satisfaction and thereby erode the teachers’ identities. Subsequent to the initial study, this research group developed a questionnaire that they suggest could be used to measure the strength of medical teachers’ identities as teachers (Starr et al., 2006).

These are important studies in an area of medical education research where the understanding of teacher identity is undeveloped compared with what is known about other teachers’ identities. The findings suggest the need for research into medical teachers’ identities in the context of the Australian health system and the medical education landscape here.

3. The approach to ‘pedagogy’ in this study

The theoretical framework for this study was one which ‘evolved and developed out of the fieldwork itself’ – more than one that was tightly defined prior to and therefore directing the
study – an approach that allows the researcher to begin with ‘an idea of the parts of the phenomenon to be explored’ (Miles & Huberman, 1994, p.17-21). The study of medical teachers was initially framed by a particular understanding of ‘pedagogy’, a concept which ‘is understood in diverse ways, depending on the historical and cultural traditions and contexts in which it is used’ (Smith, Edwards-Grove, & Kemmis, 2010, p.3), but here understood to encompass both the interpersonal and the technical aspects of teaching. It extends further than the common reference to ‘the teaching and learning process’, (McLeod, 2003, p 638) in order to capture elements of the ‘relational sphere between teachers and their students … ways of being and interacting [with young people]’ (Smith et al., 2010; van Manen, 1999, p.19). Studying pedagogy from this viewpoint, implies a focus on the person who is the teacher and the ‘interpersonal instructional (or facilitative) act’ in teaching (Yates, 2009, p.20). It implies an interest in the ways teachers are with students and what teachers do with/for students. Teachers’ practices of explaining, asking, answering, repeating and showing are common pedagogical acts while the non-verbal behaviours such as gestures, expressions, positions and use of voice are the interpersonal aspects of medical pedagogy that help to form relationships and create particular learning environments. Aspects of each of the two domains are understood as interacting in ways that facilitate, neutralise and/or obstruct the success the teacher has in achieving her goals.

4. Summary and outline of chapters

This is a qualitative study of hospital-based medical teachers in Melbourne, Australia. The interest in conducting this study initially arose from my work with medical teachers in hospitals and was consolidated and refined by identifying the need for a research-based understanding of these teachers’ values and perspectives. In the first part of this chapter I outlined the context of medical education and the situation for medical teachers in Australian hospitals. This context influences many factors of the educational environment, including the teachers and their teaching. Despite various efforts to reform medical education, the teachers in hospitals have not been the focus of research or practice. In the second part of the chapter I discussed the starting points in the literature that helped to frame the design of the study and the questions investigated. This discussion reveals that there has been less interest in the person who is the medical teacher than there has been interest in classifying aspects of effectiveness and excellence in their teaching. Also, the discussion revealed that in the broader literature on education and teaching, there is considerable agreement that teachers’ beliefs and identities influence the kinds of teaching they offer students. There is also a growing interest in the effects of environments on both teacher identity and teaching. What
emerges is a picture of an under-developed area of research, an inadequate understanding of the people who implement the curriculum as they teach medical students in Australian hospitals.

The study was designed to answer three questions:

- How do hospital-based medical teachers think about teaching?
- How do they think about themselves as teachers?
- How do they go about teaching?

In Chapter Two I take up the methodology and design of the project. I explain why a qualitative approach employing both observations and semi-structured interviews is appropriate to the research questions and purposes of this study. That chapter also sets out the approach to the selection of participants for the study, details of ways the data were gathered and interpreted and ethical challenges that arose in the course of the research.

Chapters Three, Four and Five are not reports of different questions or parts of the study, but are discussions of themes emerging from what was said and emphasized across the study in relation to each of three domains of interest in teaching – knowledge, pedagogy and identity. In each case they are based on the repeated re-reading and coding of the transcripts and observation notes described in the previous chapter, and involved an ongoing dialogue with relevant literature. The distinction between the first two themes, knowledge and pedagogy, was developed in the light of the data rather than my starting questions, given that ‘how medical teachers go about their teaching’ and ‘how they think about teaching and themselves as teachers’ is embedded in both.

Chapter Three is the first of the results chapters. The chapter shows that when invited to talk about teaching, these teachers emphasize what they are teaching, their clinical knowledge (the curriculum), rather than how they teach, their pedagogy. The discussion of the data reveals the particular form that this knowledge is seen to take, the intricate involvement of settings and people in its formation and the teachers’ perception of the relationship between different knowledges.

Chapter Four discusses the teachers’ approaches to teaching. It shows how in both discussion and practice, these teachers give more emphasis to the relational than to technical aspects of pedagogy. Influenced more by the past than the present or future, the teachers invest more of themselves in a connectedness with students than they do in seeking out more technical
expertise or in connecting to the University. This chapter discusses the reasons for these preferences and some implications for the practice of medical education.

Chapter Five addresses the question of how the teachers’ think about themselves as teachers. Through three iterative processes, the chapter builds the story of these teacher identities. First, the findings in chapters three and four are revisited in order to draw out and further interpret the sense of teacher identity implied there. The teachers’ representations of knowledge and their place in its making are re-examined through different theoretical perspectives on knowledge and professional identities. This chapter also discusses other data from the study that reveals more of what is at the heart of teaching and the place teaching has in their professional lives.

Chapter Six draws together the findings and reflects further on the contribution the study makes to medical education. There is an exploration of specific implications for practice and directions for future research.
Chapter Two

Methodology
The opening chapter highlighted the relevance of medical teachers’ own thinking to the teaching they do and to what is made available to students, and made a case that there is need for more research relating to medical teachers in hospitals. This chapter explains the design and methodology of the current study, a project undertaken to focus on a particular group of medical teachers – those for whom teaching is a small part of their work in hospitals and who undertake the teaching without University appointments. The study aimed to generate a better understanding of these teachers’ values, perspectives and approaches. As the previous chapter indicated, much more of the existing literature on medical education has been focused on models of good teaching than on the people involved in medical education and the views they bring to it, and yet the latter is seen to be important. This study then was designed to take a qualitative and open-ended approach to the views these teachers have; it was not designed to test particular hypotheses or to make judgements about the effectiveness of their teaching. The research was framed in terms of three initial questions: How do medical teachers think about teaching? How do medical teachers go about teaching? How do medical teachers think about themselves as teachers? By listening to the teachers and observing their interactions with students in various settings I wanted to come to know more about them and their work.

This chapter first sets out the rationale for the broad methodological approach to the study and the study design. Following this, I set out and justify the approach taken to each of the particular processes used to answer the research questions, specifically addressing the procedures for sampling, recruitment, data collection and analysis. The final part of the chapter provides an account of the interpretive processes employed in analysing the data.

1. The rationale for a qualitative approach

The concern of this study was with eliciting meanings and with understanding how medical teachers in hospitals see themselves and their work in teaching students. A qualitative approach would allow me to enter the world where the teachers work, to get to know them and earn their trust (Bogdan & Biklen, 2003) as a basis for pursuing an understanding of the values and perspectives they bring to teaching students. Such approaches are designed not just to see how participants measure up or respond to our questions and frameworks, but to try to uncover what are their own frameworks for approaching their teaching (Simons, 2009). Although quantitative and highly structured approaches to research are still more readily accepted than qualitative approaches in medicine (and to an extent in medical education), a
quantitative, pre-structured, statistically-based approach would not generate answers to my research questions because the basic research intentions are different:

‘The word qualitative implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured … . Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry. Such researchers emphasize the value-laden nature of inquiry. They seek answers to questions that stress how social experience is created and given meaning. In contrast, quantitative studies emphasize measurement and analysis of causal relationships between variables, not processes. Proponents of such studies claim that their work is done from within a value-free framework’ (Denzin & Lincoln, 2005, p.10)

Given these fundamental purposes, a central feature of qualitative research is that it is conducted in natural settings, where people are not manipulated in advance and no predetermined categories are used to constrain the outcomes of the study (Patton, 2002, p.39). In seeking answers to the research questions in this study, it was necessary to conduct the study in the places where the medical teachers practice and teach. To conduct a study otherwise is thought ‘to divorce the act, word, or gesture from its context [and] is, for the qualitative researcher, to lose sight of significance’ (Bogdan & Biklen, 2003, p.5) Contextualised data is essential to the types of understanding I sought.

As well, a qualitative approach would allow the world of the teachers to unfold naturally in front of me, allowed me to be open to whatever emerged (Patton, 2002) in the various places (physical and metaphorical) to which the teachers took me. I collected the data through unstructured observations of the teachers as they interacted with students (as well as with other staff and patients) in different situations. Subsequently, I conducted semi-structured interviews to draw them into discussions, allowing me to listen to their perspectives on teaching and being a teacher. An essential interest underlying the choice of this qualitative approach is in understanding the subjective aspects of people’s behaviour. My use of observations, in keeping with ethnographically-framed qualitative traditions, was intended to give me some access to how these teachers acted, not just what they said they valued. Conversely, the interviews provided opportunities to hear how they thought, not just what they overtly showed by their action.
The study is not explicitly affiliated with one particular school or tradition of qualitative research, although it does reflect elements of ethnographic research in its unstructured approach to observations in the field and in the semi-structured approach to the interviews. Rather, the research was guided by interests that are broadly shared by qualitative researchers as means of finding and understanding the meanings people bring to and give to phenomena (Denzin & Lincoln, 2005), and in establishing its rigour by displaying the details of the processes of data-gathering in the field, and interpretation of the data in ways that meet accepted standards across the qualitative methodological literature.

In the fieldwork I adopted a position of empathic neutrality (neither aloof, nor passionate). Such a stance allowed me to have relationships with the teachers (and bystanders) that were respectful and sensitive, as well as keenly interested but essentially non-judgemental (Patton, 2002).

Given these characteristics (the purposes, the places and the techniques), the initial phase of the study aims to produce data that is detailed, with some ‘thick’ descriptions to take the reader into the setting (Patton, 2002, p.437) via direct quotations from observations, field notes and interviews. Moving from there to thematic analysis and to produce interpretations and conclusions from the study is an inductive process through sustained immersion in the details and specifics of the data (Patton, 2002), coding and repeated readings, and dialogue with the literature and further readings. (Specific examples of this are given later in this chapter.) My approach to analysis and interpretation is consistent with the overall rationale for taking a qualitative approach. That is, efforts were made to understand the whole in order to understand the particular and, conversely, I also made efforts to understand the parts (utterances and acts) in order to grasp the whole – intentions, the institution, the social activity (Schwandt, 2003). These movements back and forth from the data to the theorizing (the literature and my own professional experience with medical teachers) and back again, characterise both the processes of the research in this study and the form of reporting in this thesis. Chapters Three, Four and Five in the thesis exemplify the interpretive process of linking the data to interpreted meanings in the data, the claims to the evidence for the claims. Throughout these processes, the supervisors provided ongoing scrutiny of the researcher’s actions in producing the findings and drawing conclusions.

The cycles and processes of coding and building of the analysis and interpretation are detailed in the latter section of this chapter.
2. Establishing trustworthiness

Rigour is achieved in qualitative research through the use of processes that, in their explicit description and documentation, allow the research to be judged as credible, transferable, dependable and confirmable (Denzin & Lincoln, 2005). Trustworthiness (rigour) in qualitative research (compared with surveys and statistically based research designs) cannot be established technically in terms of pre-set techniques of analysis since the aim of the research is to uncover new insights about how participants think and act (Denzin & Lincoln, 2005). Rather the evidence and the case for its appropriateness, relevance and sufficiency has to be made discursively in the writing itself. What is required are descriptions of processes used in analyses and re-checking of those to demonstrate what the researcher did in carrying out the research to avoid arbitrary interpretations.

In this study, three main processes recommended in the methodological literature are used to build trustworthiness. First, triangulation is a means of cross-validating data and interpretations by using multiple sources of evidence and different analytical techniques to answer the research questions; it adds rigour, breadth, complexity, richness and depth to an inquiry (Denzin & Lincoln, 2003, p.8). Second, reflexivity – that is, a critical awareness and discussion of the researcher’s own perspective and the potential effects of their presence and impact in relation to eliciting and possibly influencing responses – is an important feature of the research account to show the way the production of evidence is critically assessed, not taken at face value. Third, the process of building analytic claims requires sufficiently detailed descriptions of the processes the researcher uses and of the ways in which claims relate to data for the reader to have confidence in their non-arbitrary character.

2.1 Triangulation

I used a number of techniques to obtain data from multiple sources in order to allow for cross-checking in the analysis: the study group was diverse and the participants were located across three hospitals (triangulation of research subjects); second, triangulation of methods (observations and interviews), and third, triangulation of settings (the teachers were observed in a range of classroom and clinical teaching settings).

In addition, I conducted particular cross-checking processes in the analysis and interpretation of the data (Patton, 2002). First, different techniques were used to analyse the data: I compared the findings in the interviews with the findings generated by observations, and meaning found in both consistencies and inconsistencies there. Second, the internal qualities of the sources were interrogated: I questioned what the teachers said to the researcher and to
the students; what they said at one point in the interview and then later; how one teacher’s viewpoint compares with the viewpoints of other teachers. Finally, multiple theoretical perspectives (from education, medical education and the sociology of education) were used to interpret the data.

2.2 Reflexivity

Qualitative research requires the researcher to acknowledge that they were present in the world they are studying, that they bring their own biographies to the research, and that this means that participants behave in particular ways in their presence (Cohen, Manion, & Morrison, 2007). It is necessary both in the conduct of the research and in the subsequent account of it, for researchers to be alert to the impact they are having on the study; it is also expected that the researcher will explicitly discuss this issue (Hamersley & Atkinson, 1983) in the report.

‘Members of the community are reacting to this particular ethnographer and the cues he or she generates, not to “an outsider” in a generic sense ... different ethnographers ... might well stimulate a very different set of interactions, and hence a different set of observations leading to a different set of conclusions’ (Angosino & Mays de Perez, 2003).

I noted earlier my stance in the field as one aiming to present ‘empathetic neutrality’. Nevertheless it might be argued that my current position in medical education in the FMDHS may have influenced various aspects of the research from both my own and the participants’ perspectives. For example, it is likely that the teachers, having read the initial invitation and consent form, may have prepared how they wanted to interact with the researcher as educated and professionally empowered people may wish to do (Sorrell & Redmond, 1995). Two teachers mentioned in the interviews that they had thought about what they wanted to tell me – about the curriculum, their work, and what I needed to know more about.

An important factor to manage was the possibility that the teachers would think of me as a critic (Bogdan & Biklen, 2003) of their teaching practices, there to make judgements about how good they are in different settings. At different points in the study, I took action to manage this possibility. In the initial correspondence with the teachers, and again before the teaching began and at the start of or during the interviews, I explicitly reiterated that this was not an evaluation study (See Appendix B, email invitation). Also, I took care when observing the teaching to take up the least conspicuous position available, to avoid eye contact with the
teacher and mostly resisted taking notes during the session. In spite of these efforts, it is likely that the participants’ awareness of my academic position as well as other characteristics (for instance, my age, non-medical perspective, personality and gender) came into play in the interactions with the teachers.

Nevertheless although no interviewee/interviewer interaction is neutral, it is unlikely that the ways participants may have shaped their response to my particular presence seriously distorted the kinds of issues I will go on to discuss. I was not their superior and they were unlikely to be concerned about loss of face by what they said. If they thought about what they would say in advance, that means only that their responses were more considered.

2.3 Considerations of dependability and transferability

‘Dependability’ is parallel to judgements of reliability in quantitative research. By providing an audit trail (Lincoln & Guba, 1985) in qualitative studies, the researcher can allow others to access study documents that reveal how the outcomes were reached. For this study, comprehensive records have been retained and are accessible: records of meetings, transcripts, audio-recordings, analytical moves, personal reflective notes, and drafts of findings chapters have all been retained. Also, in the writing, there are detailed explanations of the analysis processes undertaken and evidence is provided from the data to support the claims being made.

A criticism often levelled at qualitative research is that findings from studies other than large scale investigations are not able to be generalized in the same way that through statistical procedures generalization can be established in large quantitative studies (though such studies often establish only probabilities rather than what would be seen in each specific situation). One response is that, in making such judgements about qualitative studies, the term ‘transferability’ is used (in preference to ‘generalization’). ‘Transferability’ refers to the ability of readers to make judgements about the usefulness of the findings in other contexts, and the ability to interpret or see the findings in other different settings (Patton, 2002). It acknowledges the inevitable variability of natural settings; detailed contextual qualitative accounts should enable readers to see where the phenomenon occurs in other settings that are contextually not identical. It is possible to assess the typicality of the participants and the settings of this study to identify possible comparison groups, and thus to indicate how data might translate into other medical teaching settings (Lincoln & Guba, 1985). The following section in this chapter provides details of this sample of participants in this study as well as
details of the techniques used to make the sample adequate for the purposes of establishing transferability.

Transferability is further established through the provision of thick descriptions in the reporting, (Patton and (Bryman, 2004). In addition to details of sampling decisions, I have provided detailed descriptions of the contexts in which the field work was conducted including details of particular incidents that occurred during the study as these provided important perspectives and insights. Also, in the ensuing sections of this chapter, thick descriptions are provided of the particular approaches I took to conduct the observations and interviews.

Finally, the notion of naturalistic generalization (Stake, 1995) is also used in discussions of qualitative methodologies referring to the process by which readers of qualitative research read the particulars of cases and encounters so that a general knowledge is built of the subject area. This cumulatively results in what Guba and Lincoln see as a sense of the ‘fittingness’ of a particular study (Patton, 2002, p.584). This study, with details of the encounters with the teachers, contributes to the general knowledge of medical teachers that is becoming available to those making (research and practice) decisions about these teachers.

The following section of this chapter explains the data collection processes and is followed by detailed explanations of the analysis and interpretive processes used.

3. Sampling and recruiting processes

This kind of research must balance the inevitable issues of the adequacy of the sample and the needs for an intensive approach that limits total numbers that can be studied. The methods of interpreting the meanings of data collected in interviews and observations is time consuming and the iterative interpretative processes need to be undertaken over a period of time. The scope of this doctoral study required therefore that the number of participants needed to be sufficiently limited to allow adequate time beyond the data collection period for thorough iterative analysis and writing (Bogdan & Biklen, 2003). Sampling decisions were made with the intention of achieving sufficient spread of medical specialty, location, gender and the like in order to encompass differences and not be atypical. The study is however specific to a single city and university context, and the numbers in it are not of sufficient size to investigate or test within-group differences. Rather, the focus was the medical teachers as a group, and the diversity in it sufficient to this purpose.
3.1 The participants
The research plan was to observe and audio-record between 20 and 30 medical teachers in one teaching session, interview them and repeat the observation and interview. The actual study involved 25 volunteer medical teachers from three teaching hospitals and most were observed once and interviewed once. The rationale for the adjustments to the original plan is explained below.

3.2 The Sites
Three ‘teaching hospitals’ associated with the FMDHS were selected as sites for this study. A ‘teaching hospital’ is one that has medical and other health professional students undertaking ‘rotations’ during their university courses. For medical students, these rotations involve both classroom teaching (conducted mostly by doctors) as well as scheduled and unscheduled contacts with patients; some of that contact involves doctors teaching students with and around patients. The three sites had these characteristics: one central metropolitan, one suburban, one outer suburban; two have long term associations with the University, and one has only recently become an independent clinical school. Difficulties with administrative procedures at the central metropolitan site early in the planning phase required the selection of an alternative site in the same region, one with similar characteristics as the original site. This change is described in the Ethics section of this chapter.

The researcher’s own work in medical education is located in only one of these hospitals. The first part of the fieldwork was undertaken in the two hospitals where she does not work and does not know the medical teachers. Subsequently, interviews and observations were conducted with teachers in the hospital where the researcher works.

3.3 The Teachers
The recruitment decisions were driven by the research questions and focused on recruiting individuals for diversity, that is, with variation in terms of gender, age and medical specialty. Recruitment decisions were not based on trying to establish a numerically representative sample; that would require larger research numbers and a different kind of research methodology. Also, the intention was to recruit teachers who taught in both classroom and clinical settings to provide for discussion of teaching and teachers in each setting.

Participants volunteered to take part in the research and some explained in the interviews their reasons for participating: one, having been a researcher, was sympathetic to the researcher’s need to recruit; another was concurrently conducting qualitative research for a
community organisation and was curious about the interview process; one teacher had thought about what he wanted to ‘tell’ me particularly his opinion of the UoM; another teacher said she thought that if someone considered medical teaching was important, she should support it; and, another said he takes medicine seriously and saw this as an opportunity to contribute to the profession. Thus, the motivations are variously personal and professional, invested and disinterested and it is likely that the participants are like the wider medical teaching workforce.

3.4 Sample Size

The research plan was to conduct two observations and two interviews with each participant based on the estimation that sufficient data would emerge from between 20-30 participants from across the three sites. The recruitment continued over a number of months and participants from each site responded to the invitation at different times during that period. Therefore, the recruitment, field work, data processing and initial analysis proceeded concurrently. There was less heterogeneity (Cohen et al., 2007) than expected in the stories and observations, particularly as encounters in clinical settings were characterised by repeated procedural pedagogic activities (McLeod et al., 2006). At a certain point, it seemed that the interviews and observations were no longer generating new information (that is, saturation had been achieved) (Bogdan & Biklen, 2003) and recruitment stopped after 25 teachers had been studied.
### 3.5 Recruitment

**Table 1: Steps in recruiting medical teachers**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official contacts and information – Medical Deans/Site leaders</strong></td>
<td>The second doctoral supervisor, the Head of the FMDHS Medical Education Unit, wrote to academic clinical leaders at each of the sites to inform them of the project, introduce the researcher, and encourage them to support the conduct of the study at their site. The researcher then met individually with the academic medical leaders at the sites to discuss purposes and logistics of the project.</td>
</tr>
<tr>
<td><strong>Identifying potential participants – timetable administrators</strong></td>
<td>The researcher met with the Administrator at each site, the person who arranges the teaching timetable, to identify from the timetable the teachers according to the following criteria: 1. be in the 35-55 age range 2. have consultant positions in the hospital 3. be timetabled to take students for both ‘classroom’ teaching (lecture/tutorial) and clinical (patient-based) sessions in the current term of the researcher’s data collection period 4. be in either medical or surgical positions 5. teach medical students in both classroom and patient-based sessions. Potential participants were excluded if they had an official role in medical teaching curriculum or course development with a university or medical college, or had a paid position with The University of Melbourne for their teaching, or if they were junior doctors in training. The participant group was intended to include both males and females from different medical/surgical specialties and from three hospitals with different characteristics: large tertiary metropolitan, medium secondary outer-metropolitan, medium secondary metropolitan.</td>
</tr>
<tr>
<td><strong>Official letter to all potential participants - Clinical Dean and Researcher, Appendix A</strong></td>
<td>The researcher and the Clinical Dean at each site sent a jointly signed letter to all potential participants (54 across three sites) to inform them about the project and invite them to participate. These letters were sent to the potential group at one site, and then, as arrangements progressed, to the potential group at another site, and then the next. This site-by-site process rationalised the travel and data collection processes.</td>
</tr>
<tr>
<td><strong>Arrangements by direct email between researcher and individual volunteers, Appendix B</strong></td>
<td>The volunteer participants and the researcher entered into individual email and/or telephone conversations to establish suitable dates, times and venues for observations convenient to the participant. Prior to the observations, the Plain Language Statement and Consent Form were emailed to the participant, Appendix C Over seven months, this process drew 25 participants into the study at which point recruitment ceased.</td>
</tr>
</tbody>
</table>
The recruitment process was straightforward and resulted in a number of positive responses to the invitation to participate. Initially, an attempt was made to minimise what might be interpreted as unnecessary or even nuisance emails to participants. However, that approach had three disadvantages to the researcher: sometimes doctors had forgotten that they had made an arrangement for the researcher to attend the session; times for interviews had not been always been negotiated prior to the observation; and, the intention to record had to be (re)negotiated if a teacher had forgotten, or perhaps not noticed, the mention of the audio-recorder in the original letter and email. One teacher, at the conclusion of the observed teaching session, seemed surprised by my request to make arrangements for the interview; he suggested a telephone interview would suffice. However, he did not respond to subsequent emails or messages left with his secretary and the interview did not take place. In contrast, all other doctors were prepared (some even seemed pleased) to participate and many talked at length.

Unfortunately, the formal timetable proved not to be an accurate source by which to identify participants based on all the inclusion and exclusion criteria. Each doctor had been contacted and enrolled on the basis that they were currently teaching, teaching in both clinical and classroom settings and did not have university appointments. It emerged once the contacts had been made that some teachers were not teaching that term/year, or not teaching in both clinical and classroom settings. Also, it emerged during two interviews that the teachers did hold University positions, although these were related to their research, not teaching.
4. Collecting and managing data

**Table 2: Data Summary**

<table>
<thead>
<tr>
<th>Participants</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>total number</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>physicians</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>proceduralists (surgeons &amp; procedural physicians)</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interviews</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>duration</td>
<td>11 hrs</td>
<td></td>
</tr>
<tr>
<td>average duration</td>
<td>25 mins</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>total hours</td>
<td>36 hrs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation types</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Tutorials</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Bedside tutorials</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Clinic teaching</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ward round teaching</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 lists the number of interviews and observations conducted with each of the 25 teachers. Further details are provided in Appendix E. However, while certain participant details (gender, age, vocational group) might be of general interest to readers, these details have not been matched to participants listed. The decision not to provide that matched information was required because the size of the study group makes possible the identification of individual teachers. The group of participants includes physicians from the following specialties: neurology, respiratory medicine, infectious diseases, paediatrics (general and subspecialties), geriatrics, endocrinology, haematology, renal medicine, general medicine and emergency medicine. The group of proceduralists includes doctors from the following specialties: specialist surgery, cardiology, intensive care and ophthalmology.

As the study progressed, three factors affected the number and types of observations that were undertaken. First, as mentioned above, it emerged in some interviews that some of the participating teachers were not scheduled to teach in both settings during the period of the data collection meaning it was not always possible to observe each teacher in the two settings. Second, the interviews drew on the observed teaching session but the discussions ranged over many matters relevant to teaching and to being a teacher; they did not focus only on the observed session. Third, as mentioned above, there were more similarities than differences
between the teachers in clinical settings. After observing a number of teachers in one type of clinical setting, say ward rounds, it emerged that all teaching in that setting appears similarly constrained by time, high patient load, and space available for interacting with students – and possibly by tradition. Thus, observing a total of 12 different teaching sessions in clinical settings produced enough variation for iterative analysis, and a decision was made that it was not necessary to continue to observe every teacher in two settings.

4.1 Recording and identification
The interviews and the teaching sessions were recorded on a micro digital recorder and each recording was immediately downloaded to the researcher’s computer. The recordings were numbered in the order in which the observations were conducted and there are no identifying details other than each teacher’s voice. The interview transcripts contain the alphabetical identifier given to each participant, no names or other identifying information was included on the written or recorded data.

4.2 The observations
The observations of teachers with students were intended to achieve two purposes. First, being in the teaching session was meant to provide a point of reference, to generate something specific for both the researcher and the participant to refer back to in the subsequent interview. The second purpose was to gain a sense of the doctor/the person as a teacher. Seeing and hearing a teacher ‘in action’ and in context, thus made the observations more than mere elicitation devices or supplements to the interviews. Third, the recording of the teaching sessions provided a data source to return to for evidence in the interpretation and subsequent reporting – what was said, how it was said, and what preceded and followed an utterance. The observation data were referred to during the back-and-forth interpretation of the interview transcripts. For example, in one bedside tutorial – six students around the patient being examined by one student – the teacher made some ‘soft’ jokes, one about a piece of medical equipment. While this appeared to be an innocuous social action, the teacher’s subsequent elaboration revealed more. He explained that ‘making wise cracks’ helps ease the tension for the students (and perhaps for the patient) in bedside teaching sessions. His explanation allowed for the utterance to be interpreted as potentially meaningful pedagogical action – the sort of things medical teachers do. This two-way meaning-making is central to the interpretive processes explained in the next three chapters.
4.2.1 Observations: Practicalities

In line with usual practice in qualitative research, observations in this study were grounded by the research questions (Punch, 2009) and by the literature discussed in the previous chapter. At the same time, there was a deliberate orientation to being open and inductive to what the medical teachers themselves were doing and what they were emphasizing. The observations required particular alertness and responsiveness to the sensitivities and action in the clinical teaching settings where patients were involved. Also, a particular focus was to identify at least one moment or teaching practice which could be explored in the interview.

The researcher usually took up a position at the back and the side of the student group. In classrooms this was easy and mostly predictable but each situation was negotiated with the teacher (and sometimes the students). In one instance, the researcher was asked to sit where the teacher could not see her during the teaching. The location of the digital recorder also had to be negotiated. Where patients were present, taking up a position was more awkward and difficult because clinical areas are always small, often with no spare space. In the small Outpatient (OP) clinic rooms the researcher was seated alongside the medical student observer. In ward rounds and bedside tutorials, the researcher met the teacher and then the student group at the ward desk prior to the start of the round as arranged, and followed behind or beside the group. This arrangement provided the opportunity for some brief social and professional chat with the teacher and the students, as the group approached and moved between patient rooms. All of these situations required watchful consideration of patients’ privacy and students’ needs to learn. In three instances, based on hearing the story of a particular patient’s (emotional or social) situation, the judgement was made that my presence would crowd or complicate the medical consultation; I chose to wait in the corridor rather than enter those clinical areas.

4.2.2 Observations: Rapport

The original research plan included an initial meeting between the researcher and each participant. This was intended to provide an opportunity for the researcher to establish some trust of her and the research activity. However, none of the teachers made themselves available for a meeting prior to the observed session. One possible explanation of this is that the content and tone of the early email and telephone conversations in which observations of teaching were organised had already established sufficient trust. Also, of course, the doctors do not have time for unnecessary meetings. The result, though, was that the first few moments of contact in or outside the teaching setting were important for the researcher to
meet the teacher and establish a beginning level of rapport to carry into being an observer in
the teaching session. Those moments required the researcher to demonstrate a sufficient mix
of humility, professional confidence and commonsense to be trusted in the setting. Following
those brief contacts, the researcher negotiated entry, seating and consent-seeking with each
teacher and the bystanders (students, patients and others) as explained in Appendix D. In each
case, the teacher determined (actively or passively) the way this could be done.

In terms of furthering the rapport between the researcher and the teachers there were,
fortuitously, many opportunities to walk and talk together to the place for the interviews after
the teaching had been done. These were important moments for the researcher to get a sense
of the personality of the teacher, the likely level of formality in the impending interview, the
amount of time available, and sometimes, the teacher’s attitudes to the research. For
some of
the teachers, these were opportunities to ask more about the researcher’s experience and
background. Bogdan et al see value of social interactions with participants: as the field work is
undertaken, the researcher participates with the subjects in various ways such as joking and
behaving sociably (Bogdan & Biklen, 2003). This characterizes the interactions with some of
the teachers in this study before, during and between the observations and interviews. The
interactions are undertaken in order to advance the research goals. In this study, the
researcher’s experience was that every exchange further established the rapport and infused
the observations and interviews with an appropriate and comfortable atmosphere.

4.2.3 Observations: Problems

It is common that times and venues for medical teaching in hospitals are changed as doctors
move between clinical, research, administration and teaching responsibilities. This affected the
field work. Dr B rescheduled the teaching that had been set up as an observed session and did
not notify the researcher. Dr K cancelled a session due to illness but his staff did not notify the
researcher. And, the scheduled OP session which had been arranged with Dr C, did not take
place because the students – approaching end-of-semester examinations – did not arrive for
the clinic. Sometimes, the session missed was the only opportunity to observe the teacher in
that setting.

There were particular challenges in recording teaching in clinical settings. Sometimes I arrived
at the scheduled time and place but the teacher seemed to have forgotten about the
arrangement that had been made (by email, sometimes weeks prior to the event). In these
situations, the teacher did not recognise me as a researcher, or looked surprised and quickly
make adjustments to standard procedure. Also, if they had also not noticed or had forgotten
about the plan to record, this had to be negotiated within an already busy and complex situation. In the Ethics section later in this chapter, there is an explanation of how each teacher had their way of dealing with the information-giving/consent-seeking moment with patients. This was sometimes awkward, the presence of the researcher and the requirements of the research adding to the already busy work. After some experiences of this, the researcher sent an extra email reminder to other participants as a way of streamlining the process.

In certain clinical teaching settings, it was not always possible to record any or all of the session. As I explain later, gaining consent from patients was often a complicated and rushed process and sometimes it was obviously another burden in an already complex clinical situation. In some instances, I judged it to be inappropriate; I did not record and relied on my post-observation notes. In other sessions, where, for instance, I observed the doctor as clinician and teacher for an hour or more, I learned to read the situation and to anticipate the moments that would involve the teacher with the student. In this way, I could record only those teaching moments rather than record any of the doctor’s conversation with the patient.

4.3 The interviews
The first draft of the interview guide presumed that some questions would be asked in the first and some in the second interview. However, it became apparent in the first interview, that this structure seemed both to intrude on the natural flow of the conversations and also it failed to capture some aspects important to the study. Further, as explained earlier, the plan for conducting two interviews with each participant was abandoned once some interviews had been conducted. Therefore, most of the interviews were based around the following questions and prompts shown in Figure 1 below.
**Figure 1: Interview Questions**

1. It was good to see that teaching session. How typical was it?

2. How would you broadly describe what it is that you were doing in that session?

3. Something I noticed when you were teaching in that session was [describe the behaviour observed]. Can tell me more about that and perhaps why you do it that way/why it happened that way?

4. Do you think of yourself as a teacher? What does it mean to you as a person and as a doctor to be a medical teacher? What’s important to you about being a teacher? Has the way you think of yourself as a teacher changed over time? Do you think of yourself as a teacher differently in different settings? What feelings are associated with being a teacher for you? Do you talk with others about being a teacher?

5. What have been the main influences on you as a medical teacher and how/what you teach?

6. What else is it important for me to know about being a medical teacher? What have I missed?

7. Thank you (and further arrangements).

Figure 1 shows how the interviews were semi-structured, and allowed for the discussion to move around these broad areas of teaching and teachers in whatever order suited the flow of conversation. This approach worked with all but one doctor who liked telling long stories which make it difficult for the researcher to guide the discussion. That interview was almost two hours long, included many medical and historical rather than teaching narratives, and was the only one which was transcribed externally as will be discussed later.

The opening interview question provided an opportunity for the teacher to discuss how the researcher’s presence may have affected the session. The responses are discussed in Chapter Four. The second question was intended to take the discussion into some specifics of the teacher’s approach to teaching. It was provided as an opportunity for the teachers to elaborate their pedagogy and highlight what was important from their perspective. The third question gave the researcher the opportunity to focus on one utterance, incident or action in the session. The intention was to provide an opportunity to discuss a particular feature of the session, perhaps something unusual or something that the researcher-observer did not understand. It was an opportunity to discuss a part as a way of coming to a better understanding of the whole.
In that way, the first three questions focused the discussion around the observed session in order to link the talk – the interview – to the action of teaching in order to understand more of both.

The purpose of the next three questions was to facilitate a more expansive discussion of teaching and what it is like to be a hospital-based medical teacher. Question 4 was inserted after a number of interviews had been conducted. It seemed to be needed because in one particular interview (with Dr M) the researcher listened to the doctor listing a vast amount of teaching that he does and has done in his career. It occurred to the researcher to ask him whether he thought about himself as a teacher. As discussed in Chapter Five, the question was subsequently put to 16 participants and the responses were valuable in the back-and-forth interpretation of the notion of teacher identity in the context of other findings and the literature.

Question 5 was intended to provoke a reflection by each teacher on teaching in their career. As each interview progressed, however, it was often not necessary to ask this question: many teachers talked about what was important to them in teaching, why they do what they do and who or what affected the approaches they adopt. Question 6 was designed to hand over the final direction of the interview to the teacher, to allow each one to discuss something that was important to them. As well, it provided a signal that the interview was coming to an end. It proved to be a valuable question. Teachers used the question for different purposes: to reiterate a point they had already made; to elaborate on something that the researcher had asked about that appeared novel idea to them; to tell the researcher something that should have been included in the interview; and, finally, to make comment about the value of the interview for them.

Appendix E includes details of the number and duration of the interviews as well as the locations. The interviews took place in a range of venues, each chosen by the teacher. Not all venues offered suitable seating arrangements or optimal conditions for recording. The most suitable for recording was the visiting doctors’ lounge and the least suitable was a hospital café and the car phone (subsequent to the corridor).

**4.4 Field Notes**

In addition to the transcribed interviews, field notes were collected as jottings after all observations and interviews. These were referred to repeatedly during data processing as well as the analysis and also during the writing to confirm details or for finer-grained insights than
the transcriptions provided – notes on people, objects, places, events, activities, corridor conversations, ideas, reflections and hunches. Comments made and questions asked by students and other staff that were not audio-recorded were also captured in the notes as were impressions and extra remarks made by a teacher before or after the interview when the recorder was not on (Bogdan & Biklen, 2003). The notes are valuable for recording details of the settings that observers notice and recorders miss.

4.5 Transcribing and data processing
The recordings of the teaching sessions were not transcribed because there was no plan to use discourse analysis or conversation analysis techniques. Instead, they were replayed so that each one was heard again immediately after recording it, and commentary notes made; also, the recordings were referred back to at different times as required during the analysis process. This constant referral to the data allowed the researcher to remain familiar with each teacher and each setting; it prompted recall of the content and dynamics of the setting. Throughout the analysis and writing processes, language and mental pictures could be called on and referred back to for details; as well, excerpts could be transcribed to illustrate the findings and substantiate the interpretations.

The researcher transcribed all interviews except one (as explained above) which was professionally transcribed in detail that was not required for this study. Doing the transcribing – the physical and mental processes of listening a second time to a teacher and painstakingly recording their words – helped to reinforce images and recollections. These endured into the analysis and writing.

Immediately following each data collection event, the recordings of the observed teaching session and the interviews were processed. First, the recordings of the teaching session were replayed and written comments made to supplement notes made at the time of or immediately following the observation. Second, the interviews were transcribed using MS Word and notes and comments were made on each transcript to capture points the teacher was making and the researcher’s thoughts about them including actions and moments recalled from the event. The transcripts were entered into the software ‘NVIVO 9’ for future data display and analysis as required.
5. Procedures employed in data analysis

As a qualitative research report, the findings chapters in this thesis provide much detailed description rooted in the text (recordings of observed teaching sessions, interview recordings and transcriptions), capturing the meaning of the everyday teaching experiences of the people being studied.

This section provides a detailed record of decisions, including the procedures for ‘inductive analysis’:

*Inductive analysis begins with specific observations and builds towards general patterns. Categories or dimensions of analysis emerge from open-ended observations as the inquirer comes to understand patterns that exist in the phenomenon being investigated.*' (Patton, 2002, p.56)

This describes the over-arching analytical movements in this study from specific words to broader themes and sub-themes that are explained in this section. Looking further at Patton’s terminology, ‘content analysis’ is explained as ‘qualitative data reduction and sense-making … [an] effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings’ (Patton, 2002, p.453). This describes well the other processes in this study. Here, the search for meaning in the data began with an openness to what the data contains, then attaching labels (codes) to specific features that seemed to have meaning, and moving through a series of discoveries to identify patterns and conceptual categories that could be described.

This section includes a full description of the processes of moving back and forth between the data and emerging categories (Merriam, 1998), the processes through which the essential features and patterns in the data could be identified. Following this explanation, the interpretive processes are detailed revealing how the main elements of the findings were discerned; this includes how the turn to theory at this stage gave plausibility to the conclusions by linking them to larger issues in the scholarship (Wolcott, 1994) of education and medical education. Others have described this process of qualitative research as ‘endlessly creative and interpretive’, rather than one in which the researcher just leaves the field with mountains of empirical material to write up findings. In this way, qualitative interpretations can be thought of as being constructed (Denzin & Lincoln, 2005, p.26). Creative and constructed as they may be, the processes are also careful and thorough as the following explanation in this chapter indicates.
In addition to the analytical procedures described in this section, a reflexive dialogue was maintained in monthly meetings between the researcher and the two research supervisors. They offered extensive research and supervision experience as well as broad content knowledge in education, medical education and the social sciences. Furthermore, the researcher made continued reference to the education, social science and medical education literatures throughout the study, particularly in the latter stages seeking more generative interpretation of the findings.

Key to the processes of analysis and interpretation is the continuous comparison of teachers’ statements – statements made to me and to the students, made at different points in the interview, and one teacher’s statements compared with others. Inter-woven with my own field notes and noticings, this process of continuous comparison facilitated the construction of a set of concepts for higher-level abstraction and interpretation (Merriam, 1998). Those concepts emerged through two inter-related but separate analytical processes; these require separate explanations because the units of data were identified differently.

5.1 Identifying key words and phrases

In the following two chapters, teachers’ use of two particular single words - ‘real’ and ‘interactive’ – are separately explored. In the first instance, the many references to something as ‘real’ were intensively examined to understand the meanings the teachers attached to the word. That examination revealed something about the teachers’ priorities and this is the subject of Chapter Three. Separately, noticing that ‘interactive’ was being used often and in ways that surprised me (Bogdan & Biklen, 2003), a similar analytical procedure was used to reveal what the teachers associated with that term. That is discussed in Chapter Four. Both of these words, through those analytical procedures and further interpretive processes that are explained in the respective chapters, are signifiers of significant curriculum and pedagogical concepts: ‘real’ pointed to knowledge and ‘interactive’ pointed towards the relational sphere of pedagogy.

5.2 Determining frequency of key words and phrases

Here, the emphasis is on the context for each of the teacher’s use of the special vocabulary, what was associated with it. In the early phases of analysis, the mechanics of the software programme, ‘NVIVO 9’ were helpful for some counting and graphic displays. Beyond that, colour highlighting and comments functions for categorising within text in word processing software proved to be more intuitive, less de-contextualizing and in the end, more efficient.
These techniques resulted in the single word documents referred to below and available in Appendices F and G.

5.3 Developing the concepts for interpretation: Zooming in, zooming out

The process described in this section is best thought of as the ongoing zooming in and zooming out processes, the progressive focusing (Wolcott, 1994) from single words to concepts to theory ... and back again. The process provides the substance and strength to the threads linking data and interpretation which is sometimes needed by those not accustomed to reading qualitative research (Norman, 2010). Further meaning in ‘real’ and ‘interactive’ emerged as more general topic categorizing, more reading and re-reading of the transcripts and re-listening to recordings of the observed sessions took place over time.

In qualitative research, the identification of codes and categories may begin, as it did in this study, during the process of transcribing the first interview, the making of margin comments and intuitive analytical comments (Miles & Huberman, 1994). Driven by the research questions – the interest in how the teachers think about teaching (what teaching is about and what is important to them) and themselves as teachers (what they like, what motivates them, what influences them, images of teachers) – initial categories emerged from the two interviews with Dr A. These were: role modelling as teaching, ‘professionalism’ as content, students’ needs, patients as people, opinions on the curriculum (her own and others’), textbook knowledge, motivation to teach, hating some teaching settings, loving some teaching settings, ‘just have students, teachers, patients, yeah’, other teachers, teaching courses/professional development, wanting feedback, the institutions, influence of own teachers and experience.

By subsequently listening to the recordings of Dr A teaching, together with the field notes made during/subsequent to the observation, other categories were noted: seating arrangements, discussions, managing the patient in the teaching, facilitator/manager, supportive to students, questioning and talking, before and after teaching, openings and closings, teachers with students, teacher disposition, ethics/consent, researcher discomfort.

As interview and observation data from Drs B, C and D were collected and processed, a list of features was made and compared with the list from Dr A’s data. From this collection of words, phrases and ideas, one concept list was developed as the foundation for the continuous looking back, looking forward as each piece of new data was processed and as interim findings were suggested. An important step in the process of refining this list, was the interrogation of the concept documents by the researcher and supervisors, examining how excerpts from
various transcripts illustrated and elaborated each concept, and seeing patterns and relationships.

This is the process by which fully contextualised illustrations of the following concepts were constructed:

**Table 3: Concept List**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>influences</td>
<td>natural</td>
</tr>
<tr>
<td>knowledge</td>
<td>feedback</td>
</tr>
<tr>
<td>motivations</td>
<td>describing teaching</td>
</tr>
<tr>
<td>enjoying</td>
<td>explaining typical</td>
</tr>
<tr>
<td>the university</td>
<td>about patients</td>
</tr>
<tr>
<td>thinking of self as teacher</td>
<td>purposes and visions</td>
</tr>
<tr>
<td>questions and questioning</td>
<td>the curriculum</td>
</tr>
<tr>
<td>changing knowledge/transforming</td>
<td>textbooks</td>
</tr>
<tr>
<td>about knowledge</td>
<td>students in metaphors</td>
</tr>
</tbody>
</table>

Each of these terms is associated with a document that provides contextualised excerpts from the interview transcripts and from recordings of teaching sessions as evidence for the claims made in the interpretive work of Chapters Three, Four and Five. Similarly, from the recordings of observed teaching sessions (and the additional notes made), documents were constructed from transcribing examples of teachers speaking to and interacting with the students - for example, what they said to open the session, how they introduced themselves, how question-and-answer segments progressed. These are used to illustrate and substantiate the findings.

The recordings and transcripts were also examined for the existence of sub-groups. For example, an attempt was made to identify and explain which sub-groups of teachers used ‘interactive’; through this process, one characteristic common to all of those teachers who did not use the term was identified. Also, further examination was undertaken to look for group differences between physicians and proceduralists. This action was taken because of the stereotype that physicians are different from proceduralists and those differences will be reflected in their teaching. Particular teaching practices in three sessions were transcribed and closely analysed. From this comparison, the two groups were not clearly distinguishable.
Neither did they emerge as different from each other in the analysis of the use of ‘interactive’. I acknowledge that the numbers in the study are small, and the group includes only seven proceduralists, so these are only indicative findings.

5.4 Interpretive strategies

From the initial descriptions and cautious steps of analysis as described above, the process of interpretation involved three main strategies: extending the analysis, turning to theory, and connecting with personal experience (Wolcott, 1994). Again, zooming in and out from the small parts to the whole and back again best describes these interpretive processes.

5.4.1 Identifying tentative relationships

A first attempt to extend the analysis was made by pointing to some likely relationships between findings. The use of and associations with ‘real’ were traced and ‘place’ was found. This extended the analysis and produced a new interpretation of what constitutes clinical knowledge. Similarly, tracing ‘interactive’ and finding ‘relationships’, meant extending the analysis to produce a new understanding of the importance the teachers place on the relational sphere of pedagogy. Similarly, considering ‘just part of’ and ‘commonsense’ led to finding the perception of teaching as ‘natural’. The results of these interpretive strategies constitute challenges to some presumptions about medical teaching and medical teachers, and these are taken up in the two final chapters of the thesis.

5.4.2 Turning to theory

Another interpretive strategy involved two different turns to the theory. First, to draw some conclusions about the teachers’ notions of knowledge, it was necessary to examine the findings in relation to the literature on knowledge and clinical knowledge. This was an aspect of education that had not been anticipated prior to the study. Similarly, in drawing conclusions about pedagogy, the findings were examined in relation to the literature on teaching and medical teaching – much of which had been previously considered. For example, in interpreting the findings related to pedagogy, the early micro-level analysis revealed the value that the teachers place on personal and interpersonal factors (friendly, knowing, drawing them in) over technical aspects of teaching. To further interpret these findings and locate their deeper conceptual meanings, the reflections section in Chapter Four considers these concepts through relevant theoretical lenses in the education and medical education literature. The interpretive process here involved asking of each of these theoretical perspectives, ‘How are
the medical teachers’ ideas about teaching in tune with this theorizing?” in order to reach some broader conclusions.

5.4.3 Iterative examination of transcripts for further clues

As the teachers talked about and manifested their values and pedagogical preferences, they provided insights into how they thought about themselves as teachers. However, these insights into their teacher identities became meaningful as they were reinterpreted using other empirical and theoretical perspectives from the education literature. Thus Chapter Five includes a theory-based reinterpretation of some of the findings discussed in Chapters Three and Four; it also offers an interpretation of other interview data that has not been previously considered.

5.5 Summary of Analysis and Interpretation

In summary, the study arose out of the researcher’s experience in medical education in hospitals and associated literature and this background influenced what I noticed. However, the extended procedure involved systematically extending and testing the initial inductive interpretations. In interpreting the findings, the sense of ‘this is what I make of it all’ (Wolcott, 1994) is dominant. In particular, making something of finding a relationship between ‘real’ and ‘place’ and ‘knowledge’ is connected to my experience of noticing how much teaching happens ‘around’ patients that is, at the patient’s bedside or chair-side. Methodologically, then, the researcher’s own experience supported the research actions – noticing the popularity of one word (and then another) led forward and back to increasingly meaningful understandings of knowledge and pedagogy and ultimately, to identity.

6. Methodological insights

I described earlier that observing teaching in clinical settings is fraught with challenges, and I elaborate those challenges in Section 7 below. At the same time, however, being present with the teachers and the students, and being with the teachers and the patients, infused the collected data with a sense of authenticity and vitality. In the interviews, both the teacher and I were able to call on the teacher’s interactions with the students (non-verbal and verbal), the micro-logistics of the teaching, the management of the patient/family/student network and the meaning of some actions and features of the exchanges. The interviews then furthered the participants’ trust in the research process, and the discussions were both grounded in the shared prior experience and provided an opportunity to explore matters outside of the one observed session. The recordings of the observations were also invaluable to return to as
tentative findings emerged; they helped to refine, confirm or dispute initial ideas. In summary, although challenging, the observations gave a particular substance to the data and facilitated more meaning-filled interpretations.

The bigger challenges, the ones that I did not fully anticipate, were concerns related to research ethics.

7. Ethics

The research proposal was approved by the Melbourne Graduate School of Education’s Human Ethics Advisory Committee at The University of Melbourne. As well, the study had to be approved by separate application to each of the three hospital’s ethics committees. In considering how the plan worked in reality, four issues deserve comment.

First, the issue of gaining bystander consent relates to the importance of observations. The students mostly showed little interest in and no concern about the statement to them and the request to record the teaching. There were two innocuous exceptions: one student asked whether their names would be used (although I had explained that no names would be used); and, in the first tutorial with Dr A, a student asked what the researcher expected to find and how the findings might be applied. This led to a discussion to which the teacher also contributed by endorsing the importance of the study. These questions were not problems in the study; they served to alert me to the students’ perspectives.

The second issue relates to gaining consent from the other bystander group, the patients and families in clinical settings. This often proceeded differently from the plan that had been approved by the ethics committees. Obviously, these are not recorded because the interactions occurred before the recorder was switched on. The first teacher observed in OP was very clear that she did not want the researcher to speak directly to ‘her’ patients; instead, she went outside the consultation room to explain to them prior to entering that, if they gave permission, she would have an observer from the university present at the consultation to record her teaching the medical student. Others took similar approaches though often not as formally or pedantically. One teacher hastily told the patient that ‘a professor’ from the university was there (pointing to me) and wanted to record his teaching if that was alright. The patient just nodded. Three other teachers told me that there was no need to bother explaining it to the patients or families, implying that it was acceptable for me to be there and to record. This generated a tension for the (student) researcher (McLeod & Thomson, 2009), a discomfort about not complying with ethical standards that had been officially approved. The practice
seemed somehow contrary to the principle of respect for the bystanders who had not been
given the opportunity to refuse. In some of these situations, as I explained earlier, the recorder
was not switched on at all or only for moments of direct teacher-student interaction. On ward
rounds, where getting consent sometimes implied a burdensome complication for the doctor
getting their clinical work done as well as teaching, I did not record at all and sometimes did
not go to the patient’s bedside. This had implications for the data records: sometimes only
minutes were recorded of an hour or more of observation. For example, as indicated in
Appendix E, I observed almost two hours of an OP session with Dr E, but recorded only 12
minutes – only the explicit teacher-student dialogue between patients.

The third issue related to ethics is the discomfort a non-clinician can experience during and
subsequent to prolonged observation in a clinical setting. The problems and conditions the
patients present with and discuss with the doctor-teacher may be reminiscent of the
observer’s experience of illness – her own and others’. Or, they may simply be distressing.
Non-medical researchers in particular need to be aware of this potential burden and perhaps
consider building in opportunities for de-briefing.

The final issue is the key concern to protect the anonymity of participating teachers. As well as
careful de-identification of recordings, transcripts and careful storage, efforts were made to
write the thesis so that the teachers are not individually identifiable. Where the source of a
quotation or excerpt from a recording or transcript was considered potentially identifiable, it
has been have left anonymous. Furthermore, contrary to the initial plan, no version of the
analysis was sent to the participants; it was clear during the data collection phase that this
would threaten the anonymity of a specialist at a site.

In summary, being an observer/researcher in teaching where patients and their families are
present is essentially a privilege and brings with it significant personal and professional
responsibilities. The role requires sensitivity to patients, their families and their doctors as well
as to the students’ needs to hear and see the ‘action’. The researcher’s experience of working
within this action was important in the way the observations were carried out without
unnecessarily obstructing the work. The interviews offered other challenges, but were less
complex situations because only the volunteer participant and the interviewer were involved.
Chapter Three

Medical Teachers and Their Distinctive Understanding of Clinical Knowledge
This study sought to understand how medical teachers go about their teaching, and how they think about teaching and about themselves as teachers. The findings are presented in three chapters as three domains of interest in clinical teaching: knowledge, pedagogy and teacher identity. As explained in Chapter One, the three findings chapters are not reports of different questions or parts of the study, but are themes in each case based on the repeated re-reading and coding of the transcripts and observation notes and involving an ongoing dialogue with relevant literature. In the case of this chapter, Knowledge, the theme arose from what the teachers emphasised – both that knowledge was central, and that they have a particular conceptualization of knowledge that is different from that described in much of the literature. In the next chapter, ‘pedagogy’ takes up the question of which elements of the approach to teaching methods did they emphasise.

This chapter explores the teachers’ emphasis on a distinctive conceptualization of clinical knowledge how it is formed and its relationship to other knowledge. The three sub-themes in the discussion of this knowledge domain emerge from the teachers’ use of the term ‘real’ in relation to knowledge and the implied distinction that some knowledge is not real in the same way. They also emphasise processes of knowledge being transformed.

In the interviews, all of the teachers talked more about the knowledge they are teaching than they did about the form of the teaching itself. One of the opening interview questions invited them to describe what they were doing in the observed teaching session. Almost immediately and almost without exception, they began to describe what they were – and were not – teaching. Only one teacher referred to his teaching practice: he said he handed out notes about four conditions and then elaborated them for the students. He went on to explain what is important about the knowledge he taught. Furthermore, most of the teachers, in describing what they are teaching, refer to making the decisions themselves about the knowledge to teach: that they know what the students need to know. None presented themselves (to me or to the students) as the teachers of the university’s curriculum except in some references to how the session would assist the students to pass their examinations. For these medical teachers, the knowledge they value for students is their specialist knowledge and talking about teaching means first talking about that knowledge.

In selecting appropriate terminology to use in discussing this theme, I initially considered Irby’s typology of knowledge required for clinical teaching as I discussed in Chapter One: ‘knowledge of medicine’, ‘knowledge of patients’, and ‘knowledge of context’ (Irby, 1994, p.335-336). However, to remain closer to the distinctions implicit in the teachers’ ideas, I have chosen to
use ‘textbook knowledge’ and sometimes ‘bioscience knowledge’ that they contrast with their knowledge which is ‘clinical knowledge’. Furthermore, in this discussion, I do not distinguish, as Irby does, between ‘knowledge’ and ‘skills’ since none of the teachers explicitly distinguished the two. This decision reflects my view of knowledge as a broad domain in which more specifically defined clusters of meaning reside (Eraut, 1994).

1. ‘Real’ knowledge

In the interviews, the doctors often referred to things being ‘real’. In 12 of the 27 interviews there were 26 specific references to ‘real’ in relation to an aspect of teaching clinical medicine, see Appendix F. The incident that generated my interest in how this concept was being used occurred part way through the study. One participant’s (Dr K) use of ‘real’ struck me because he used it to explain why he chose to teach students inside the patient area of the ward. ‘Real’ was striking in this instance because the teaching did not actively or explicitly involve the patient, and could equally have been taught in a classroom. This reminded me that I had heard other teachers using ‘real’ and I systematically reviewed where and how they had used this term, and then reviewed the data as a whole in the light of the issues this seemed to point to – namely that there was a quite specific form of important knowledge that was the domain of the medical teacher in the hospital, one that was differently formed, and of different form, and not simply an ‘applied’ biomedical knowledge.

In order to understand the meaning of ‘real’ as potentially signifying something important about medical teaching, I examined all previously processed interview transcripts and found ‘real’ in the first interview. All instances of ‘real’ were extracted from the interview transcripts with enough text preserved with each instance to reveal the context and intentions of the language. These references to ‘real’ were brought together in a document that ultimately revealed the associations with aspects of clinical knowledge, see Appendix F.

In this way, tracing ‘real’ through these processes uncovered three perceived constituents of clinical knowledge that make it essential knowledge for students: knowledge of the ‘real life’ work of a doctor in a hospital; the knowledge extant in the ‘real’ places of the hospital; the patient as a ‘real’ person for teaching and learning medicine.

1.1 Knowledge of Practice Realities

Knowledge of the actual conditions of doctors’ work in hospitals is one aspect of the knowledge that teachers think is important for students to gain. In the interviews they talked about this in relation to the pressures of time and budget and particular challenges of
interactions with patients. As well, I observed that they tacitly convey this to students in the way they go about both their clinical practice and their teaching.

In the interviews, teachers suggested that they want to convey to students knowledge about how a doctor’s time is allocated, how it is used and managed for clinical practice in hospitals. What students need to learn is how time affects clinical work, including how doctors have to manage the compromises that time forces on them. This idea of knowledge of real clinical life was variously expressed in the interviews. Dr N explained that she thinks students can learn by being in ‘real time’ clinics where they get a sense of the time required where an interpreter is present in a consultation, the inevitability of the over-run of the hospital’s allocated time per patient. Dr S referred to walking on a ‘tightrope’ in the allocated 12 minutes-per-patient in OP. Dr E employs a similar metaphor to describe how doctors get through their work by ‘juggling’ different responsibilities. Others [Dr R, Dr F] explained that students experience the limited time that is available for teaching on ward rounds. In an interesting twist, Dr L lamented that the effect of time constraints on doctors in OP is that students see some ‘slap dash’ clinical practices. However, there is a positive side to this, too. Dr E explained to me that students gain knowledge from being with busy doctors as they do their work; the doctors can ‘show people ... about respect for patients and that even though you are busy, you can ... well, try at least, can do the right thing’.

The sound of the clock ticking was also conveyed directly to students. I heard teachers explain to students that they were rushed for time and could not cover everything in the topic, or that they could not stay after the tutorial or could not make the tutorial because of other administrative or clinical commitments. In clinical teaching, they move quickly between and around patients. As well, I noticed that the pressure of time is often subtly conveyed to students as teachers sometimes arrived late – but did not finish early. (They often ran 5 or 10 minutes over the allotted teaching hour before hurrying off to their next commitment.) There is a strong physical sense of hurrying in and out of classroom and clinical situations, revealing how to live the busy clinician’s life.

In addition to the pressures of time, budgets and other ‘real’ life conditions contribute to this understanding of what constitutes clinical knowledge. In referring back to the classroom tutorial I had observed, Dr D mentioned that he gives students ‘real world information’. He was referring to examples of the compromises that are sometimes required of him in his practice, the difference between the best and the affordable investigations or treatments to offer patients. Sometimes, there is a patent ordinariness in the clinical knowledge as it is
represented. For example, Dr C described what he ‘might talk about’ in OP when there is nothing otherwise spectacular for the student in the patient’s visit:

*I usually ask the patients what medications they’re taking and they might even have their shoebox or Tupperware box with their tablets in it so I will often drag that out and show them what a box of [DRUG NAME] looks like ah so you know you can pull out a [PILL TYPE] and say that’s a [YY] and [YY] is used for [CONDITION] and you might talk about side effects of medications ... [Dr C, Interview]*

Equally, this ‘real world information’ can be extra-ordinary, too. The knowledge includes awareness of the sensitivities inherent in particular consultations, sensitivities they need to learn to anticipate and manage. In the tutorial referred to above, Dr D related to the students an extended story about a real world moment of clinical practice: a patient exploited the opportunity that a consultation provided to divulge intimate, incriminating personal information in the presence of his family. Later, in the interview, Dr D described this as one of those ‘awkward’ moments that he thinks students need to know about, coming to know what they will need to face as doctors.

Knowledge of these awkward or sensitive aspects of medical practice arises in various forms in clinical work where students have opportunities to observe and even participate in them. On one occasion, a medical student and I were asked to leave the OP clinic because the next patient the doctor was seeing was a member of the hospital staff. The teacher explained to the student and me that it was inappropriate for observers to be present (Dr S, Observation), representing a quick lesson for the student, offering knowledge about being a doctor, the extent of collegiate relationships in the organisation and confidentiality. On another occasion, I observed a teacher facilitating a bedside tutorial. In the discussion after the time at the patient’s bedside, the teacher emphasized to the students the importance of noticing how much she had been able to elicit from seemingly simple social ‘chit chat’ with the patient and his wife. She stunned one student in insisting that, contrary to his expressed preference, he *did* in fact need to know about the local football because ‘as a doctor you have to be interested in everything!’. She told me later that by observing and practising in clinical settings, in contrast to simulated settings, students might consider how they ‘will actually cope with it real life, [to] have at least thought about [these issues] beforehand’ [Dr A, Interview].
None of this is minor. ‘Self awareness’ as knowledge has been described as fundamental to a doctor’s ability to express medicine’s core values of empathy, compassion and altruism (Cooke et al., 2010a, p.61).

Other aspects of the doctors’ work lives are revealed to students when they are watchful bystanders to collegiate discussions between doctors. They observe (as I observed) how doctors share information, problems and solutions with each other and with other health professionals. In and around the OP clinic rooms, for instance, I observed interactions between staff that reveal the nature of professional relationships. Before starting a consultation, or sometimes between patients or even during a consultation, doctors often called on each other for assistance (with computers and software) and input (with clinical matters and decisions). In the interviews, some teachers mentioned that one of the motivations for teaching in public hospitals is the opportunity for contact with medical colleagues. Thus, from early in their clinical rotations in hospitals and other practice settings, students come to know that these doctor-to-doctor interactions are a common and positive feature of hospital work life. The nuances of the interactions suggest that sometimes they provide a momentary relief from concentrated patient contact and clinical work.

Elsewhere, such interactions have been interpreted differently, presented as ‘interruptions’ in one study of teaching and learning on the wards where the researchers propose ‘protected’ and ‘uninterrupted’ teaching time (Young, Orlandi, Galichet, & Heussler, 2009, p.815) as an ideal. From my observations, there is valuable knowledge available – and perceived to be available – in these moments of interruption which characterise a medical teacher’s real life. In another study the notion of sharing ‘what it is like to be a doctor’ was identified as belonging more to the role of ‘clinical supervisors’ (of specialist trainees) than by ‘clinical teachers’ (of medical students) and seen to be associated with induction and socialisation rather than as a constituent of knowledge (Stenfors-Hayes et al., 2011, p.206). The teachers in my study present this window on the real life conditions of practice in the hospital as knowledge – as something to be learned – rather than as a role, something to be done, and they are teaching it or making it available for students as well as to trainees. Furthermore, it is presented as essential knowledge even for beginning students, knowledge of the ‘real world’ challenges of time, money, shoeboxes, football and awkwardness, perhaps the knowledge of that ‘swampy lowland’ of a doctor’s work life (Schön, 1987, p.3).
1.2 Knowledge from Places

Other references to ‘real’ suggest the notion of clinical knowledge residing in the places of the hospital – around the patient’s bedside, in the unit (ward) and in the corridors. This offers a new understanding of the knowledge and the place.

After observing a tutorial with a group of students for one hour near but not actively involving the patient, I was prompted to ask the teacher why he conducted the tutorial there – rather than in a nearby, unoccupied tutorial room. He reflected:

... I think it makes it more real ... I think from my own experience of being taught was I learnt a lot more at the bedside, I learned from people who liked to involve me in the conversation and made it seem real ... sometimes also at the bedside there’s all the data too so we often pull up an x-ray as we did there and look at some of the other results as well, the blood gases and things. So there’s a convenient practical element at the bedside as well because all the data is there [anon, Interview].

In other words, it seems to be both concrete and conceptual knowledge that determines the teacher’s preference to teach there. My attention was particularly drawn to this teacher’s reference to ‘real’ here (and then elsewhere in the interview) because it is co-located with his descriptions of the teaching as actively ‘involving’ students and, later, as a ‘conversation’. These descriptions surprised me because the tutorial consisted mostly of the teacher talking. It was not a conversation – the students were mostly listening, occasionally looking at the data on the computer monitor and occasionally answering a question. But for the teacher, being in the place itself seems to involve them, to provide them with knowledge – as they stand listening, often awkwardly and uncomfortably, amidst the busy workplace where nursing, administrative, domestic and other medical staff go about their work. The student-teacher group stood only metres from the patient (and his mother), a critically-ill man of the students’ own age. The sense is that the place itself acts on students’ knowledge.

The corridors of hospitals are also regarded as powerful sources of knowledge. This understanding comes from what I noticed in the study and have noticed in my own work. Corridors are often chosen as the places for teaching. In observing the teaching in this study, I sometimes found myself in crowded gatherings in corridors as the traditional between-patient information-sharing takes place during ward rounds. Like in the ICU tutorial described above, some of these gatherings took place only a few metres from an unoccupied meeting/seminar room. Further, the gathering in the corridor clearly inconveniences others - the patients,
visitors and domestic staff who negotiate their passage and their tea-trolleys around the medical team. Corridors are also noisy, and students are often awkwardly straining to listen, watch and take notes – and sometimes to ask a question.

At the same time, all of this bustling human activity makes the corridor a lively place that connects students with the specialist as teacher to learn about medicine. Dr M offered an animated account of that exciting ‘opportunistic stuff’ that corridors contain:

... the other day I was walking to ED there was a patient with a heart attack and there was a student standing in the corridor and I said ‘want to see a heart attack?’ and ‘yes’ and it was one of the final years I had just taken them the day before, so I took her with me. [Dr M, Interview]

In conducting the study, I spent large amounts of time with students waiting in and traversing the corridors both with and without the teacher. In considering the ways that teachers represented these places, and reflecting on my own observations – the many verbal and non-verbal interactions in doorways, lifts and other spaces – knowledge seems to be available to learners there.

This sense of there being knowledge in places has been described elsewhere. Lingard explored the need for radical rethinking of the place of non-human objects as central rather than incidental parts of the teaching and learning context (Lingard, 2007). Lempp analysed the notion within the hidden curriculum framework (Lempp, 2009). Montgomery discusses this matter of knowledge and place in relation to students and junior doctors learning how to behave in the places of the hospital. She came to understand that they actually learn their place. The example she investigates is junior medical staff learning seating arrangements in meetings as these are determined by the medical hierarchy (Montgomery, 2006). Through her ethnography, Montgomery came to see that this knowing is understood in two ways. First, taking the right seat was seen as a sign of good behaviour that maintained the comfortable hierarchy. Second, it was also seen, perhaps more importantly, as an indicator of the student’s or trainee’s actual ‘clinical judgement’ (Montgomery, 2006, p.156): taking the wrong seat revealed to senior doctors that the student or junior doctor lacked perspective, a deficit that could translate into a lack of clinical judgement in practice.

The notion of ‘distributed intelligence’ is of interest in medical education, wherein knowledge and intelligence are seen to be distributed throughout the clinical environment – individuals and groups have information, perspectives and experiences that are relevant to a patient so
that ‘there is knowledge available in a clinical setting’ (Cooke et al., 2010a, p.47). This understanding is slightly different from what is suggested by the interview and observation data in my study. From the teachers’ perspective, knowledge resides not only in the individuals and groups, but actually in the places where those people are, and in the places where the clinical work and the teaching work are done. Seen this way, the places contribute beyond what has already been shown as important contexts for learning (Bleichley et al., 2011; Regehr, 2006; Shulman, 1986).

1.3 Knowledge of and from people

The discussion of clinical knowledge has so far shown the value that the teachers give to students gaining knowledge of the real life of doctors and from being in the real places of their work. There is a third aspect of this ‘real’ knowledge – knowledge of patients as ‘real’ people with whom students must learn to interact appropriately. In fact, a number of different and distinct points are made by doctors about the patients as sources of real knowledge.

1.3.1 Patients are individuals, different from each other

One emphasis here is on the need for students to learn how to think about patients as individuals, as having specificity. In Dr A’s terms, this is ‘the person sitting in front of you’ and Dr F refers to ‘what walks through the door’. The emphasis here is on the ways that patients are different from each other:

Every patient is different, there’s all these things to consider ... and what might be right for one patient might not be right for the other ... [Dr J, Interview]

And Dr G was more specific about the need to highlight this for students:

if you get someone who lives on the street your solution might be different than for someone who lives in a house with carers coming in. So that kind of dynamic is what I want them to think about – beyond just learning the facts of the case. [Dr G, Interview]

This understanding was also evident in what I observed in students responding to these opportunities for learning that each patient is different from another. For instance, in an hour-long bedside tutorial, I observed two students separately practising, one taking the patient’s history and the other administering a standardized test. The teacher then stepped in to ask the patient and his wife more questions, gaining more detailed information about his memory loss. In the interview later, the teacher explained that she had been modelling for the students...
how ‘to do social chit chat and how to pick up on the things ... how to be a bit more intuitive’. But there was also other knowledge about the individual patient available to the students. In a tender moment at the end of the tutorial after a long discussion away from the patient and his wife, one of these students gently asked the teacher ‘What will happen to him?’ The question seemed to arise out of the student’s concern for the individual he had been practising with, an expression of something more than mere curiosity. The questions seemed to surprise the teacher a little, possibly because the allocated time had clearly expired. However, she provided a comprehensive response about the man’s likely future explaining the effects of his particular family circumstances and the consequences of his late presentation to the hospital that will compound the usual course of the disease.

1.3.2 Patients are real people

Another ingredient in the make-up of this knowledge relates to respecting patients as people and the need for students to learn what are appropriate responses in different care settings. In intensive care, for example:

... whenever we examine a patient I will get them to tell the person what they’re going to do, I’ll say maybe you can examine their conscious state, look at their eyes, but before you do that you’re going to say to them, even though they look unconscious “sir, I’m just going to shine a light in your eye”. So there’s always that personal element there, showing some respect rather than just going and doing [Anon, Interview]

Emerging here is the sense that sick or very sick, competent or demented, conscious or unconscious, patient care requires finely grained knowledge of what constitutes respectful behaviour in each specialty. Here is a rich sense of what is not conveyed by the commonplace term ‘communication skills’. Also, what is particularly important here is that all of the medical teachers emphasized this point, that students need knowledge of how to behave around and towards patients. Across all age groups, all medical specialties and males and females in the study group there is an acceptance that this is central to what clinicians need to know in order to do their work.

1.3.3 Exposure to multiple patients builds knowledge cumulatively

The third emphasis in this understanding of clinical knowledge comprising knowledge of patients as ‘real’ people is that the knowledge accumulates from every patient contact, that each patient offers knowledge. In the example from Dr A’s tutorial described in 1.3.1 above,
the understanding emerges that students gain knowledge of this patient and then the next one and the next, so that cumulatively they acquire knowledge of how to treat patients with dementia. Similarly, after a tutorial in an emergency setting, the tutor (anon) explained that her goal was to show students one patient after another, to build their knowledge of that patient group. This reflects Montgomery’s emphasis on the continual building of knowledge through individual cases (Montgomery, 2006). One after another, patients (and classroom cases) help students construct their knowledge of a medical condition, a specialty and of medicine generally.

1.4 Knowledge of the broad aspects of medicine
Other teachers emphasised the importance of ‘communication skills’ or ‘the broader aspects of medicine’ or something ‘broader than the acquisition of knowledge’ – or more generically, ‘professionalism’. Dr R said students need to be taught ‘patient care … introducing the patient and introducing the team to the patient’ because otherwise students (and young doctors) ‘just don’t do that, [they] stand in front of the patient and talk about them as if they aren’t participating’ [Dr R, interview]. While the usual term ‘communication skills’ accents the ‘doing’, Dr R and others emphasise that respectful communication needs to be learned ‘about’, it is learned as part of the broader aspects of ‘care’ for people. It is related too, to what Dr A calls ‘professionalism’ that involves learning how to be around patients.

‘Real’ then helps to capture the dynamic, unique and complex nature of clinical knowledge that these teachers perceive to be essential. The knowledge of and from places and people is finely grained: patients are individuals; patients are real people; each patient/case contributes cumulatively to the doctor’s/student’s knowledge; and, this knowledge must be broadly conceptualised and brought into students’ (and practitioners’) behaviour. Thus conceptualised, clinical knowledge is inclusive and intricate.

2. Knowledge that is inadequate – not ‘real’
‘Real’ implies an opposite – knowledge that is ‘not real’ although the teachers in this study did not refer to knowledge as ‘not real’. More often, the knowledge that they seem not to value is represented as ‘textbook’ knowledge, student’s knowledge brought to the hospital from university.

Firstly, there were strongly expressed views from four young-to-middle-years teachers (Drs D, F, I and S) – each of them representing a different medical/surgical specialty – that the formal curriculum is inadequate, that they see students arrive in the clinical settings with inadequate
knowledge. These four teachers each separately described in the interviews how, either individually or with their clinical team, they had designed their own series of tutorials on their clinical specialty. Their intention in each example was to fix the students’ lack of knowledge:

... the students are coming out without much knowledge, I don’t think it’s their fault. I don’t think it’s a lack of trying, I just don’t think they get taught nearly as much. You can’t blame the students, it’s the uni’s fault. [Dr D, interview]

Not all of them are as sympathetic to the students’ plight and it is not always an absolute lack of knowledge they were concerned about:

... when we went through university we think we were taught a lot about the basics of the illnesses and antibiotic sensitivities and bacteria and that sort of stuff in our undergraduate years and the clinical teaching was all about the clinical signs and clinical presentations which was topping off the information you have already gained ... . [Dr F, Interview]

Here, while Dr D is concerned that the quantum of knowledge is inadequate, Dr F and his team are concerned about the gaps in the knowledge. In another study, a teacher said ‘problem based learning leaves people desperate to know a few facts, and ... I actually think clinicians are going to have a very important role ...’ (Knight & Bligh, 2006, p.229 ). The contemporary curriculum, often symbolized by practitioners in the phrase ‘the PBL course’ or similar, is represented by the teachers in my study as not teaching enough knowledge or not teaching enough of the right knowledge. Whichever way the problem is expressed, it creates a space for a (self-appointed) role for the teacher of the knowledge that the university should have taught.

Secondly, working from the view that the knowledge is not the right knowledge, a number of teachers tamper with the formal curriculum. Dr B told me ‘I have my feelings about what I want to tell them’ and this ‘feeling’ determines the content for her lecture. Others are prepared to contradict the formal curriculum:

I’m probably not doing what I’m supposed to do ... I ... want to transmit something that I think is important ... [Dr Q, interview]

Even more pointedly than these declarations, I observed Dr O telling the students that he was not going to teach the university’s curriculum – to their relief. When he explained to them that the university had asked him to teach a whole unrealistically long list of things related to his
specialty, he reassured them ‘... so I’ll just touch on what I would regard as being important things for you [Dr O, observation]. The students sighed.

It seems that that they exert their authority to teach because, in their terms, they know what knowledge is required for practice and take every opportunity to provide students with access to it. Each of them is teaching about the specialty area of medicine they practice – how to take a history from a child, from a patient with dementia, from a diabetic about a ‘hypo’. I also noticed how the teachers introduce themselves to students: ‘I’m a Paediatrician’, ‘I’m a Neurologist’ or ‘I’m an Endocrinologist’. Their sense of authority to teach arises from their specialty medical knowledge, layers of knowledge from practice with one patient after another in that specialty. As the examples above suggest, even knowledge of the way to behave around patients is often knowledge essential to the specialty rather than general clinical knowledge.

Three particular forms of formal (codified) knowledge (Young, 2008) were differently represented by some of the teachers as inadequate, irrelevant and/or inferior: textbooks, Evidence-Based Medicine (EBM), and documents that represent the curriculum.

Textbooks were presented by eight of the teachers as teaching ‘knowledge’ but not how to ‘think’. Books are useless with the ‘struggle’ of clinical practice, and do not help with the ‘uncertainties’ that arise in dealing with patients [Dr A, Interview]. Books seem not to contribute to students learning to think well. The problem is represented in seeing students arrive in hospitals with the mistaken view that they have ‘right’ answers – or even that there are ‘right’ answers [Dr Q, Interview]. Students were described in interviews as giving textbook answers without thinking [Dr C, Interview], ‘kneejerk’ responses to questions [Dr S, Interview], and answers which are even just ‘silly’ [Dr Q, Interview]. The teachers blame textbooks and, by implication, the formal curriculum.

The problem with textbook knowledge seems to be that it takes the form of lists – lists of signs and symptoms that are not localised, or contextualised, not like people, not even current and not always correct. Information presented as ‘lists’ gives students knowledge consisting of ‘beautiful lists’ but nothing of ‘value’ in diagnosing and managing patients [Dr E, Interview]. Lists are also seen as hard to learn, even recalled as making the learning of some medicine horribly tedious [Dr D, Interview]. Dr Q related for me quite a long story about being caught out in her early medical practice by acting on incorrect information gained from a textbook, and this seemed to justify her mistrust of textbooks. In another study, medical teachers described ‘the stuff from the book that is ... the minor part of it’ (Taylor et al., 2007, p.373). Textbooks do not provide, it seems, the real stuff about ‘how the specialist decides’ which drug
to give, or even just how to ‘tell the difference’ between drugs [Dr G, Interview]. Clinical decisions are made on behalf of an individual patient; they are not based on a generic list of medications applied to composite, idealized patients in textbooks [Dr A, Interview].

Also, other dangers seem to lurk in textbooks. When I asked Dr N ‘What do you think are the most important things about being a medical teacher?’ she wandered around the territory:

\[\text{Um it’s not necessarily the teaching, because they can get the learning stuff out of books, I guess it’s more ... [pause] ... the process of learning and the ... [pause] process of finding things out ... well you know you can get a certain amount of learning from books but the other part of learning is observing ah working with ... ah ... making decisions yourself and it’s trying to teach them that, that you can’t get from books, you have to do, and if you’re not confident to do, then you’re always going to sit with books, you’re never going to go out to the wards cause you’ll just make a mistake, I’m not quite ready for that yet I’ve got to do some more reading. But that only gives you knowledge, it doesn’t give you practice and ... until you actually start getting in there ... . So I guess it’s the skills bit the non-learning bits that I’m trying to ... [Dr N, Interview]}

After this meandering (perhaps reflecting teachers’ uncertainty about describing teaching and learning), Dr N mimicked how some students seek refuge in books: ‘I’m not quite ready for that yet, I’ve got to do some more reading!’ Like Dr A earlier, Dr N draws attention to the safe, certain knowledge that students have become accustomed to in their books contrasted with the uncertainties and personal challenges inherent in contact with real people.

Importantly, it is not only the words, but the hints of impatience and frustration (or mimicry) in the expression of these statements that gives weight to the teachers’ position on textbooks. One teacher insisted you do not learn to be a practitioner by reading books, even if you read ‘the whole textbook of Harrison’s!’ [Dr G, Interview]. Montgomery captures this in her view of medical students arriving at hospitals ‘crammed to the gills with scientific information’ but without knowledge of ‘negotiating ambiguous uncertainties’; they have to learn that ‘while there are clearly wrong answers, ... there is often no invariably right one’ (Montgomery, 2006, p.3-6). In this study, I heard little sympathy for where this leaves students.

Furthermore, it is the classrooms themselves which are sometimes characterised as inadequate, contributing to the making of the wrong type of knowledge. As I discussed earlier, these teachers (and others I have observed in my work) often choose not to teach in classrooms. The places themselves are seen as part of the problem. Classrooms as places are
represented as antithetical to the teaching and learning that the teachers value. Various comments suggest that classrooms mean students are ‘just sitting’, ‘recipients’, ‘in a coma’, ‘sleepy’, ‘nod off’, just ‘just blah blah blah’, ‘just listening and going’ [miming sleepiness]. Like textbooks these places are dull and dulling. The rooms are not dynamic, they to take the vitality out of the knowledge. The act of ‘sitting’ is linked with passivity and sleepiness (Dr K, Interview), a finding taken up later in this thesis.

The other form of codified, formal knowledge that was criticized by three teachers (from one specialty) is Evidence Based Medicine (EBM):

‘you’ve got to fit everything into a paradigm because there is one right answer’ [Dr A]

‘I don’t care if you read a hundred trials!’ [Dr G]

[you have to] ‘be practical about it’ [when you make reference to the literature in your teaching] [Dr J]

Despite these protestations, however, what I observed was that almost all of the teachers did illustrate numerous teaching points by referring to clinical studies (in general or specifically) – as would be expected of physicians in large, tertiary, ‘teaching’ hospitals. Groopman characterises the part that evidence plays in medical knowledge and clinical practice as the doctor moving back and forth between the evidence and the case (Groopman, 2007). The design of my study, in allowing me to observe the teachers as well as listen to their stories, generated a new understanding of this dynamic. It is not only in their medical practice, but also in their medical teaching that there is this essential and characteristic movement back and forth between the case and the evidence. In their teaching as in their clinical practice, the teachers do ‘use’ the evidence, but they express some resistance to an embrace of the EBM movement. Perhaps the movement privileges what they do not value in their own experience of learning, teaching and practicing medicine (Brosnan & Turner, 2009). So-called ‘cookbook medicine’ (Montgomery, 2006, p.89) – perhaps like ‘textbook’ medicine – is a world away from the situated practice of the medical teachers. What is being contrasted is knowledge gained in the randomness and messiness of clinical encounters with knowledge contained in neatly randomized patients in large trials.

(As something of an aside, this ambivalence about EBM is seen to extend into the field of medical education in its rejection of evidence based education (Bleakley et al., 2011). From my
experience of the interviews, however, when the teachers made reference to (medical) education theory or books or seminars about teaching, these seemed less a rejection of theory or evidence than an expression of just not knowing anything or having time to learn about education. It is more likely, I suggest, that they are not even aware of the evidence in education – it is challenge enough to keep up with evidence in the area of medicine in which they work and teach.)

In addition to the dismissal of textbook knowledge by many and EBM by a few, the other form of knowledge that seems to be the opposite of ‘real’, is the university’s curriculum as it is represented by the official guide to teachers. In the same way that the textbook ‘lists’ are represented (and rejected), so too are the lists and instructions in the tutor guide. The Haematology teacher sees the lists as ‘extremely broad ... a whole lot of [technical] stuff’ [anon], so he does something more practical in his tutorial. And, Dr M, immediately following his animated reference to having met a medical student in the corridor and the excitement of taking her to a dramatic clinical event with him, continues to make the contrast:

*I don’t like the rigid, you’ll do this and prepare like this. I don’t like that because I was never taught that way and I don’t think I’m very good at it because I don’t have the time to prepare for it. I don’t want it. That [tutor guide] is filed in there somewhere [gesticulates dismissively towards his filing cabinet]. [Dr M, interview]*

The lists are too long and too rigid, as are the tutor guides themselves. Not only are these guides wrong in form, they seem to be wrong in intent. An excerpt from one such guide is provided in Appendix I. The list of what to teach presents a fixed view of the knowledge in the doctor’s specialty that is not familiar to or comfortable for him. As well, it would also require him to teach differently from the ways he learned the specialty and the ways he has worked out for teaching it to the students.

In Dr O’s tutorial, he told the students:

*‘they give me a list of everything that they expect me to teach you about [topic] and it’s basically anything anybody could ever know about [topic]!’* [Dr, Observation]

To the teacher (and now the students) ‘they’ is the university and he does not feel obliged to teach to their generic – perhaps academic – expectations. As noted above, in response to the declaration that he would instead teach them what he knows ‘is important’, the students
expressed audible relief. It seemed as though they had reached an agreed position on what knowledge is worthwhile ... and the tutorial began. The tutor and students are allied in (re)defining what knowledge is valuable.

Knight found a similar attitude existing amongst ‘clinical’ teachers in her study. There, a doctor said ‘the curriculum will be driven by us anyway because we know what people need to know’ (p.229, Knight & Bligh, 2006). Knight suggests two possible explanations for this view: the teachers have been excluded from the curriculum planning process; alternatively, teachers are resistant to change. Both of these explanations are plausible and will be considered in relation to the teachers’ identity-making in Chapter Five.

Thus, in contrast to knowledge gained with doctors with people and in places around the hospital, formal knowledge from textbooks, EBM and tutor guides seems to come from outside the ‘real world’ and is in various respects inadequate. There is a view of written knowledge as orderly lists, so beguilingly neat that they may even obstruct clinical teaching, learning and practice. In essence, formal knowledge is not about people, it does not spring from the right places and is not relevant to the ‘real life’ of the hospital doctor. Precise and orderly representations of clinical knowledge are rejected as antithetical to the teachers’ experiences of clinical knowledge in practice.

3. Knowledge transformed

From the teachers’ perspective, the knowledge that students gain at university needs to be transformed into useful knowledge ‘as soon as they hit the hospitals’ (Dr A, Interview). My focus in this discussion is the teachers’ emphasis on the change in the knowledge from one form to another rather than on the pedagogical activities involved. Also ‘transforming’ is my term for the teachers’ expressions of these change processes and it is different from Irby’s description of ‘transformative processes’ as those which turn ‘the student’ into a ‘practicing physician’ (Irby, 1986, p.35). Central to the transformation is the patient.

3.1 Knowledge being put right

There are various expressions of teachers’ efforts to fix the knowledge, to make it right. While these efforts are all serious, some teachers understate them. One of the Paediatricians described his carefully designed, energetically conducted large group session about how to take a history from a child. When I asked him to talk about what he was doing in the session, he said he was giving students some ‘tools for their toolkit’, but he then talked about ‘instilling confidence in them to just go and play ...’. From his experience of being a medical student, he
expects that the students have probably come to paediatrics anxious about whether parents and children will like them. He wants them to know that ‘it’s alright to sit on the ground and just be an idiot if that’s what you have to do to examine them properly’.

‘Play’ is the opening move in paediatrics practice, a means of finding out about the child. It is intentional and significant – more significant than a ‘tool’ suggests. Similarly, another teacher referred to his specialist tutorials and ward teaching as offering students ‘little clinical tricks’ – but he went on to describe that he is helping them learn how to distinguish a patient who has a severe illness from one who does not – again not ‘little’, but definitely quite ‘tricky’. Here the teachers are adding tools and tricks to the students’ knowledge base in the understanding that all these ‘little important things’ (Dr G, Interview) accumulate into significant clinical knowledge. There is also the ‘little bit of philosophy about how to think about’ a certain condition [Dr X, Interview] and ‘little details that make things go smoother’ (Dr Y, Interview). These representations of knowledge as ‘tools’ and ‘tricks’ and ‘little things’ are misleading; each of them signifies more serious features of clinical knowledge. Perhaps they are expressions of the contradictions and essential uncertainties in clinical medicine (Montgomery, 2006) and the uncertainties about teaching and a lack of experience in talking about teaching as I will discuss in the next chapter.

So, while some teachers saw themselves as fixing knowledge, others emphasised the need for a process of ‘undoing’ students’ knowledge before it can be remade. Two specialists [Dr Q and Dr S] explained, by referring back to instances in the observed sessions, that they often need to expose ‘silly answers’ and ‘wrong thinking’ in students. They both expressed some impatience with students’ inability to call up useful knowledge, to think sensibly about a patient, a question or a scenario. Furthermore, Dr X named a key objective in her lecture as wanting to ‘undo’ some wrong thinking that students have acquired from what others have taught them. More generally, and perhaps reflecting a more informed educational perspective, Dr F explicitly described one of his early moves in the tutorial is to deal with students’ ‘misconceptions’ about particular medical practices.

3.2 Knowledge being put together

The other way that knowledge is thought to be transformed into effective knowledge is through things coming together or being put together, different aspects of knowledge being shaped into a useful form. Central to this conceptualizing were the teachers’ notions of bridges, links and connections.
What one teacher saw as students’ knowledge being ‘little bits and pieces everywhere’ [Dr N, Interview], others saw as students in need of help to consolidate and link knowledges. This concern was represented as links between knowledge being acquired in different settings, as well as links being made between reading (theory) and experience:

*if we had a good case of you know if someone had [condition], then that week in that session, I would add it, to consolidate it. Obviously, we can’t control what walks through the door, but we always try to come back to it* [Dr F, Interview]

Dr F talked further about ‘adding’, ‘consolidating’ and ‘coming back to’ something in the classroom that the students have experienced in the clinical setting. Dr J had a different emphasis again:

‘giving them a structure to look at a particular condition such as [condition] and giving them important pieces of information so they can read around it or think about the patients they’ve seen on the wards and think back to the talks. That’s what I used to do as a student [laughs]. They might not follow it up but whether they can link some of their previous encounters with patients with the talk. That’s why I asked them if they had examples and they had a few’ [Dr J, Interview]

Dr J thought about linking the reading with the information she gives them in the classroom with what they have experienced during ward rounds with her. In her conceptualising, knowledge-making involves processes of ‘thinking back’, ‘follow up’ and ‘link’. Similarly, Dr S expects that after being in a clinical setting, students will undertake their own linking. He expects that they will ‘pick up a textbook and read the theoretical aspects which is what I would expect a student to do based on something they’ve seen’. Here he does the putting together:

*I make it very clinically oriented ... putting a patient together with an illness is the way I remember things better (so that) the type of knowledge is hands-on clinically relevant stuff ... not a whole lot of theory because there’s not going to be time for that, so they’ve got to select the theoretical aspects and bridge the clinical, it’s a bridge between clinical medicine and theoretical aspects of disease* [Dr S, Interview].

Thus Dr S offered another way of seeing the knowledge-transformation: putting things together – the patient and the condition, the theory and the knowledge gained from experience. His emphasis was on forms of knowledge being linked, this time by ‘a bridge’.
There is a different transformative process in OP teaching. In the interview, Dr S also explained that at the start of the clinic he gives the students ‘a bit of a run-down of the type of patients [they] are going to see this afternoon’. The information he gives them allows them to gain knowledge during the clinic. This was given a slightly different emphasis by Dr W:

*I guess medical students who sit in with me, and they say oh that was really interesting, and you know I’ve not thought about health being holistic in this way [laughs]. But I guess it’s gradually all those little bits gelling. It took me a while as a medical student too before it all came together. But I think little bits gel at a time. So I think medical students enjoying sitting in, I don’t know whether it’s so much the teaching reflecting that … maybe there is a component of that because they see it being put together for them.*

What’s it like teaching in OP? [Researcher]

*Hard, hard because I’m always running behind time and because um partly it’s also because some of the patients I’ve been seeing for a long time so putting it together quickly for the medical students and helping them understand this presentation in the context of the history is hard, um helping students understand the whole link between the psychological and the biological is sometimes hard when they come with funny presentations also. So not having the time to be able to unpack it for them and kind of feeling rushed and I don’t feel like I’m doing a good enough job in OP. I find it hard.* [Dr W, Interview]

Here the sense is of knowledge as ‘holistic’, ‘gelling’, it ‘came together’, and is ‘put together for them’ and the teacher is always ‘putting it together quickly’. The teacher must act at the beginning of the OP session, as well as between patients, so that students are orientated to and can then get meaning out of each consultation, understanding ‘the whole link’.

The other ways that ‘links’ seem to work is that the classroom teacher provides principles of diagnosing and managing conditions in the specialty, and on the ward round can then teach about the ‘kind of dynamic … what I want them to think about beyond just learning the facts of the case’ [Dr G, Interview], the dynamics involved in treating the individual patient. For example, if the student attends a lecture and then goes on a ward with the consultant, they can ‘see the patients at the time and they can see how I am making the decisions’ (Dr J, Interview). Furthermore, in describing what he enjoys about teaching, Dr C talked about putting things together and making connections as a higher order purpose:
‘... perhaps trying to make it about the art of medicine as opposed to the science of it all, you know putting together the clinical and the investigation and make the connection’ [Dr C, Interview 1].

The emphasis here on how clinical knowledge is built via putting and pulling knowledges together, with bridges, links and connections, seems to arise partly from the teachers’ own experiences as learners, either medical students or trainees in their specialty: ‘reading up’ after a tutorial, ‘that’s what I used to do as a student’, [Dr J, Interview] and how they felt [‘the things that I found frustrating when I was a student ...’ Dr T, Interview].

Further insight into ways teachers perceive the relationship between different aspects of knowledge also emerged in their emphasis on things being put together and linked more than they emphasised the notion of ‘applying’ knowledge – which would suggest one form laid upon another form. Only two doctors (Dr R and Dr T), both senior physicians, referred to the students’ existing bioscience/textbook knowledge being applied to clinical knowledge and Dr T had particular reasons for using the notion of ‘applying’. Based on his own experience as a medical student, he wanted to emphasise to the students that there is just ‘a subtle gradation between normal physiology and medicine ... [so that] they feel a bit empowered with the knowledge they’ve got, this is not new knowledge to them, they’ve already got the knowledge all they’ve got to do now is learn how to apply that knowledge [Dr T, Interview].

3.3 The patient at the centre of knowledge transformation

This discussion highlights the key place of the patient around whom the students’ knowledge is transformed. Textbook knowledge of medical conditions (knowledge that encourages ‘knee jerk’ answers) is seen to be transformed around patients into practical, useful knowledge that endures. In higher education the teacher has been described as ‘the conduit’ linking knowledge and understanding (Entwistle, 2009, p.79). In clinical knowledge, the most meaningful link is to and from patients. I note here that the teachers were emphasising what is also called for in the literature: the need for stronger links between clinical and other learning. Interestingly, however, the teachers suggest that these links are already subtly, variously, but persistently occurring and they are determinedly committed to the processes. All except two teachers (Drs O and I) discussed an aspect of clinical knowledge being formed around and in relation to patients. There are four expressions of this understanding of clinical knowledge being fundamentally made around patients.
3.3.1 The patient in context

Two teachers gave particular emphasis to the need for students to understand the patient-based knowledge in context. As Dr W explained, for the student to understand this patient with this condition in this consultation, the teacher must put together an explanation of the patient’s history with the patient’s visit today, giving the student a context for this visit. Without that context, the consultation means nothing, the student does not gain more knowledge. Dr W talked further about students’ knowledge ‘gelling’ over time given all their clinical experiences. However, it does not ‘gel’ without the contextualizing information provided by the teacher before and often, as well, after the consultation. The ‘putting’ together of the patient’s history with the visit today, becomes the knowledge the student continues to build upon.

This knowledge-making sometimes involves the teacher and at other times is the students’ sole responsibility. Dr G described to me how a student’s knowledge can be transformed by a teacher during a ward round only if the student has previously spent time on the ward to become familiar with the patients and other medical staff. This adds a new dimension to clinical knowledge-making. Ward round discussions (with patients, families and then amongst staff) according to Dr G’s representation, are of value to a student only if she brings to the event a familiarity with the patients being discussed. Without this familiarity, it is as though ‘they are hearing the case for the first time’ and so will not be able to understand it, their clinical knowledge will not deepened or expanded by what they hear the teacher say and see the teacher do with and to the patient and staff.

I suggest that one of the situational influences on this way of thinking about knowledge-making is that the teachers often expect to see some students only once, to have only one opportunity to teach and influence them about the condition, their specialty and about medical practice. In the reality of the timetable, for example, a medical student may attend only one OP clinic with an Endocrinology physician, or a Neurologist, so there is a limited, perhaps single opportunity to have the ‘links’ made and the knowledge put together around a patient. The pressure of the single opportunity is keenly felt.

3.3.2 Patients make knowledge messy

A second expression of this understanding of clinical knowledge being fundamentally made around patients is in teachers’ references to students’ textbook-based knowledge being prised open and exposed to the dynamic uncertainty and complexity of practice. The knowledge is
thus contextualised to individual patients and the circumstances of their health and illness. In its very nature, the emerging new knowledge is dynamic, uncertain and messy as it is learned from each individual patient. The teachers gave subtly different emphases here. One emphasis was on the ethical aspects of practice. The students are thought to have learned in textbooks about what ‘could’ be done, but they need to think about what ‘should’ be done for a particular person: ‘people’ are not just ‘diagnoses’ (Dr A). Another emphasised that students need to learn to think carefully about each person because people live with a particular medical condition in their own social ‘circumstances’ (Dr G). In the classroom, a teacher can convey this knowledge through narrative, ‘a patient I saw once ...’. In the ward or clinic, the patient tells their own story revealing the significance of their circumstances – on the street, cycling, on the freeway, living alone.

In this study, I observed such a case on a ward round where the patients had suffered strokes. A considerable amount of the students’ time was spent listening to and watching the doctor’s discussion with a patient and his wife. The discussion focused on the need for and risks associated with anticoagulant therapy in the context of the man’s commitment to road cycling for recreation. Both he and his wife agreed that it is cycling that ‘keeps him going’, and will not readily be surrendered. This type of clinical learning setting has been categorised by some as ‘passive’ learning and dismissed because, for instance, the students have been found to not speak much in these places (Jolly & Rees, 1998). However, this consultation was a dramatic, demanding and sometimes entertaining treatment dilemma: a lively, eccentric man interacting with the doctor was in effect teaching the students about the challenge of prescribing a ‘recommended’ treatment when the very treatment may threaten the patient’s life if he had another accident and bled while riding his bicycle. In the subsequent corridor discussion, students listened to the medical team discuss at length the possible management plans for the patient given his determination to continue cycling. The teacher referred back to this in the interview as a classic example of a memorable patient encounter for those students. It is likely too that it will become a case story to illuminate and enliven future classroom teaching (for him and perhaps the students in the future). It makes messy and gives meaning to the textbook facts of managing stroke patients, and of prescribing life-saving (life-threatening?) treatment.
3.3.3 Patients have knowledge that doctors need

The third expression of this understanding of clinical knowledge being fundamentally made around patients is a new emphasis on the patient as actually having knowledge that a doctor needs. Here is a new place for the patient in medical knowledge-making.

When one of the teachers talked about the tutorial where she had been teaching students about diabetes, she insisted (as she did during the tutorial itself) on the importance of students learning that doctors must ‘ask the patient’:

   You know they forget, they think there’s right questions and answers and they forget that the patient is part of the dynamic so when you say to them how do you know if it’s Type 1 or Type 2 Diabetes, the first thing they said is you have to do this test and that test. You know, and I said no you ask the patient and in the real world that’s a lot of what we do we try to work out with the patient what’s going on and the patient will tell us things ... (Anon, Interview)

And later in the interview, she gave a very practical emphasis:

   they’re little quirky things like nobody ever tells you that you can get the patient to tell you what the blood pressure is if you just tell them what to do they don’t need a stethoscope. (Anon, Interview)

Suggested here is the sense that clinical knowledge is not only built around patients, but also actually acquired from them. This is much more than the common expression of students needing to learn to take the patient into account: the teachers are making the point that knowledge of what to do for a particular patient is gained from that patient – and becomes part of the whole knowledge store. While this particular sense of the place of the patient in knowledge-making was expressed by just one teacher, it was made to both the students and to me. Its expression contributes to the emerging understanding of how clinical knowledge is conceptualized.

3.3.4 Doctors remember this knowledge better and longer

The fourth expression of the patient’s place is that, contrasted with textbook knowledge which is often dull and difficult to learn, clinical knowledge gained around patients and from time spent in the clinical settings lasts the doctors’ working lifetime:
I want them to put a face to a constellation of things that they need to know, Mrs X had this and I read it up today and I will remember this for the rest of my days ... And you remember the scenario not the particular patient, and especially how it came about (Dr S, Interview).

Another teacher who has been practicing medicine for more than 40 years, emphasised the importance of the first clinical encounter with a condition that provides for deep learning:

I learnt myself a lot from experience and from patients and I can still remember interesting patients that I saw as a student and as a junior doctor and when that condition comes up I can actually remember the first time I heard about it and the context in which I heard about it so it worked for me ... (Anon, Interview)

Dr S said he remembers the scenario probably meaning the patient’s condition as well as the clinical setting he was in. The other reference was to remembering actual patients as well as the context. It was common in the interviews for a teacher to refer to the importance of ‘a particular patient’ in building their enduring store of practice-knowledge. In talking about the importance of gaining knowledge about how to interact respectfully (and therefore productively) with patients, Dr M passionately recalled his experience:

[another] thing that influenced me most was in my intern year I had a patient who had been on the ward – I’ll never forget this – he’d been on the ward for 6 weeks or something and ah he was about 70 and I can’t remember what was wrong with him and I’d go up and see him every day as an intern and at the end I had built up a bit of a rapport with him, but at the end he said I’ll give you one piece of advice if you’re a doctor don’t talk to people talk with them, and I thought wow that’s really true and now I tell that to people and I talk with the patients rather than talk to them (Dr M, Interview)

Thus, learning from an individual patient and from patients in general is central to the making of useful knowledge. And, it is significant that this knowledge is thought to last for ‘the rest of my days’. Teachers in Taylor’s study referred to having picked things up from patients that were ‘precious in my mind’ (Taylor et al., 2007, p.373).

Variously thought about, the patient is thus central to the transformation of students’ knowledge, patient scenarios they never forget. These are the transformative narratives that change the quantum and the quality of students’ clinical knowledge both at the time it arises
from the patients, and later. As well as being of fundamental value in medical practice, the memorable patient is also available to be drawn upon by medical teachers to enliven and power classroom and clinical teaching. The different emphases I found in this study offer new ways of thinking about how formal knowledge is transformed into knowledge for practice with real people.

### 3.4 Seeing knowledge as ‘wisdom’

As well as being complex, dynamic and lasting, the knowledge formed in the clinical settings is seen by the teachers to ultimately produce ‘perspective’ and ‘wisdom’, the higher realms of clinical knowledge. This understanding emerged in different ways in the interviews. In commenting on what he perceives to be the acceptable level of students’ theoretical knowledge, Dr R went on to say ‘[but] you learn the perspective ... what’s common and uncommon and what’s important and what’s not important’ through practice [Dr R, Interview]. ‘Perspective’ here captures much of what other doctors described about knowledge they are teaching the students. For instance, two teachers (Dr A and Dr F) said they teach students ‘tricks’ and ‘little clinical tips’ for distinguishing severe from not severe illness or highlight the difference between what could and what should be done for an individual patient. The essence of ‘perspective’ (or ‘judgement’) as a higher form of knowledge formed through bridges, links and putting things together around/about patients involves making distinctions – separating what is important, rare, severe, and necessary from their opposites.

Another representation of this re-positioning of clinical knowledge is evident in the teachers’ ideas about teaching ‘the art rather than the science of medicine’ (Dr C). In the interview with Dr C, for instance, he further emphasised his intention of drawing students’ attention away from the new technologies and back to the looking at the patient and asking questions. Others elevate this intention to ‘wisdom’. Dr A is a little coy in saying she wants to ‘give them a bit of wisdom, not wisdom, but how someone who’s been in the field a lot’. But, Dr G is more certain of what he and other hospital-based teachers are doing:

> What I’m trying to give them is the stuff they won’t get from the textbooks ... the stuff that the consultant who does that particular specialty all the time knows, little pearls of wisdom that you can’t get from the books no matter how you read. I don’t care if you read a hundred trials or you read the whole text book of Harrison’s, but they’re the little things that you can’t get unless you’re taught that! And, you don’t have to know everything but those little things are very important ... they’re little pearls of wisdom
that you get from experience, that the practicing clinicians know, but nobody has ever written it down or tells you or teaches you ... (Dr G, interview)

There are interesting and revealing contradictions inherent in Dr G’s statement – that knowledge reified as ‘wisdom’, can be gained only from ‘experience’, but then again, it must be ‘taught’ because it is not ‘written down’ or otherwise available. Tacit knowledge for practice, what the doctors know from their own experience, is both essential and difficult to acquire. What is certain for them, however, is that the knowledge is unique – practitioners gain it from experience, from doing their work in ‘the field’.

4. Summary
Emerging from the ways teachers talked about and practiced their teaching, is an understanding of the dominant place they give to a particular type of knowledge – knowledge that they have acquired in and that is related to the workplace and the patients around and with whom their teaching takes place. The form of knowledge is concerned with specifics and contexts of people and places through which students need to learn what matters and how to go on learning and building knowledge about that. Some of it is tacit. Some of it is about accumulation and transforming the inert and undifferentiated knowledge of textbooks into forms that can be usable and effective as distinct from theoretical knowledge.

From the teachers’ perspective, one element of clinical knowledge that students need to learn about concerns the realities of a doctor’s working life. By being around the medical teachers in classroom and clinical settings, students can learn about the pressures of time, the constraints of health budgets on clinical decisions, the complexities of language and other social factors in consultations, and about managing sensitive conversations. Much of this is implicitly available as students spend time in OP and wards, but some is also explicitly taught there, interwoven with the teaching of clinical medicine.

Also emerging here is the incontestable value of people, of learning medicine from patients. The teachers emphasised that students need knowledge of how and why to behave respectfully towards each patient as a person. The knowledge involves understanding the uniqueness of each individual’s experience of a condition within their personal and social circumstances. There is a prevailing disappointment, however, that students do not have and sometimes do not appreciate the value of this knowledge. Also there are other important emphases: the knowledge involves learning about the application of treatments according to individual patient differences; and the knowledge is constructed patient-by-patient. An
important finding is the perception that some knowledge is also in the patient, that the patient has knowledge (of their conditions, treatments, experience) that students and doctors need to access.

This chapter has also discussed the teachers’ perspective on the places of learning and their understanding that knowledge resides in the places themselves – the wards, the corridors, the hospital. Here, the study offers some explanations for teachers’ decisions about where to do their teaching. The places themselves and the artefacts in them are seen to hold some educative power, they ‘involve’ the students in ways that make the extant knowledge ‘real’ for them.

In contrast, textbooks and classrooms, protocols and curriculum documents all lack the vitality, complexity and durability of knowledge that is contextualised and processed around patients, families and the doctors in the hospitals. At the core of the problem is the form that formal knowledge takes: neat lists and facts are no match for messy individualised clinical knowledge.

The discussion in this chapter turned to an understanding of textbook knowledge – formal, codified knowledge – being transformed into useful knowledge. From patients directly and from hearing patient stories in clinic or classroom and always in the places of the hospitals, knowledge is reformed. Teachers provide students access to this knowledge, taking them to see and learn from particular patients. Here, more common than the conventional notion of ‘applying’ one knowledge to another, is the suggestion of knowledge made through ‘links’ and ‘bridges, ‘pulling’ and ‘putting’ things together. Importantly, it is seen to be the knowledge that lasts.

5. Discussion

The medical teachers’ values, perspectives and practices discussed in this chapter contribute two new ways of thinking about clinical knowledge, teachers and teaching. First, the study offers a new way of thinking about what constitutes clinical knowledge. Second, the teachers’ perspectives suggest an opportunity to conceptualise the relationships between different forms of medical knowledge.

5.1 Conceptualising clinical knowledge

Two decades after Irby classified the domains of clinical knowledge that teachers need (Irby, 1994), the teachers in this study have offered a new way of thinking about what constitutes the knowledge they have – and the knowledge students need. The teachers’ values, practices and passions add further texture and vitality to that model.
First, the teachers’ perspectives suggest that there is both pedagogical and political value in referring to clinical ‘knowledge’ rather than to clinical ‘experience’ as the Irby model proposed (Irby, 1994). From their perspective, clinical knowledge emerges out of clinical experiences. The two are not the same and the distinction is important when the facets of knowledge and the teaching of knowledge are being considered. Knowledge is seen to emerge from experience which puts experience in the pedagogy domain – how experience is provided for, facilitated and built on in ways that cumulatively construct knowledge. Second, the teachers did not distinguish knowledge from skills which is a perspective consistent with a holistic view of professional knowledge (Eraut, 2004). Even in relation to ‘communication’, their focus was not on ‘skills’, the doing, but on what the students know about how to behave around patients in general and in specific situations. This is a broad conceptualisation of knowledge.

One emphasis in this conceptualisation is that clinical knowledge exists in and comes from patients. The teachers did not talk of the more commonplace learning ‘about’ or even ‘with’ patients (Nair, Coughlan, & Hensley, 1998). Rather, if some knowledge is in patients, it can no longer be seen to reside solely in the doctor or in the student. It is not what is simply applied to or brought to bear on a patient, but is also acquired from them. This emphasis is different from the representation of students learning from patients as they work on their interview skills (Brosnan & Turner, 2009). The teachers talked of students needing to learn that doctors ask patients to tell them about their illnesses, about their response to the treatment, their attitudes to the plan, their particular life circumstance – and that this constitutes knowledge. Importantly, that knowledge is seen to be available only once the student has the requisite knowledge of the types of behaviour that allow it to be elicited.

Importantly, too, the knowledge is not limited to diseases and their investigation and treatment. Rather, knowledge gained from patients – and from being around and hearing ‘about’ patients in the more usual formulation – encompasses the affective and ethical spheres too: it constitutes knowledge about self and life … and death. It is seen to emerge in and be about difficult situations: the strangeness of introducing yourself to an unconscious person in ICU; the poignant moment of asking questions of a man with dementia who turns searchingly to his wife for answers; the personal difficulty of giving advice to a joker who is more committed to his own pleasure than to the doctor’s potentially life-saving treatment; the personal ethics of consulting with a patient from whom you may be required to withhold unaffordable medical treatment. In the teachers’ view, students need this knowledge of what to do, as well as the how, the why and the self-knowledge of how they will ‘cope’ with it, how
it will feel to be a doctor. (As an aside, medical teachers and students in Vietnam would understand this differently: in their language only one accent distinguishes intellectual knowledge “Trí thức”, from knowledge about how to behave towards and treat people, “Tri thức”.)

The teachers’ re-positioning of the patient as an actual source of clinical knowledge contributes further to contemporary re-thinking about the relationship between patient and doctor (as well as patient and student) within is thought of as a redistribution of power in medicine (Bleakley et al., 2011). Over recent decades, the patient has increasingly been positioned as a more active partner in the relationship, and the relationship seen as one in which students learn ‘with’ rather than just ‘about’ patients (Rees, Knight, & Wilkinson, 2007; Towle & Godolphin, 2011). From my study, the patient is further repositioned, becoming more powerful as the tacit holder of knowledge that doctors and students actually acquire.

In this study, it is not only the patient re-positioned as a constituent of clinical knowledge. The place itself – where clinical practice, teaching and learning happen – is also newly positioned as offering more than a ‘context’ for the learning (Dornan, Scherpbie, & Boshuizen, 2007; Teunissen & Wilkinson, 2011), and is certainly more than a ‘container’ in which the teaching and learning occur (Edwards & Miller, 2007, p.263). Being around patients and being in places means gaining knowledge from them. Seen through the Actor Network lens which has recently appeared in medical education (Bleakley et al., 2011), the clinical place emerges as another (non-human) actant. Looking more closely at this, the teachers evoke a less dichotomous view of content and context, leading to new a sense of the knowledge-place relationship, a view consistent with others’ representations of knowledge residing in places (Edwards & Miller, 2007). Like Edwards, Mulcahy captures this understanding in her view of space as ‘not a backdrop against which action takes place’ in teaching so that space or place is now thought of in ‘relational’ and ‘nonhierarchical’ ways (Mulcahy, 2006, p.58).

Others have previously suggested that ‘medical educators have largely ignored the importance of location’ (Jolly & Rees, 1998, p.184), and that they have focused on teachers and pedagogy ‘rather than on the contexts for such activities’ (Bleakley et al., 2011, p.137). The findings of my study challenge these views. The teachers do not ignore location; rather, they actively choose to teach in particular places for knowledge-making. Place is more than a ‘context for’ teaching and learning: place is perceived to actually effect knowledge.
5.2 Reconceptualising knowledge relationships

A common description of how the components of medical knowledge are related is that they are (or would ideally be) naturally ‘integrated’ (Cooke et al., 2010b; Irby, 1994). However, from the teachers in this study, there is a sense of something different from ‘integrated’ in the relationship between different forms of knowledge, and this perspective affects how they practice as teachers. The teachers’ metaphors of links and bridges, and their expressions of putting and pulling together aspects of knowledge, suggest something more subtle, certainly more dynamic and continuous than is implied in ‘integrated’. As well, linking and bridging may be more achievable given the inherent uncertainty and fluidity in the knowledge and in the knowledge-building they value. It is somewhat intuitive and natural for them to make links – and to help the students make links – between all the sources and forms of knowledge.

In this study, I did not explicitly ask the teachers about how they perceive the relationships between knowledge, but a strong sense emerged that speaking as teachers, they dismiss formal (codified) knowledge (encompassing both textbook and bioscience knowledge). This calls for some consideration of Patel’s so-called ‘two worlds’ model, wherein experienced doctors are seen to separate bioscience knowledge from their clinical knowledge and the two worlds interact only minimally in their practical reasoning (Patel, Evans, & Groen, 1989). Alternatively, from another perspective, the so-called ‘encapsulation’ model of medical knowledge suggests that formal foundational knowledge becomes gradually integrated through repeated application (Rikers, Schmidt, & Moulaert, 2005). Others have recently suggested that such a view of the separation of bioscience from clinical knowledge that persisted throughout the 20th Century is not the best way to develop ‘clinical expertise’ (McColl, Bilszta, & Harrap, 2012, p.3), and Norman recently reminded the field about the evidence available for another understanding of this matter (Norman, 2012). Basic science has been shown to provide students with something of ‘an organizing conceptual framework in learning clinical medicine’; it has a ‘developmental role’ for students (Woods, 2007, p.454). That framework may become invisible to practitioners in their employment of it over time, perhaps helping to explain why medical teachers do not pay attention to it in practice. Norman also suggests that because the teaching of the biosciences has traditionally been poor, the knowledge does not endure (Norman, 2012). These perspectives and alternative explanations are taken up again in Chapter Five in relation to how the teachers do and do not identify as teachers and the place of knowledge in those teacher identities.
In contrast to what teachers associate with formal (textbook medicine and bioscience) knowledge, knowledge that is made with and around patients is seen to be associated with what is unique and even represented by some teachers as ‘wisdom’. While this might appear as an extraordinary and lofty claim, it has recently been carefully examined and found to be a reasonable description of the higher forms of clinical knowledge and probably the ultimate goal of medical education (Montgomery, 2006). I suggest that it is the notion of ‘wisdom’ that, once examined, helps to explain why textbook knowledge is seen as inferior and dismissible. Montgomery examines wisdom from different angles; she sees practical wisdom as well as colloquial wisdom, aphoristic wisdom, situational wisdom, clinical wisdom, folk wisdom, accumulated and contradictory wisdom and proverbial wisdom. This is clearly ‘wisdom’, not ‘Wisdom’. The teachers’ references to their ‘tricks’ and ‘tips’ and ‘tools’ that help students distinguish one thing from another, developing what one teacher called ‘perspective’, another ‘art’, and another as the ‘stuff that no-one has ever written down’. This is ‘practical wisdom’. In Montgomery’s terms, it is the clinical judgement that ‘enables physicians to fit their knowledge and experiences to the circumstances of each patient [within] permeating uncertainty’ (Montgomery, 2006, p.33). This helps to explain the prominence of knowledge in the teachers’ discussions of teaching.
Chapter Four

Medical Teachers’ Humanistic Perspective on Pedagogy
When I set out to explore how medical teachers in hospital settings thought about and approached teaching I discovered, as discussed in the previous chapter, that their direct response was to emphasise to me what they were teaching – the form and content of their knowledge, and the features and relative status of the particular form of clinical knowledge they value. The study also allowed me to understand their processes of teaching, how they thought about and practiced the pedagogy. This is the focus of this chapter.

I begin with a short narrative about the circumstances of the interviews and the observations of the teaching to suggest something of the character of the people and the situations. Then, four findings are discussed: the popularity of the term ‘interactive’ to describe teaching; the reliance on questions; the importance they place on personal and interpersonal factors; and the influences they cite regarding their approaches to teaching. The chapter concludes with reflections on these findings in relation to particular features of the medical education discourse and wider theoretical perspectives.

Despite my preference for meeting with each teacher prior to observing them, none of the participants made time for such a meeting. Instead, I met them at the scheduled teaching session, and these first contacts were characterized by brief exchanges of pleasantries, handshakes, introductions, signatures on consent forms, and decisions about consent-seeking from bystanders and where I should sit. Such was the environment for the data collection: the doctor-teacher has no time to spare, rushes in and rushes out, so that exchanges of information are limited to the essentials, particularly in the context of teaching around patients. In most cases, the interviews took place immediately after the teaching session and the conversations were thus infused with the energy, immediacy and concreteness of the shared experience of the teaching.

Observing teaching in hospital classrooms (lectures, tutorials) is similar to observing teaching in school and university except that in the hospital the teacher is usually fitting a teaching session into or around their clinical and other responsibilities. What is significantly different, however, is conducting observations of teaching in clinical settings – ward rounds, outpatient clinics and tutorials conducted at a patient’s bedside. There, as ‘your content talks out in front of you’ (Taylor et al., 2007, p.373), the doctor is primarily concerned with the patient, but also manages their families, other staff and, as a teacher, the students and medical trainees. These are busy and crowded situations:
... on a ward round ... you obviously have to see the patients, so fundamentally it’s a service requirement, but what you can do is get the students and the junior doctors to present the patient to you and that includes the students seeing the patient and then seeing what they can learn from it in terms of asking the questions, examining the patient, giving you an idea of the diagnosis is and the investigations and management, and then the other members on the round ... they can all learn from that and if there is something interesting you can go into more depth and show them. But you do have limited time, so it has to be a sort of teaching on the run, short bits ... [Dr R, Interview]

As an observer on ward rounds and in OP, I was, like the students, squeezed inside this action, carried along from patient to patient, and trying not to obstruct the work or the students’ learning. Despite these pressures – and the added strangeness of having an observer and a subsequent interview about teaching – the participating doctors were welcoming and helpful to me as a researcher. Once we had met, many were happy to talk at length in the subsequent interview.

Most interviews began with the doctor’s response to my opening question about whether the session I had observed was a ‘typical’ teaching session. An examination of their responses revealed that the sessions were mostly thought to be typical suggesting that the researcher’s presence did not affect the sessions. Only Dr C explicitly mentioned that my presence may have made the students less talkative than usual (although during the interview he also described his teaching as ‘traditional’ and ‘didactic’ and my observation was that his tight structure and preference for talking and telling stories did not leave much space for students’ participation). Another teacher’s response contained a hint of defensiveness, perhaps inferring ‘typical’ as a criticism; he said ‘I have to do the best I can, and if they’ve complained I haven’t heard about it’ [Dr S]. Others mentioned circumstantial factors that made it ‘different today’ such as the room, the volume of information, the students. Having an observer did not seem to be experienced negatively.

The follow-up question (‘Can you tell me about what you were doing in that session?’) was intended to give the teachers something concrete to talk about, an opportunity to refer to what went on in the teaching session and to reveal to me something of each teacher’s way of thinking about teaching. A small number made reference to what they and the students were doing, or to what was going on, the action of the session. Others teachers took this opportunity to express opinions on the medical curriculum. Many enthusiastically related
lengthy stories and explanations that suggested there was some pleasure for them in talking about their teaching.

1. Understanding the pedagogy: ‘Interactive’ is popular and ambiguous

In an interview with one doctor approximately halfway through the study, I was surprised by his use of ‘interactive’ to describe the teaching I had observed. It was not that the term is unfamiliar to me, but I did not think that Dr I had done anything in his teaching session that made it ‘interactive’. For me, an ‘interactive’ teaching session would include some of the following: eliciting questions and comments from the students, a discussion, small group case analysis or problem-solving, or perhaps ideas-generation or experiential activities. Somehow, students would be actively and deliberately ‘invited into’ learning encounters (Mann, 2011, p.66). It occurred to me that ‘interactive’ was a term that had been used by other interviewees. In this chapter I explain the meanings of ‘interactive’ as the teachers used it and which I identified in a systematic search of the transcripts. The results of this identification and display process, similar to that described in the previous chapter in seeking to understand and explain ‘real’, are available as a full set of quotations showing the use of ‘interactive’ is available in Appendix G.

The first level of analysis of this finding comes from the interview data. Fifteen (15) of 24 interviewees used ‘interactive’ between one and five times each; overall, there are 27 references to ‘interactive’ in the set of transcripts. Closer examination of the transcripts, and in the context of my observations of the teaching practices, revealed that different teachers associate ‘interactive’ with different factors related to the teachers themselves, the students and the teaching. They use the term often but do not make it at all clear what they mean by it. For example:

‘I think interaction is important, I think not scribbling away is important, you know just having, not thinking about it, but just writing things’ [Dr W, Interview]

‘... being interactive with me and being open and flexible about it rather than just going through the slides.’ [Dr O, Interview]

‘... have [answers] on the board and be able to discuss it in a more interactive way, rather than just someone says something and it’s just forgotten.’ [Dr P, Interview]
‘... questions came from all over the room’ [Dr J, interview] and ‘and we have Jenny here today so you can be interactive’ [Dr J, Observation]

‘... it’s very group dependant, some groups will just sit there and almost writing all the time ... other groups are very out there and it becomes a very interactive’ [Dr N, Interview]

‘... sometimes it is a little bit more interaction so I think that I don’t know what the variables are that make that happen’ [Dr X, Interview].

‘I’m not sure whether that was didactic or interactive what I just did ... probably bits of both [Dr M, Interview]

‘Interactive’ picks up the teachers’ attempts to explain what the students do and what they are like, how groups differ, how content and place determines what can be done, what might determine the differences, what the teachers do, what they feel like as teachers, their preferences, and even the mystery of working with students. However, although the term is popular and liberally used, it is not necessarily helpful to teachers as can be seen in Dr M’s use of it five times in the interview, and finding he is ‘not sure’ what it means.

Of the nine teachers who did not use ‘interactive’ (or ‘interaction’) eight were senior teachers. I did not observe senior teachers to have distinctly different practices from the others, not evidently teaching more or less ‘interactively’ and nor did they necessarily hold different perspectives from the others. Perhaps like other senior professionals they have seen fads and faddish language come and go and have somehow developed immunity to what they perceive as fads. Others have noticed that senior teachers are more at ease than younger clinicians, more comfortable about aspects of teaching (Beckman, 2004; Maguire, 2008) and this may translate into their disinterest in this popularist language.

‘Interactive’ comes without philosophical or pedagogical specificity or value that would support teachers to do what is needed to achieve educational goals. It is used freely, not only by these teachers, but also in the course guide from the University where tutors are instructed that the tutorials they give in their medical specialty:

‘... are not lectures, but are interactive sessions in which the students are challenged to explore the subject material and attain the learning objectives with the assistance of the tutor ...’ [original emphasis]

[Tutor Guide: Kidneys, Vessels and Glands 2011-2012, Semester 8/9/10, page 7].
While the term is used officially, this is not, I suggest, the main reason for its popularity. In my own work with medical teachers, I hear it often. It is used to judge teaching (the question asked about a prospective teacher ‘but is he interactive?’) and, recently, a teacher wrote that her plan for the lecture was to ask ‘interactive questions’ (unpublished). Bleakley et al raise the topic of ‘mantras’ in medical education. They say that it used to be ‘adult learning’, then ‘experiential learning’, then ‘reflective practice’ (Bleakley et al., 2011, p.49). Perhaps ‘interactive’ might be a new mantra. If so, it is likely that it will become just ‘another notion that appears to by-pass critical attention’, belonging in the ‘junk categories’ (Schön, 1987, p.13).

Perhaps teachers use ‘interactive’ (or other popular terms) when they want to describe the ‘relational’ aspects of pedagogy for which there is not an accepted language. Taylor and colleagues found a similar preference for interactive forms of learning, describing their finding in terms of the teachers’ desire to impart knowledge in an active and engaging way and with the same focus on questioning to achieve it. They found that medical teachers tend to see these approaches not emerging out of an understanding of principles of learning, but rather, as ‘pleasant methods to make the business of learning more palatable’ (Taylor et al., 2007, p.375). It is likely too, that the popularity of ‘interactive’ expresses an aspiration towards what is currently in the air around medical teaching. Stenfors-Hayes refers to this as ‘the prevailing zeitgeist’ about teaching, a partial acceptance of a ‘student-centred’ perspective, but without a full understanding of what that means or requires (Stenfors-Hayes, Hult et al., 2010, p.206). The following discussions of pedagogy, followed by an analysis of the teachers’ perspectives on what influences their teaching, draw out further meaning in what the teachers in my study associate with ‘interactive’.

2. Understanding the pedagogy: Questions, silences and uncertainties

There was not a wide range of pedagogical techniques observed in the teaching sessions during this study. The most common technique in classroom teaching was to talk and ask questions, and also, particularly in large group sessions, to show slides. A few teachers included small group work, facilitated discussion or used video. However, putting together the observations of teaching with the teachers’ ideas revealed in interviews, afforded me a more informed view of what is going on pedagogically with question asking and management.
2.1 Teachers asking questions

In this section, with reference to data from both the interviews and observations, I will explore how the medical teachers went about and talked about using questions and answers, particularly the important matter of who is asking the question (Green, 2006, p.6). In the interviews, some teachers focused on the teachers as the question-askers, others focused on the questions coming from the students, some talked about questions coming from both and others did not talk about questions at all. Those who emphasized the questions coming from the teacher explained that this helps students concentrate, helps them self-assess, and keeps students awake. For some, this discussion focused them on their own perceived inadequacies:

- ‘I usually answer my own questions to save time’;
- ‘I feel compelled to continue to talk rather than wait too long for students to respond’;
- ‘I get bored if students do not answer’;
- ‘I use a version of the Socratic method, but I don’t have time to do it properly’.

Implicit here is some awareness that their technique for question-and-answer teaching does not necessarily exemplify good teaching practice or reassure them about their teaching.

On the other hand, those teachers who talked about the students as the initiators of questions, have some sense of questions as important pedagogical devices. For Dr U this approach was seen as requiring particular pedagogical expertise in responding appropriately to students’ challenging or confronting questions. Another teacher emphasised that encouraging the students to do the question-asking is a form of professional socialization – students become confident about asking senior doctors questions so that later they can practice more safely (Dr N). Another teacher said that students do not know enough to ask questions when they have just started their clinical rotations (Dr S).

Many of the teachers have a sense that questions are important pedagogical devices but my observations show they use questions in limited ways. Questions are seen by the teachers here as devices that help them to achieve a range of personal, interpersonal and pedagogical goals. Contrary to the impression given in some interviews, when I observed teachers, I noticed that it was usually the teachers rather than the students who asked the questions. The following example illustrates the typical rhythms that questions help to create particularly in classroom session (the topic, ‘sleep’, may identify the teacher, so I have not included the participant identifier).
Table 4: Analysis of questions in tutorial

<table>
<thead>
<tr>
<th>Question samples</th>
<th>Type</th>
<th>Description</th>
<th>Number of Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>So what is sleep? What muscles are involved?</td>
<td>1</td>
<td>Asks for a single answer (usually factual).</td>
<td>7</td>
</tr>
<tr>
<td>There is one drug that is particularly important, and that is ...?</td>
<td>2</td>
<td>Upward inflection indicates students should finish this sentence</td>
<td>3</td>
</tr>
<tr>
<td>That’s pretty much sleep in a nutshell. Any questions about all of that?</td>
<td>3</td>
<td>Ends topic, asks for questions; provide structure.</td>
<td>4</td>
</tr>
<tr>
<td>So why do some people get sleep apnoea and others don’t? Well it’s all related to two things. First of all ...</td>
<td>4</td>
<td>Asks a question and answers it without pausing</td>
<td>1</td>
</tr>
</tbody>
</table>

This table illustrates a typical pattern for a one-hour classroom session including the teacher’s attempt to invite students to ask questions. The questions can be classified into four types: the question seeks one factual answer (closed); through inflection, the teacher invites the students to finish the sentence with a correct word/term (chorus); the teacher asks if the students want to ask questions (‘Any questions?’); and, the teacher asks a question of himself (a non-question). This teacher and others ask ‘Any questions?’ to divide and structure the sections/topics in his tutorial. The body language (forward-leaning, smile, open gestures) implied a desire for the students to ask questions – it was not a meaningless action. However, the questions the teachers asked were most frequently Types 1 and 3, particularly of the ‘inquire, respond, elaborate’ approach asked in a way that implied that the students’ response(s) – active or silent – were springboards to talk further on the topic (Schoenfeld, 1998). It was common to hear the teachers ask a question, take one answer, respond with something like ‘Yes, that’s right’, perhaps explain why it was right – and move on.

In most instances, the student-initiated input is thus controlled and limited, although often too, students ‘interrupt’ the teacher with a question. This highlights an important feature of the pedagogy: it was obvious in all instances that the teachers responded positively to the students’ questions whether they come as an interruption or in response to the invitation ‘Any
questions?’. In every instance where this question was posed, one or more students asked a question and the teachers verbally and non-verbally communicated (through tone of voice, facial expressions and body language) pleasure in these exchanges. In other education settings, such ‘patterns’ of language use by teachers are regarded as the stuff of self-monitoring of teaching practice (Christie, 2000). Also, in the analysis of medical interviews such interactions are regarded as important, more than insignificant ‘noise’ (Heritage & Maynard, 2006, p.11).

Green’s observations of clinical teaching, lead her to describe the common use of ‘false kinds of question and answer’ (Green, 2006, p.8), questions seemingly not intended to take either the teacher or student very far. This suggests there is further meaning in ‘interactive’ as questions are employed by the teachers. The way the practice is described by the teachers, posing questions to students seems to provide a sense of the students being attentive, awake, even involved, and offers the teacher a feeling of being connected to the students and makes teaching more enjoyable:

The problem is if you don’t pick on them they fall asleep. So, and if you notice in the lecture, I did the same which is to ask questions (Dr G)

really it’s just ... [laughs] I get bored, really if they’re sitting there doing nothing and I’m just talking, you know nobody answers a question. It’s very frustrating to have a conversation and teach and not have anybody answer your questions! So, fine, I’ll just MAKE them answer my questions (Dr E)

I also observed that posing a question to a student is often a moment for direct eye-contact, a smile perhaps, a verbal and non-verbal invitation to engage that perhaps produces and preserves the desired atmosphere and spirit of the session.

Two important points emerge here. First, my understanding of what counts as interaction has a technical focus which misses some of the interpersonal elements of pedagogy which these teachers emphasise and upon which they are somewhat reliant. Second, my own initial impressions were modified: my description of what I observed as a ‘talk-and-ask-questions’ approach more than an ‘interactive’ approach, is not consistent with the ways the teachers talked about the teaching. It is not that the impressions were false, but rather that putting the observations and their discussions together, afforded me a more complex view of what is going on pedagogically.
2.2 Teachers managing questions

Although maintaining the position as dominant question-initiator might suggest that the management of the exchanges would be uncomplicated, this was not always the case. I noticed that once a student answered a question, the teacher would often simply continue talking. However, if a student did not answer promptly, there was sometimes a discernible moment of awkwardness, a discomforting lack of technical teaching expertise. This happened many times but was most starkly evident in Dr X’s experience which she discussed in the interview. Dr X expressed disappointment and frustration with the lecture, not having enough time to get the discussion working despite her expressed goal of changing the students’ attitudes to a certain medical practice. I recalled for her a particular moment in the lecture when she clearly did stop talking and showing slides, and asked the students if they had questions. She explained her experience of these moments:

And that’s sometimes when ... that’s the moment, and you know sometimes you can see you know you can eyeball someone who’s you know nodding and giving you lots of positive affirmation and you eyeball them at that point and they may have a question but sometimes it doesn’t work like that, yeah. I much prefer teaching a little group. [Dr X, Interview]

When ‘it doesn’t work like that’ – that is, when the students do not respond – the teacher expresses (and appeared to experience) the feeling of being stranded, bereft of options other than reverting to showing slides and talking about them, or to the comfort of a small group. In these moments, Dr X looked uncomfortable. There were many signs that she wanted to have a dialogue with the students: she leaned forward over the lectern, her hands and forearms facing forward, she smiled often, paused frequently to indicate a willingness to hear the students’ questions and responses and used her voice with rising inflections. However, generating little more than a minimal response from the students, she hastily reverted to talking-and-showing-slides, escaping from the awkward silence of a failed dialogue.

This limited technique for managing exchanges and facilitating discussion was apparent in some small group tutorials as well as in lectures. While like Dr X, some of the teachers expressed a preference for teaching small groups, my observations suggest that this preference does not necessarily equate with small group teaching expertise. Rather, it is just more comfortable for them, they feel closer, less exposed, better positioned to influence and to draw the students in by non-verbal means.
2.3 Silences and uncertainty

In the interviews, some of the teachers explained that they just do not want or do not allow silences to occur, and they have individual strategies for avoiding (the discomfort of) them. In the example above, Dr X retreats to talking, and like others, sees the problem related to the group, the room, the situation. Dr E in describing her preference for fast-paced sessions, explained that she knows that ‘you can spend time with big silences’, suggesting that she has experienced this or perhaps heard about using silence as a teaching and communication technique. However, she went on to say explicitly ‘but I do not want to do that’. She described the technique that I had observed her use: she maintained a high-energy pressure on students, kept coaxing and ‘pushing them’ – with a joke, a smile – to answer. It seemed to work for them, and she described how it works well for her.

This is not limited to teaching. In the medical education literature, it has been shown that doctors also often avoid silence in consultations with patients (Kurtz, Silverman, & Draper, 2005). The time-pressure in both medical practice and in teaching might explain this: however, there are other explanations too. Dr M offers one way of understanding this:

... if you ask them a question and there’s blank stares and no one says anything then you’ve got to say something otherwise you’ll all just be sitting there!’ [Dr M, Interview]

What the teachers are revealing is that silence can be experienced as uncomfortable and regarded as a waste of valuable teaching and learning time. Both ways of understanding the problem suggest that with some more technical expertise – including underlying explanatory theory – the teachers could feel more comfortable with intentionally creating and managing silence.

A related finding is the awareness amongst the teachers of their inadequate technical expertise in teaching. Some teachers commented in the interviews that ‘we are not taught to teach’, and this was the issue that three teachers raised in response to the final question intended to open up the interview up to their interests and concerns. The area of professional development for medical teachers will be discussed at length in later chapters. More specifically, in talking about teaching, these teachers reflected little on their teaching, on how different teaching techniques are or might be employed. It seems that both in their teaching and in their talk about teaching, there is little understanding of what techniques might be required to achieve the sometimes lofty goals that many have for their teaching. These goals include, for example, wanting to use the one-hour lecture to change students’ attitudes to a
patient group or wanting to challenge students to not go on to practice as they have seen others practice, for example in prescribing medications. These are ambitious goals given the situation – one hour, single encounter, volumes of content and little pedagogical expertise. The situation then, is that these otherwise successful and well-respected professionals are unsure of themselves, and in moments like Dr X described, even perhaps feeling vulnerable. The gulf is between knowing what you want to achieve as a teacher and knowing what to do to achieve it.

There was little certainty in the ways these teachers talk about teaching, evident in the many ways ‘interactive’ is used, in their various ways of using and talking about questions, and in the ways they explain (and how they go about) achieving their goals. In explicitly describing their teaching, all but three of the teachers talked about ‘trying’ to do things; there is a total of 81 instances of ‘trying’ in the transcripts. They talked about ‘trying’ many things … to get students to reflect … to avoid just talking … to improve students’ knowledge base … to highlight … to get across … to engage them … to introduce new concepts … to impart … to make it relevant. In noticing this, I wondered why they did not say ‘I was getting students to reflect …’ or ‘I taught them how to make decisions’ or ‘I introduced them to new concepts’. I wondered why they do not use definitive expressions and make unqualified statements about some specifics of what they are doing as teachers.

One possible explanation for this lack of certainty is that these teachers said they are rarely (if ever) involved in discussions about teaching, their teaching or teaching in general. Perhaps, then, they do not have the language for the conversation. In unfamiliar territory, they are reluctant to make definitive statements about what they are doing in their teaching. Alternatively, perhaps like other teachers, they may be perpetually unsure about the outcomes of what they are doing, so that ‘trying’ can be seen to express the distance between the goals and the action, the possible – but also ultimately unknown – outcomes for students’ learning. ‘Trying’ may reflect the gap between the aspiration and the reality (Holt, email communication); or it might signify the teachers’ macro awareness of their teaching goals such as trying to get students to be more aware of patients’ needs (Kron, email communication).

In summary, in this section, I have explained that ‘interactive’ is a popular, all-embracing way for these teachers to describe what they want in teaching. To achieve the atmosphere they want, they rely on the use of questions – going around the room, drawing students in. Much of their effort relies on non-verbal means to communicate their intentions; there is less intentional use of ‘instructional’ techniques to manage exchanges with students. The way
questions are used has a feeling of something habitual, sometime providing not much more than a predictable rhythm to the teaching. Beyond the routine asking of questions, however, the limited techniques leave teachers uncertain and sometimes uncomfortable.

3. Understanding the pedagogy: Relationships and enjoyment

Personal and interpersonal elements are important in these medical teachers’ approaches to teaching: dispositions characterized by friendliness; an interest in knowing the students; an overwhelming sense of enjoyment in the teaching; and strong personalities with definitive personal styles of interacting. These are not dour, formal or remote medical teachers as may exist in the popular image of medical teachers in film and television. This valuing of interpersonal aspects of teaching has been noted in other discussions of medical teaching (Kisiel, Bundrick, & Beckman, 2010; Sutkin et al., 2008; Taylor et al., 2007) as well as in higher education (Entwistle, 2003; Entwistle, Skinner, Entwistle, & Orr, 2000; Ramsden, 2007). New understandings of this aspect of medical pedagogy emerged from observing the teachers with students in a variety of settings and the interviews offered other insights to refine these understandings.

3.1 Friendliness, familiarity and closeness

As I observed the teachers, I noticed their overwhelmingly friendliness towards students and their enthusiasm for teaching them. Even in the busy, crowded and complex setting of a ward round, the most challenging teaching setting of all, the doctors were not brusque, did not show any impatience; they were actively or implicitly supportive of students’ need to learn, scaffolding their efforts and encouraging their participation. This is evident in a range of behaviours: they waited for students to arrive before starting the ward round; they took time to explain the specific clinical/patient situation; they ensured some had an opportunity to examine the patient; they did not exclude the students from the corridor conversations with the medical team; they squeezed students around the x-ray viewer in the staff area; they took time after the work was done to summarise, de-brief, and plan for the next session.

Contributing to this friendly, collegial atmosphere is the physical closeness the teachers establish and the casual manner most prefer. In OP and ward rounds, of course, there are few options – everything is close, often uncomfortably close and crowded. In tutorial rooms, the teachers, with only one exception, sat at the table with the students, close and casual – only occasionally at the obvious head of the table. One tutor sat on the window ledge, propped his leg up casually while he talked through the slides – and in the interview he told me he likes to teach ‘at their level’ (Dr I). Another teacher, whom I would describe as more formal, focused
and crisply organised, took up a slightly more remote position to conduct his tutorial – his chair away from the students’ table and facing the screen rather than the students at the table. This was unusual. However, his commitment to teaching was evident in many of his behaviours and statements to both the students and to me including his energetic manner, set of prepared notes, and his dedication to the series of tutorials as well as teaching the students on clinics and ward rounds. Furthermore, adopting a traditional position in the tutorial did not alienate the students. With an outburst of enthusiasm after my introductory statements to the group, a student said ‘Oh, Dr S, he’s awesome!’ and others endorsed that view. The students are alert to his manifest commitment to teaching and interest in them as learners.

At work here, I suggest, is the ‘inter-subjective moment of trust’ (Bleakley et al., 2011, p.111) upon which much effective teaching and learning is built. For many teachers, the arrangements for teaching are such that they see the students just once and may be concerned that this is the only teaching on this topic that the students may ever have, so they may be determined to make the session pleasant as well as useful. The tenor of all the teachers’ sessions was respectful and the teachers were careful with the quality of the interactions. Personal styles were evident, but respect and interest seemed to underpin the interactions. For example, the strong, energetic, fast-moving Dr E with no time to waste, still smiled a lot, and joked and teased students into participating. Another teacher, very senior and straight-to-the-point in style, opened the tutorial with a brief explanation that she was going to ask them a lot of questions but that she did not expect them to know the answers – because they are students. She sat at the head of the table, smiled often and cajoled students into responding. Like Dr E, she used the technique of asking students to come to the whiteboard to draw some part of the anatomy. She stood beside each student as they did their drawings, offering them support towards getting it correct. One student explained apologetically, and somewhat pleadingly, ‘I’m having a stab at it’. The teacher made eye contact and responded with quiet assurance ‘That’s fine’. The student was safe.

These practices show the relational aspect of pedagogy at work although in the interviews, I found that the teachers often did not appreciate the pedagogical value of some of their actions. For instance, when in the interview I recalled the exchange with the student as just described, I referred to it as an example of supporting students’ learning. The teacher simply exclaimed with delight that the student ‘got it right!’ We did not share the same understanding of the important interpersonal aspect of the teaching that allowed the student to get it right (or wrong), the valuable expression of support. Similarly, Dr A described what
she was doing in her bedside tutorial as ‘role modelling’ but this fails to capture much of what she did. I noticed the critical stage-whispered support to the student who was administering the questionnaire to the patient, the prompting questions to the rest of the group, and her interventions that helped a student to manage exchanges between the patient and his wife in taking the history. I mentioned in Chapter 2 having observed Dr M conducting a bedside tutorial during which he made the students laugh, and later described this to me as the need to make ‘wise cracks’ to ease the tension (presumably for both the student and the patient being examined). The joke can be seen, though, as a deliberate action that facilitates an effective tutorial. While the teachers rely on such techniques, they did not on the whole identify or describe them as facilitating effective pedagogy.

In the interviews the teachers in this study placed emphasis on the value of knowing the students. More than a social nicety, knowing the students seems to be directly associated with a sense of themselves being more effective teachers and able to educate for better medical practice. The first responses to my questions at the start of the interviews, often related to whether or not the teacher knew the students – had met them before, had seen them before, will see them again, see them for longer, or teach them in another setting. This knowing was seen to build the relationship to both facilitate the obvious – a rapport, know what experience they have, know their knowledge level, see them make progress, see them as individuals – and perhaps, more significantly, to affect the development of young doctors-in-the-making as professional socialization takes place:

... somewhere along the line, when I know the group that comes out you know it’s ok to make mistakes, now’s the time to make mistakes ... [Dr N, Interview]

By implication, knowing the group and establishing relations of trust combine to facilitate teachers’ moves to deeper levels of knowledge with the students where critical issues of medical practice can be explored and explained. For Dr N this was about making mistakes, while Dr L saw that the familiarity gave students confidence to ask questions and most importantly, will give the teacher the safety to say ‘I don’t know’ – thus modelling the capacity to utter a phrase that young doctors need to able to use. Also, Dr B and Dr J both suggested that seeing the same students in classroom (lecture) and clinical (work) settings helps the students make links between the two forms of knowledge.

In the education literature, the benefits of ‘knowing’ the students has been explored: teachers will come to know students’ cognitive abilities; they know them personally and thus rely less
on formal mechanisms to manage the teaching; and, they have a history with the students, so that the students know who they are and have expectations about how the teaching will unfold (Berliner, 2004). Once again, the medical teachers in this study reveal an implicit awareness of these important aspects of pedagogy. The study suggests the high value that the teachers place on these non-technical aspects of teaching both in their talk about teaching and the ways they enact these values in practice.

3.2 The enjoyment of teaching

“I wouldn’t do it if I didn’t enjoy it” (Dr J, Interview)

From my observations of teaching in all settings, it was apparent that all of these teachers enjoy teaching – and in the interviews, they confirmed this. Even in busy OP and ward rounds where they are responsible for patients, family, staff, administration and students, they looked to be enjoying being with the students. In the interviews if teachers did not raise it, I asked. Consistent with the findings of another study with medical teachers, every teacher in the study said they enjoy teaching (Taylor et al., 2007). Some even ‘love’ it.

Given their focus on knowledge (as discussed in the previous chapter) it was not surprising that some teachers said that what they enjoy is passing on their knowledge or in other ways giving advice and making a difference – ‘seeing lights go on’, the ‘ah ha moments’. Two younger teachers said they enjoy having ‘appreciative students’. One of the senior teachers had warned me that doctors will try to convince me that they teach for reasons of altruism and professional obligation, but that I should not believe them: he insisted that they really do it for ‘the positive feedback’ they get from students [Dr T], meaning the good feelings, the affirmation. It is reasonable to conclude that because it is enjoyable, teaching is a positive feature in the clinicians’ working lives.

One of the surprising explanations given for enjoying teaching is that it adds variety to the clinician’s work: it is better than just ‘sitting on your backside in OP seeing 3 or 4 more patients’ [Dr C], and is one of the attractions of working in the public system [Dr I, Interview] and better than doing only research [Dr W, Interview]. It offers ‘a change of pace’ and is ‘something different’ as well as ‘intellectually stimulating’ [Dr I], and for Dr J, having students with her during clinical work makes her feel less ‘isolated’. Dr D, one of the very energetic, active, busy teachers in the tutorial room, said he wants to enjoy it and he wants the students to enjoy – this was his explanation for his high-energy approach in the tutorial. Dr K and Dr N confessed that they ‘just like talking’.
Despite the added complexity and burden that teaching places on the doctors in hospitals, there is no doubt that the experience is enjoyable, the moments of teaching rewarding and the sense of being a teacher and able to educate students is also a positive. This relates, I suggest, to their determination for the interactions to be respectful, to feel pleasant.

4. Understanding the pedagogy: Influences on teachers

In the course of the interviews, a number of teachers referred to what they consider to be influences on their teaching, and if they did not raise it themselves, I usually asked. The main influences identified are medical professionals from their own pasts and, for some, family. A number of the participants have one or more teachers in their immediate family and grew up in a social milieu where the teaching profession was familiar and valued – to the extent that one teacher referred to it as teaching being in his genes. Another recalled the influence of his mother’s parenting philosophy on his approach to teaching and asking questions. Also, two of the study group had partially completed degrees in education earlier in their careers.

4.1 Professional influences

The interview schedule did not include specific questions about professional development. When teachers raised this subject in interviews (sometimes in response to my final question inviting them to raise matters of interest to them), they mentioned courses, reading and workshops in medical education, and talked about having participated (or not), or that it is desirable and needed but not provided. In referring to formal professional development related to medical student and trainee teaching, seven teachers explicitly referred to not having participated, not read books or ‘done anything’. This suggests that they are aware that there are such opportunities and resources do exist (books, journals and courses); perhaps they feel they should be participating because there is a new world of medical education around them – new curriculum, different student cohorts, accountabilities.

Amongst those who have participated there are, not surprisingly, contrasting reactions. Dr E told me that she had ‘not been taught how to teach at all’ and laughed. Earlier she had told me: ‘I don’t really have any influences … I think I just do it by trial and error … I’ve not read anything or been taught anything’. At the end of the interview, however, Dr E said she had thought about what I needed to understand regarding the barriers to teaching:

"Well I think the first barrier is that we’re not taught how to teach, like there’s a theory about adult learning and we know nothing about that. And, we’re not taught about the curriculum or what we’re meant to teach the students. So, for instance, I just start the..."
PBL and see where it goes. ... I've been to a course called ‘Teaching the Teacher’ but it wasn’t useful! If we go to something about teaching it’s not good if it’s useless! [Dr E, Interview]

This contradiction (having attended a course, but not having ‘been taught anything’) suggests that the course made no positive or lasting impression and did not affect her teaching. Instead, she had worked it out by herself, like other medical teachers have said, in ‘trial by fire’ (Taylor et al., 2007, p.371).

Dr O was more critical:

"Look I’ve done a couple of little courses over the years ... but ... I think they’re common sense, you’re already doing the things that they tell you to do in these courses and sometimes I completely disagree with the courses, I think they’re a bit silly. ... basically it’s just working it out myself ..." [Dr O, Interview]

I will consider later this view of teaching as ‘just common sense’ and the implications it has for teacher identities and professional development.

Others described having participated in professional development related to teaching and found it useful. One teacher has not studied, but reads education papers from a medical journal that are sent around his department (Dr F). Dr A described something of an epiphany in her teaching career, when initially having no idea what she was doing, ‘just basically doing what I had seen done’, and then studying a course in medical teaching, she learned ‘that you could actually do things differently, very differently!’ Another described how the course she did made her ‘more reflective’ [Dr U]. They are both referring to the experiential component of the course, being videotaped teaching and observing other doctors teaching and debriefing.

Dr A talked about doctors and teachers: ‘you get to a certain stage where you are pretty comfortable with what you’re doing and it takes a bit to actually challenge you and say ok let’s look at doing things differently again’. However, amongst the teachers in the study, age did not determine the way they respond to opportunities to develop as teachers. One senior teacher, after decades of experience, had recently completed a course in medical teaching. He mentioned the value of sitting down and learning ‘some teaching skills [because] we have our own style but there [are] always more tricks you can learn’. He comments that ‘in a way it was just obvious but it was just good to be reminded of it’. He also reflected that doing research helps improve people’s reflective ‘self-critical’ capacity that is also beneficial in teaching.
Thus, in terms of what influences these teachers and their teaching practices, professional development has been a significant force for change for a few, useful for some, and a waste of time for others – perhaps even counter-productive in reinforcing the idea of teaching as commonsense or negativity. The perceived value seems to be related to the individual’s personality, as well as general attitudes to teaching and learning, and the nature of the course (the experiential components and opportunities for stimulating experiences and reflection seem to have been important). If learning to teach is about ‘complexifying rather than simplifying’ the work (Berliner, 2004, p.201), then such activities for highly educated, experienced and empowered professionals such as medical teachers need to be carefully constructed and conducted.

4.2 Influences of medical teachers in the past

More pervasive and profound influences on these medical teachers and on their teaching practices appear to be their own experiences as students. These include memories of themselves as medical students and positive and negative influences of their own medical teachers. The vehicle for expression here was often a narrative … personal, vivid and evocative.

The way teachers recall being medical students seems to be understood to directly affect what they do as teachers, what worked well – ‘how I learned best’ and ‘what worked for me’ – and what did not work. For example, finding herself a ‘rote learner’, Dr A ‘wanted to try and make my teaching better than I had as a student’ and now avoids giving lectures, prefers facilitating bedside tutorials and small group discussions. For another teacher, the experience of being taught by strict and authoritarian clergy in a single sex school turned her into one who warmly and energetically drew students into sharing of experiences and views in her lecture [Dr W]. Also, two teachers recalled being students who ‘read up at night’ and rely on their students studying this way too.

More powerfully expressed, however, and sometimes explicitly connected to the teacher’s friendly and committed approaches to teaching, are recollections of their own medical teachers. Some of these are inspiringly positive and others disturbingly negative; they are likely to be the ‘pedagogical parables’ (Shulman, 1986, p.12) that are told in and become part of the culture and history of teaching in the institutions and in the wider profession. The stories were related just as often and just as vividly by teachers of different gender, age and medical vocation. Two doctors said that the biggest influence on them was their teachers’ commitment: ‘I couldn’t believe how much effort they put into teaching me!’ [Dr Q] and ‘[they]
had so much time for us ... [I thought] these people are amazing, and they’re nice people’ [Dr J]. Clearly, it is important that their teachers were ‘nice’. Teachers being simply ‘nice’ – patient and steady, perhaps – takes on particular meaning in relation to role models:

‘... in the surgical world we do it very badly, we are a particular personality type and that doesn’t lend itself well to teaching and to taking time and being slow’ [Anon, Interview]

This teacher could not recall any teachers from medical school who were good role models and, in the teaching I observed in clinic and classroom, she worked hard to be patient, supportive and friendly to the students – almost against her natural inclination to be fast, impatient and demanding.

In contrast, a number of other teachers narrated powerful recollections of negative experiences of medical teachers – even after decades, these were still distressing. Across the age groups, both male and female and proceduralists as well as physicians, these memories endure and influence the teacher. To explore the likely connection between these experiences and their current approaches to teaching, it is worth dwelling a little on some of these memories:

... the lectures I think I remember learning the most from was when the lecturer went round the room, you know, humiliating sometimes ... [Dr F]

... engaged through fear, I’ve certainly had teachers who ... you were only awake because you knew if you didn’t have an answer you’d get ridiculed or things like that [Dr K]

... the worst thing is to have a teacher who doesn’t like teaching, doesn’t want to be there, students can tell, they think if he’s bored with this, why am I even going to bother learning this. You know. That’s my experience, and it didn’t happen very often, but ... [Dr D]

... getting them to point things out and putting them on the spot and humiliating them in front of their peers you know what I came from ...! [Dr I]
... our Professor of Medicine ... used to say things like, “Oh Mr Brown, are you on a [government] scholarship?” You’d say, “Yes.” “So you mean we’re paying you for doing this? You’re hopeless, hopeless!” And people, every, every time he gave a tute one or more students would leave in tears. [Dr L]

I think the goal is to get the message across the right way um without making them feel like they’ve been incriminated in front of everyone [laughs] which I remember as a student is not a good feeling. [Dr U]

... sometimes they stay with you because you learnt them from someone who was very aggressive and grumpy and horrible but I wouldn’t do that. You don’t think you learn that way? No no! I think some of the things I learnt are embedded in my mind because they were delivered like that [gestures horror] but I don’t want to replicate the experience [Dr X]

These reports support what has been previously described in university education as students’ dislike of inappropriate authoritarianism and patronising behaviour (Entwistle, 2009, p.80) and in medical education, as teachers ‘abusing’ (Coulehan & Williams, 2001, p.600) or ‘frequently brutalizing’ (Montgomery, 2006, p.173). What is apparent in the teachers’ stories in this study, however, and was confirmed by dispositions I observed and attitudes I heard expressed in interviews, is the apparent intention to maintain respect and friendliness towards the students. Perhaps they are determined not to replicate what ‘was done to’ them and their peers. This may help to explain the effort they put into creating a particular atmosphere in their own teaching: the involvement, the comfort, the friendliness, the supportiveness, the pleasant feelings and the enjoyment for both themselves and the students.

Another study found that positive, inspiring role models in medical teaching are remembered as powerfully but less frequently than are the negative ones (MacDougall, 2005, p.1217). However, two teachers in my study said that a little ‘humiliation and intimidation’ is acceptable as long as the students learn – consistent with teachers’ attitudes in another study where ‘good humiliation’ was proposed by teachers in a new medical school (Knight & Bligh, 2006, p.228 ). This attitude, still alive and (un)well in medicine today (Musselman, MacRae, Reznick, & Lingard, 2005), threatens the potential of medical education being a democratic force in the profession (Montgomery, 2006) or wholly a force for good (Bleakley et al., 2011). The implications of this for the institutions are discussed later in the thesis.
4.3 The influence of what is absent

One of the teachers drew my attention to aspects of the culture of medicine that affect the position and experiences of teachers.

... *What I think is that as a trainee as soon as you can do something people don’t teach you. You just do the case. You never discuss what works or what you don’t like or anything. And with the teaching, often it’s left to the people who will do it rather than the people who are good at it – whatever that means. It’s just you’re available, you do that. It might be someone who’s interested in teaching, or it might be just the one who’s available to fill the gap, which is a bit sad but it’s just realistic ... I’m not exposed to people an awful lot or watch people and think they do that really well, just don’t do that ...* (Dr E, Interview)

The profession seems to sometimes abandon its young rather than offering a supportive or nurturing culture for the novice doctor. Neither is there a developmental environment for the lone teacher. Medical teachers are often ‘volunteers’ (Dr I, Interview) filling ad hoc timetable gaps, and during the study, I cumulatively built a picture of the teacher (somewhat like a walk-in/walk-out ‘guest lecturer’) as isolated and not feeling highly valued. Neither do they have interactions with medical teaching colleagues. One teacher said she doesn’t have time to ‘sit and talk about teaching’; another teacher mused that it would be useful that to ‘compare [my]self with others’ and the idea provoked some thoughtful reflections for another:

I wonder if you talk about teaching with anyone? (Researcher)

_No, it’s a good point. We don’t and that’s a problem and maybe we should. And maybe teaching would have a much higher profile if we did talk about it, um ..._

Would it make a difference? (Researcher)

*Look it’s a good point, I haven’t thought about it in the context ... look one of the nice things about research is that you do it you think it’s important you present it to your peers and you get acknowledged for it. With teaching you don’t have that same feedback, unless the students acknowledge you or you get voted teacher of the year or something like that. So you don’t quite have the same fora to ah to look at teaching._

I wonder what effect that has, not having a community to belong to? (Researcher)
Yeah, I hadn’t thought of it in those terms … it would be important. There are people who take it very very seriously and do work in that context like [NAME] is a leader in the area and maybe that would help if we got more engaged in that and got more feedback … I mean I find this very stimulating you know that you are interested in this area, um and just this debrief is good for me… (Dr T, Interview)

Here, the idea of meetings to talk about teaching is seen as novel. Dr T links the absence of meetings and discussion about teaching with the poor ‘profile’ that teaching has in the hospital, the lack of acknowledgement, and the absence of ‘feedback’ to teachers. His description of the interview as a ‘debrief’ suggests both the rarity and the potential value of these discussions.

The absence of and desire for feedback was mentioned frequently, usually associated with feedback from students, but the teachers also often associated professional development or the idea of discussions about teaching with getting feedback on their teaching as did Dr T above. The absence of ‘feedback’, information about ‘how well you are doing’ contributes to the sense of isolation, the negative effect of the autonomy they have in their teaching. One teacher mentioned that the absence of feedback – not knowing how well you are doing – makes her anxious; another regards the absence of feedback as a failure to nourish teachers who are always giving, but sometimes also need to be ‘fed’. The two participants who team-teach described how they meet to talk about their session immediately after each of their lectures; however, both of them still said in the interviews that they would like feedback from me.

Dr G chose the following topic in response to the open invitation at the end of the interview:

… well I think the only thing … the only problem with doctors teaching is that we’ve never been taught to teach which I think is a problem so you are relying on someone … you know we don’t know if they’re any good or not and we don’t know if they’re getting anything out of it or not … I mean we do get feedback … ah so I don’t think anybody would mark you really poorly you know I’d be really surprised if students would mark you harshly , they’d probably rather not give feedback than give bad feedback, but … I don’t think we’d have time to … I don’t think we have time to do a diploma of education, but it would be nice to know how the students want their teaching and I think that would be very useful for us. So none of us were taught how to
teach so all we’re doing is modelling our teaching on people we thought were good teachers um and some people are better than others at it … (Dr G, Interview)

The emerging picture then is that the teachers are not accustomed to collegial or professional supportiveness, are not taught to teach, do not know whether they are good or bad teachers, do not get feedback (or do not trust the feedback they are given) and are merely doing what they saw their own teachers do. Seabrook also found that ‘clinical’ teachers experience the absence of feedback as a lack of gratitude (Seabrook, 2003, p.218 ). In my study, the provision of opportunities to receive feedback is also seen as part of the collegiate and institutional relationships, the dialogue with people who count:

I guess sometimes I feel like it’s in a bit of a vacuum and you don’t necessarily know how you could do it better next time. So I know you’re not here to give me feedback but I’d be really interested if there was any feedback [laughs] (Dr U, Interview)

There is a noticeable contrast between the warmth, closeness and connectedness that the teachers value in their relationships with students with this sense of teaching in a ‘vacuum’.

5. Summary

In this chapter, I have shown how these teachers’ values and practices reflect elements of a humanistic perspective on pedagogy. It is humanistic in broad terms of dictionary definition, for example “One who is concerned with the interests and welfare of humans” (Http://www.thefreedictionary.com/humanistic) rather than one aligned with a particular school of humanistic pedagogy or psychology. Their approach is consistent with ‘present-day humanism’ in education (Veugelers, 2011, p. 3), given their focus on students’ development taking place in relation to others (particularly with ‘real’ people as patients). Also, they value knowing students and having a connectedness with them as a basis for influencing their emerging clinical values and practices. While the teachers in this study did not manifest commitment to all humanistic principles in education in that they did not emphasise ideas of self-direction or self-evaluation for students (King, 1995, p. 448-450), they did emphasise the importance of providing meaningful learning, they gave emphasis to the affective as well as the cognitive aspects of clinical knowledge for clinical practice and, influenced by their own experiences, most of them expressed and demonstrated a commitment to a non-threatening learning environment where students are not humiliated, ridiculed or treated with contempt (Veugelers, 2011, p. 451).
The chapter has drawn attention to the importance of personal and interpersonal factors in the teachers’ approaches to teaching. In tracing the popular term ‘interactive’, I found it associated with the teachers’ valuing of a connectedness with students – perhaps as a substitute for technique – in their efforts to bring about knowledge and attitude change, and ultimately, good medical practice.

All but a few of the teachers in this study were unfamiliar with discussing teaching or talking about themselves as teachers. They talked about knowledge and associated goals, and about what the students are like and less about what they do as teachers to achieve the goals. As is common to medical teaching, most rely on questions and answers as a technique and this too is often employed as a means of connecting with the students. The potential value of questions and answers for teaching and learning was often not realized: if their questions (or invitations to converse) are met with silence, they are left exposed without expertise, unable to make the questions work for them.

All of the teachers were friendly, even warm and supportive, and many talked too about the importance of knowing the students, to have more than brief single contacts encounters with them. This concern is consistent with the literature which reflects a concern among academics and teachers in the field (Irby, 1986) that contemporary medical course designs that mitigate against students and teachers spending time together over longer periods (Ash et al., 2012).

The enjoyment of teaching is one of the personal benefits that accrue to medical teachers: despite the burden it may add to their work, especially having to juggle teaching around clinical responsibilities, it is seen as a pleasant activity, stimulating, and a break from the routine of clinical work. There are different expressions of the sense of teaching as a positive element in a doctor’s working life, that it is not all burdensome. All of the teachers said they enjoy teaching – and their enjoyment was apparent in their practice where they manifest an obvious commitment to the teaching encounters. In contrast, there is not the same warmth in other relationships: there are no meetings to discuss their teaching, and no feedback about teaching. Similarly, there is not a pervasive warm feeling about how their own teachers behaved towards them and their past experiences seem to directly influence the decisions they now make about what sort of teacher they want to be. In the current setting, there are fewer active, positive professional influences.
6. Discussion

This study offers opportunities to reconsider how hospital-based medical teachers approach their teaching – and what might be appropriate institutional approaches to them and to their teaching. The values and orientations selected for discussion in this chapter are broadly concerned with ‘pedagogy’ which is an appropriate term in that it broadly encompasses relationships as well as techniques.

These findings suggest an opportunity for a different appreciation in contrast to one of the dominant views in the literature and sometimes in the local discourse about medical teachers in hospitals. They are committed to teaching medical students; they have and value the knowledge that students need and are well placed to convey/share it; they care about the interactions with students being pleasant and productive; they attempt to engage students in the teaching by asking questions (and sometimes using other techniques); also, they know that having multiple interactions and relationships with patients and teachers over a long period of time is the way to learn medicine. Seen this way, the teachers seem to already know something of the reforms that are needed; they know, as education leaders now recognise, that some of the emphases in contemporary curriculum have been misguided. For example, they know that longitudinal clinical placements facilitate more contact with patients and committed medical teachers (Cooke et al., 2010a) and effect more satisfying learning and teaching relationships and ultimately, better levels of clinical knowledge.

Such an appreciation of medical teachers in hospitals allows for thinking about them in some terms in which other teachers are thought about. Like all teachers, they are on a long professional journey, each individual teacher working out how best to do the work of teaching in their own particular environment. Some are good – that is, adequate but not necessarily outstanding (Pratt et al., 2001, p.71) – and some are excellent; all are fundamentally interested in what they do and committed to it. Pratt has studied the meaning of teachers’ commitments to certain elements of teaching (Pratt, 1992, 1998) and found that the vividness with which teachers speak about what they are trying to accomplish is one way that teachers reveal their overall perspective on teaching. I found the medical teachers’ commitments are vividly revealed in five ways. First, they have a determination to connect with students through friendliness, physical closeness, enthusiasm and wanting to know the students. Second, there is evidence of a passionate commitment to avoid being like certain characters recollected in vivid stories from their own medical student pasts. Third, they are committed to enjoying teaching and to students enjoying the teaching. Fourth, they intend to achieve some ‘noble
The fifth manifestation is the intense commitment to the processes they engage in to transform students’ book knowledge into useful clinical knowledge. These commitments interact with their beliefs about knowledge and about learning to give direction and justification to their teaching practices – together forming their ‘perspective on teaching’ (Pratt, 1998). After much research seeking to understand these complex interactions and different manifestations of them in teachers’ practices, Pratt concluded that we need a pluralist approach when making judgements about what is ‘good’ teaching (Pratt, 2002) because, for example, it is the teacher’s enactment of questioning (reflecting the teacher’s unique underlying perspective on teaching), not the method itself, which matters (Pratt, 1998, p.203).

Reflecting also on Irby’s work on clinical teaching that I discussed in the first chapter, these hospital-based medical teachers might also be thought of as ‘excellent’ medical teachers. Irby summarized the characteristics (variously called ‘aspects’, ‘areas’ and ‘behaviours’ ) of excellent teaching. That list of characteristics features both behaviours (technical) and characteristics (personal and interpersonal) factors: a passion for teaching; supportive, compassionate, and able to establish rapport; exhibit integrity and respect for others; clear, organised, accessible, provide direction and feedback; demonstrate clinical competence; target their teaching to the learners’ level of knowledge; possess a broad repertoire of teaching methods; and they engage in self evaluation and reflection. In considering this list, perhaps the teachers in my study may be considered ‘excellent’.

While this study was not guided by an interest in evaluating excellent, good or poor teaching, in regard to the value of the relational aspects of pedagogy in both the data and the respected literature, it is important to consider the possibility of them being ‘excellent’. Perhaps the teachers are being under-rated by themselves and others. They seem to understand much that is important in (medical) teaching, including some aspects that have been sidelined while formal curriculum has been reformed. Being better valued as ‘good’ and ‘excellent’ teachers may relieve the sense of being undervalued and peripheral as these teachers and others seem to experience (Seabrook, 2003). If differently appreciated, they could be presumed to play a central role in the medical education system rather than being absent from discussions of medical education (Ash et al., 2012), or referred to pejoratively as ‘those who just do the teaching’, just ‘jobbing’ (Bleakley et al., 2011, p.99 ) or being restricted to accolades such as the most ‘popular’ teacher in local student voting schemes.
However, it is also critical to acknowledge that few teachers in my study revealed a wide technical repertoire. Few seemed to have thought in depth about what underpins their approach to teaching or had actively sought to develop a better understanding or a wider repertoire. It would be counter-productive to not respond to the need (demonstrated and expressed) for more pedagogical technique. Perpetuating the acceptance of motivation, commonsense and friendliness with a dash of technique as an adequate basis for teaching does not serve any party well.

Looking again outside of medical teaching just for another analytical moment, these teachers of medical students can be thought of as ‘university teachers’: they conduct a substantial volume of classroom teaching as well as teaching in clinical work settings for the university’s enrolled medical students. My study showed that like (other) university teachers, they think of themselves as experts in a discipline (sharing or imparting their knowledge) before they think of themselves as teachers (Gow & Kember, 1994). It is not long since university teachers, including those in medical schools, were considered fully prepared for their role as teachers because they had an advanced degree in their specialty (Wilkerson & Doyle, 2011). Entwistle found that university teachers and their students value particular aspects of ‘good’ teaching:

‘[T]he underlying message was that the essence of good teaching depends on the relationship that exists between staff and students’ (Entwistle, 2009, p.78).

He notes further that the teaching role is increasingly seen as dependent on being authentic, teachers being more open, personal and showing ‘warm regard for the students (Kreber, 2007, p.2). Entwistle identified seven basic requirements of ‘good’ teaching: four practices make material intelligible and accessible (that is, clarity, level, pace, structure); three practices and ways of being encourage a deep approach to learning (that is, explanation/making links, enthusiasm and empathy) (Entwistle, 2009). This perspective from outside medical education allows for the medical teachers’ emphasis on the relational elements to be better understood and better valued, to be seen as important and elevated to a position within the realm of ‘good’ teaching. At the same time, it draws attention to the need for some focus on other, more technical features of good teaching, particularly to realize the potential of small group teaching which is given more time in curriculum and receiving more attention in the literature (Dornan, Mann, Scherpbier, & Spencer, 2011; O’Sullivan & Irby, 2011).

These reflections offer understandings of the teachers beyond the ‘resistance to change’ explanation (Knight & Bligh, 2006) or the stories about teachers in hospitals being interested
only in the fun of the student contact (Bleakley et al., 2011). Looking towards other possible explanations and to other literature outside medical education, the final chapter of this thesis will consider what circumstances are most likely to facilitate the development of expertise in medical teaching.
Chapter Five

Medical Teachers and Teacher Identity
In this chapter, findings are presented relating to my third research question that sought an understanding of how medical teachers in Australian hospitals think about themselves as teachers. As discussed in Chapter One, ‘teacher identity’ is a concept that draws on both direct and indirect understandings of what was said by teachers and what I observed. To draw together themes for this chapter, I need to revisit some of that earlier discussion. I will also revisit some of the data discussed in the previous two chapters as well as further data relating to questions more directly put to the teachers about their identity as teachers.

1. Appreciating the elements in these medical teachers’ identities

Teacher identity has been a separate area of research in the education field because it has come to be regarded as a crucial determinant of how teaching and learning happen (Clarke, 2008) and because teachers’ capacities to be resilient in times of social and educational change are related to their identities as teachers (Day & Kington, 2008) (Trowler & Cooper, 2002) and their perceptions of threats to their autonomy (Young, 2008). Partly because of ‘the ever-changing landscape of the curriculum’ (Dr M) and the current move to different structures and settings for teaching, but also because of the connection between teacher identities and their pedagogy, I consider it important to better understand the medical teachers’ identities.

My intention in this project was to generate a more textured understanding of medical teachers’ identities than is currently available, so that those of us working with the teachers – and those making decisions that affect them – know more about ‘what teachers are like and what makes them tick’ (MacLure, 1993, p.311). My approach to teacher identity is influenced by Shotter’s explanation that ‘to understand ourselves we must examine how currently we account for ourselves in our everyday self-talk, the procedures and practices we routinely use in making sense of our activities to one another’ ((Shotter, 1985) cited in Maclure 1993, p 313). In this study, I sought to derive an understanding of the teachers’ identities from listening to them talk about teaching, about themselves as teachers and about the environment for their teaching. These stories, combined with observing the teachers in context and in action, allowed me to infer something of what it is like to be those teachers participating in those activities at that time and in that place, and thus to understand the values and perspectives they bring to their teaching.

The study provides insights into how the teachers’ identities can be seen to impact in different ways on their teaching practices: shaping the dispositions they bring to teaching; affecting where they place their effort; determining how they seek out professional development
opportunities; affecting the obligations they may see as intrinsic to their role (Hammerness et al., 2005). I will use this framework to interpret some of the implications of the findings.

The understanding of medical teachers’ identities that emerged in my study encompasses three broad elements:

- the central place of a certain type of clinical knowledge in the participants identities as medical teachers;
- the strong sense of it being natural for doctors to see themselves as teachers;
- the interactions between medical teacher identity construction and notions of status and isolation in the environment.

2. Knowledge and medical teachers’ identities

In Chapter Three, I discussed the findings relating to the teachers’ conceptualising of teaching being dominated by their commitments to the knowledge they teach (but not to their knowledge about teaching). The commitments to their sense of a special form of clinical knowledge can also be considered as key components of the teacher identities studied in this project. Here the relationship between professional knowledge and professional identity can be understood from two theoretical perspectives. From one perspective, the teachers would be seen to be defending themselves and their positions, making claims to a certain status in the medical education hierarchy based on the powerful qualities of their knowledge. From another perspective, the teachers would be seen as having, and being committed to, a particular form of knowledge that is unique, and this knowledge is fundamental to their professional identities just as a particular knowledge is central to professional identities in other fields.

From the discussion in Chapter Three, the teachers can be seen to be justifying their place in the medical education system as the purveyors of the (real and only) important knowledge for medical practice, unique knowledge gained from and around patients in the workplaces of hospitals. As an argument, this position could be seen as a defence against the dominant status of science and formal expressions of knowledge in medicine, in the university and also in the wider society. The defence might also be seen as being mounted against what the teachers perceive to be the recent and inappropriate value given to classroom and ‘textbook’ learning over the tradition of extended periods of unstructured learning with teachers and patients. The status of science and formalised medical knowledge in textbooks, can be seen as effectively reducing the status of clinical knowledge; it demeans the value of clinical
judgement which is the ultimate feature of a clinician’s practical wisdom (Montgomery, 2006). The teachers make their knowledge argument by constructing the centrality and uniqueness of the patient in the formation of that knowledge and uniquely positioning the doctor as medical teacher – no one else can claim that source of knowledge. It is the patients, often those patients for whom the specialist as teacher is responsible (‘their’ patients), to whom the teacher provides students access. Patients give clinical knowledge its special value, thus providing the teachers the authority to teach and the sense of the self as teacher.

From another theoretical perspective, advanced by Young (Young, 2008), arguments of this kind are not simply claims to defend or advance personal power and status, but reflect a legitimate understanding of the very structure of knowledge. In his discussion of professional knowledge, Young turned to Bernstein’s distinction between ‘vertical’ knowledge (general, explicit, coherent and expressed in bodies of codified knowledge, not flexible) and ‘horizontal’ knowledge (on-the-job or work-based, acquired experientially, flexible) (Bernstein, 2000). Bernstein argued that one type of knowledge (vertical) cannot be derived from the other (horizontal) and that horizontal cannot be made explicit because its power resides in its very tacit-ness. Also, he suggested that it is not possible to apply vertical knowledge directly to specific everyday workplace realities where the type of knowledge needed is that which is sufficiently flexible to deal with immediate practical problems.

Here then is another way of understanding the connection between the medical teachers’ often impassioned valuing of clinical knowledge and their identities as teachers. Their knowledge is ‘horizontal’ knowledge and it is special – even unique. It is not made explicit because it cannot be. By its very nature, clinical knowledge remains implicit – tacit, not codified. From this perspective, clinicians are not seen to be resisting the codification of their knowledge in order to maintain their special place in the medical education hierarchy. Rather, by its nature, its implicitness – gained from patients case by case, within uncertainty and dynamic – the knowledge simply remains un-codified.

This effort to appreciate the essential connection between clinical knowledge and teacher identity is further informed by an understanding of knowledge structures. Taking Young’s theorizing (following Bernstein), what these medical teachers regard (and dismiss) as textbook knowledge (codified, ‘vertical’ knowledge) cannot be directly applied to clinical workplace realities because it is essentially inflexible in its nature. The two forms of knowledge (‘textbook’ and ‘practical’ knowledge) are fundamentally different in structure. I discussed in Chapter Three that more teachers talked about what they are doing as ‘linking’ different
knowledge and knowledge from different sources than talking about ‘integrating’ or ‘applying’ them. This suggests that they have an understanding that the two knowledges are structurally different: what the students have learned from lectures, laboratories and textbooks and what they learn from messy, uncertain, lifelong practice with patients are knowledges in different forms that are related but not ‘integrated’. The teachers are comfortable with the sense of themselves as the link-makers and bridge-builders for students’ knowledge.

Seen this way, the relationship of medical teacher identity to a particular form of knowledge is not just a claim about status and power, but has a more objective basis in the forms of knowledge, and the different kinds of knowledge to which professionals lay claim. This understanding allows for different ways of thinking about the medical teachers’ identities. The teachers can be seen to be promoting a self-interested claim for status. Alternatively, they can be seen as resisting efforts to move them beyond a conceptualisation of teaching as the transmission of that knowledge. These two positions were both reflected in the interviews and can be considered to be components in their teacher identities, but the teachers’ insistence on clinical knowledge as ‘real’ knowledge suggests that it is at the core of their teacher identities. They can be seen to have insight into (and identify with) a form of knowledge that is the essence of medical practice and not sufficiently accounted for in what they see as the formal representations of knowledge in the curriculum.

As I discussed previously, these teachers more often talked to me about ‘what’ they were teaching and what students need to know than they talked about what they did as teachers. They each introduced themselves to students by naming themselves as a particular specialist. These further suggest their understanding that the knowledge they have (and have to share with students/help students acquire) is fundamental to the way they think about themselves as teachers. Put another way, their agency as teachers, the perception they have of their ability to pursue their goals in teaching (Beauchamp & Thomas, 2009; Day & Kington, 2008), is rooted in the sense they have of themselves as having the right type of knowledge to offer the students.

There is a burden associated with this, too.

\[
I \text{ think that some days you know that you’re not on fire, and you’re tired, like today ... and like sometimes by the end of the day you’re just sick of the sound of your own voice because it doesn’t matter how much you try to do group interaction, you just have your own voice and ... you feel an immense pressure that everything you’re saying to them}
\]
has to be absolutely the god’s truth, so it actually puts you in a very vulnerable position as well. ...Yes, so that does take courage, because you are literally putting yourself on the firing line. And there are lots of students, you know postgraduates, and they’ve got their own opinions, ...it’s putting yourself on the line, but it’s a bit like in medicine, isn’t it, you’ve got to be prepared to say, ‘I don’t know’, ‘I don’t know the answer to that’, and I suppose, you ... if I don’t know something, you know you can defer it to the audience, but it does make you feel really bad if you don’t know something, because you think well I’m the consultant and you’re supposed to know everything ... (Dr B, Interview).

This is a story I hear often in my own work with young medical teachers. They express this as a burden, the ‘immense pressure’ to be knowledgeable, being able to answer every student’s question; they feel ‘really bad’, even ‘vulnerable’ if a knowledge gap is (or could be) exposed. Sometimes the pressure to be 100% knowledgeable affects the type of teaching they choose to do. They are under enough pressure to do what is required of them in informal, on-the-job teaching (of students and other junior medical staff) without seeking to put themselves ‘on the firing line’ in more formal, classroom settings.

Of Dr B’s story above, I ask myself “What is it like to be this teacher in this place at this time?” or “How does she think about herself as a teacher?”. The answer is that this teacher is tired, she has just given a lecture to 70 students at 9am on Monday morning having been on duty all night and is still concerned about a complex clinical case that she and her colleagues managed during that shift. She is pressured by the expectation she has of herself to know 100% of what students want to know and went on to explain too that she did not feel confident about what the students learn in this and other lectures.

The implications of these understandings of knowledge and medical teacher identity will be taken up in discussion below.

3. Do medical teachers think about themselves as teachers?

In this section, I discuss interview data that has not yet been considered in the thesis. Shortly after I began the interviews with the doctors, I decided to ask the doctors the direct question ‘Do you think of yourself as a teacher?’ as a way of provoking a discussion of their teacher identities. The responses to this seemingly simple question (posed to sixteen participants) reveal a range in the teachers’ stated priorities, as well as some tentativeness and interesting inconsistencies. The question perhaps raised something novel and/or difficult for the doctors
to articulate, perhaps something they did not expect the interview to address. To find the meaning in their responses, the first interpretive process considers the initial Yes/No responses. The subsequent discussion looks at the emerging patterns in their teachers’ various elaborations of their Yes/No responses.

The Yes/No responses reveal that some teachers do not really think of themselves as teachers; others do not want to be seen as teachers, and some see teaching as just part of what a doctor does. One teacher gave an emphatic ‘yes’ but showed no interest in elaborating.

**Table 5: Participants’ responses to question: ‘Do you think of yourself as a teacher?’**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Response</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not identifying as a teacher or as a good teacher</td>
<td>No. No, not really.</td>
<td>Dr L</td>
</tr>
<tr>
<td></td>
<td>I’d say that my primary role is as a researcher. ... I would prefer to be known as a good researcher.</td>
<td>Dr Q</td>
</tr>
<tr>
<td></td>
<td>I have at some stages but that’s probably not now, but it would have been in an earlier stage of my career been a bigger role than it might be now.</td>
<td>Dr R</td>
</tr>
<tr>
<td></td>
<td>I wouldn’t think of myself as a very good teacher ... without doing that course I wouldn’t have thought of myself as a teacher</td>
<td>Dr U</td>
</tr>
<tr>
<td>Wearing a teacher’s hat</td>
<td>I’ve never thought of myself as a teacher no. Don’t know whether I should. ... I don’t want to see myself as something else ... if I have to take on another hat I’ll go nuts</td>
<td>Dr M</td>
</tr>
<tr>
<td></td>
<td>... probably not. ... My hospital life is full time and I teach on the ward round with the interns, I teach my registrars, teaching is always there but not with the dedicated teaching hat on ...</td>
<td>Dr S</td>
</tr>
<tr>
<td>Teaching as part of primary role</td>
<td>... no I probably think of myself as a clinician rather than as a teacher but I must have some of the teacher in me because I enjoy it</td>
<td>Dr N</td>
</tr>
<tr>
<td>Theme</td>
<td>Response</td>
<td>Participant</td>
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<td>---------------</td>
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<tr>
<td><strong>Theme</strong></td>
<td></td>
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<tr>
<td><strong>Response</strong></td>
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<tr>
<td>Oh yes ... I enjoy it as a part time, it’s more a hobby than a career</td>
<td>Dr C</td>
<td></td>
</tr>
<tr>
<td>Not a good one, I don’t consider myself a good one ... however yes I do see a critical part of what I do is teaching so that makes me a teacher.</td>
<td>Dr E</td>
<td></td>
</tr>
<tr>
<td>I think that’s part of my role, but I don’t think of myself primarily as a teacher</td>
<td>Dr G</td>
<td></td>
</tr>
<tr>
<td>Not primarily, but ... ‘cause primarily I’m a doctor and a clinician. ... Well I see it as one of the roles I do. As a doctor ah I see four areas, I suppose, clinical work, teaching, research and administration. The clinical work would be the primary, but the teaching would be next ...</td>
<td>Dr O</td>
<td></td>
</tr>
<tr>
<td>Um ... yes, a part time teacher</td>
<td>Dr P</td>
<td></td>
</tr>
<tr>
<td>I think that’s an important aspect of my role yeah absolutely</td>
<td>Dr V</td>
<td></td>
</tr>
<tr>
<td>Uh I don’t think so actually. I feel as though I bring my experiences to them in some ways. ... I think it’s just part and parcel of the whole role. ... I don’t see it necessarily as separate.</td>
<td>Dr W</td>
<td></td>
</tr>
<tr>
<td>Not really I think of myself as a doctor really. Although [muses] there are lots of similarities because what we’re doing really is teaching families ... so I think there is a lot of teaching in medicine</td>
<td>Dr X</td>
<td></td>
</tr>
<tr>
<td><strong>Unqualified</strong></td>
<td><strong>Yeah, definitely.</strong></td>
<td>Dr T</td>
</tr>
</tbody>
</table>

Interestingly, these responses are given both in the positive (Yes, I see myself as a teacher because it is part of being a doctor) and in the negative (No, I do not see myself as a teacher because it is part of being a doctor). Reflected
here, I suggest, is some difficulty of responding to the question, the challenge of finding the right language in the interviews to talk about this novel, complex and fluid concept of self as teacher. (Dr Y, in response to another interview question, commented that the interview had raised some unusual ways of thinking about teaching. This idea of thinking about yourself as a teacher, was presumably one of these unusual ideas.)

Those teachers who prefer not to identify as teachers gave different reasons for that preference: for one, the preferred identity is as a researcher second to an identity as a clinician; for another, not having thought of himself this way before makes it difficult to think this way now; for another, ‘a teacher’ is more what a younger doctor does; another explanation was that if the teacher felt unable to say he was a ‘good’ teacher, it is preferable not to think about himself as a teacher at all.

Also, there is a suggestion that a doctor does not – and may not need to – think too seriously about being a teacher:

> Oh ... um ... *only an amateur teacher (laughs)* ... Oh yes yeah but I wouldn’t think I could ever *make a career of it or anything like that you know but I enjoy it as a part time, it’s more a hobby than a career, I think.* (Dr C, Interview 2)

Elements of a teacher identity can be inferred here: this teacher sees himself at this time (late in his career) and in this place (the hospital) as something other than a professional teacher, not a ‘real’ teacher perhaps. His sense of himself as a teacher is light, insubstantial, not serious. Seeing himself in teaching as a ‘hobby’ implies that being a teacher is to be enjoying himself, having a pleasant and interesting experience that makes him feel good. It should be satisfying and generate feelings of doing something worthwhile without requiring the effort that his real work may demand.

3.1 The view of teaching as ‘natural’ and its implication for medical teacher identities

The main story emerging out of the responses to the direct question about teacher identity, however, is that teaching is seen as ‘just part of’ a doctor’s role. These medical teachers do not see their identities-as-doctors and identities-as-teachers as separate; rather, the sense of self as a teacher is inherent in the identity as a doctor. There are different expressions of this part of the identity story.
For some doctors, teaching is a given just because they work in the system. One response to my direct question went this way:

*Probably not [laughs] no I probably think of myself as a clinician rather than as a teacher but I must have some of the teacher in me because I enjoy it yeah but I wouldn’t say I was a teacher if I were asked first off. I mean I guess I have always worked in the public system so with public hospital appointments you always get your registrars and you have to teach and I mean the whole training programme in [SPECIALTY] is an apprenticeship and it wouldn’t work unless you taught them and allowed them to do things* (Dr N, Interview)

Here, Dr N muses that because she enjoys it, she must have some inherent sense of being a teacher. Also, however, like other participants mentioned in discussions at other points in the interviews, Dr N says that doctors who choose to work in the public system in Australia make the medical training system ‘work’ because they teach. So, for Dr N, teaching is something of a given, she is one of those who ‘have to teach’ because of the place they work. Still, she does not think of herself as a teacher.

Dr G is unsure:

*I don’t think that’s my … I think that’s part of my role, but I don’t think of myself primarily as a teacher, but because we have junior medical staff I’m teaching them all the time so every time I see them in every clinical setting I have to be teaching someone um so …* (Dr G, Interview)

Dr G had reflected that teaching ‘all the time’ does somehow make him think of himself as a teacher – but it is not his primary identity. Importantly, I heard that this understanding is experience comes early in the professional socialization of the doctor as medical teacher:

*Yeah, definitely. I mean … I remember as a student and a lot of my philosophy comes from being a student … sitting in the lecture theatre at [HOSPITAL] there’s a little plaque with a stool on it and the stool had three legs and each was a component, one was the patient, one was teaching and one was research, all three are important, and that’s kind of been my philosophy of medicine ever since.* (Dr T, Interview)
Like Dr N (above), Dr T also conveys the depth of this sense of linked identities. It is an understanding based in the experience of professional traditions as well as in the experience of health system structures in this country.

One teacher said that *she does not* think of herself as a teacher because teaching is just part of her everyday work, a view that has previously been interpreted as suggesting that teaching and clinical practice are ‘integrated’ (Irby, 1994; Stone et al., 2002), or that being a physician ‘means’ being a teacher (Starr et al., 2003; Starr et al., 2006). However, another teacher who answered ‘Yes’ to the question, said *she does* see herself as a teacher because it is ‘critical’ part of what she does as a doctor. Thus, the meanings each individual attaches to this sense of teaching as part of being a doctor are varied, possibly reflecting the complexity of the very concept of (teacher) identity. As well, the inconsistencies seem to reflect teachers’ struggles to articulate where teaching fits into their sense of professional selves, to reconcile the different demands that teaching makes on each person’s sense of self in different settings.

References to the ‘hat’ are particularly significant in capturing different ways the teachers think about themselves as teachers. Two doctors use ‘the hat’ metaphor, one saying that he is teaching ‘all the time’ in his work, but does not ‘wear a dedicated teaching hat’. Here ‘dedicated’ means ‘separate and distinct’ rather than ‘committed’. Another teacher listed, with some pride, all of his teaching experiences. After listening to this, I was prompted me to ask:

*You teach all the time ... do you think of yourself as a teacher? [Researcher]*

_No [laughs] I don’t. I don’t really. I’ve never thought of myself as a teacher, no. Don’t know whether I should._ [Dr M]

Yet you’ve described how in every part of your clinical work you’re teaching, it’s interesting isn’t it ... [Researcher]

_I don’t want to see myself as something else ... I see myself as a [special]ologist, a director, and a researcher and if I have to take on another hat I’ll go nuts I think, and I’ll just have another, I’ll worry about it, I’ll think ‘oh I’m a teacher too’, I’m not doing enough or something._ [Dr M]

Despite all the teaching that Dr M had proudly told me he is involved in, he has ‘never’ thought of himself as a teacher. Although I often hear this from young doctors in my work (that is, that the workshop is the first time they have thought about being a teacher) it surprised me to hear this sentiment from a doctor who had been teaching for over 15 years. Dr M fleetingly
considered that perhaps he ‘should’ think of himself as a teacher, perhaps wondering if he has missed something going on around him. However, he rejected that possibility and jumped immediately to defend himself: he does not want to wear ‘another hat’ because it would be a burden, it would label teaching as something (else) to take seriously, another job to worry about in addition to clinical, management and research responsibilities. The preference is to retain teaching in its place in the scheme of his work.

The ‘hat’ seems to suggest that to see oneself as a teacher would be a public declaration of what you are doing – ‘I am wearing the hat, so now I am a teacher’. It is significant, I suggest, that this identity is not desirable. A hat would draw both his own and others’ attention to his teaching – rather than leaving it as ‘just part’ of clinical work. By implication, it would introduce a new set of evaluation criteria the teachers may be judged by. Perhaps this expresses the desire to keep the teaching somehow invisible to himself – and to others. There are other possibilities raised here, too, and Lawson has questioned this before. If doctors’ teaching remains invisible, then it is protected from scrutiny (Lawson, 2007). In that situation, medical teachers can continue to teach what they want and teach it in the way they are comfortable – time-honoured techniques like just talking a lot because they enjoy that, or maybe even humiliating students. Another explanation is that the hat metaphor reflects the conviction that the teaching derives from the teacher’s clinical knowledge as discussed earlier. See this way, thinking about or talking about teaching as a different, separate activity – as a hat would signify – could disconnect it from this central underpinning of knowledge which is the core of the teachers’ identities.

In this discussion, I have extrapolated the expression of teaching ‘as just part of’ being a doctor so that teaching is seen as ‘natural’ for doctors. This interpretation came from the teachers’ own expressions. In response to another question in the interview, one participant said that he does teaching because ‘it’s a natural tendency if you’ve got something to share with others’ (Dr O). And another teacher told me that having senior students with you as you work is ‘a natural part of the ward round’ (Dr R). As ‘natural’, the argument may proceed, there is no need for change: doctors have traditionally done the teaching without having to explicitly think of themselves as teachers. It is hard to argue with something that is ‘natural’ (just as it is hard to argue with something that is ‘real’), or with unanimous and personal expressions of the ‘enjoyment’ that teaching offers medical teachers. Their time with students is enjoyable, connecting with young people, helping them, having the feeling of being appreciated, not having to worry about the technical side too much - but invested all the same. Like (other)
university teachers who ‘bring parts of’ themselves into their teaching as they share their knowledge with students, the connections they make with students matter ‘crucially’ to them (Entwistle, 2009, p.79). Furthermore, perhaps, if teaching is ‘natural’, there may be no need to attend too much to the technical aspects of teaching.

### 3.2 Medical teachers’ purposes and their teacher identities

Further insight into the teachers’ identities emerged as I considered how they describe their purposes they are committed to in their teaching – the goals, visions and responsibilities that are part of teachers’ identity construction (Beauchamp & Thomas, 2009; Clarke, 2008). Here, I found more expressions of personal and professional goals than expressions of higher social or grand altruistic aspirations and I found no explicit associations with the goals of the curriculum.

My exploration of the various expressions of purpose in the interview transcripts revealed that beyond a personal ‘enjoyment’ and some other personal interests, the common commitment is to the medical profession. This is variously expressed in the ways they see themselves as teachers. For some, it is in the tradition of the profession to teach:

... historically it’s one of the great aspects of medicine isn’t it, passing on information and education and experience to the next generation ... it’s part o the job, historically it’s always been part of medicine, consultants have taken on that role ... [Dr C, Interview]

And for others, this obligation has a further moral dimension:

*I think there’s an ethical and moral responsibility in terms of what we have, I mean we have a gift, which has been given to me by our society, someone paid for my education, I have certain obligations ...* [Dr T, Interview]

Differently expressed, there is an ultimate goal of contributing to an educated medical workforce by disseminating knowledge correctly:

*I think everyone who’s involved in teaching gets the rewards of you know passing on the knowledge and having appreciative students as well, but it’s also the greater good of having better medical students and doctors in the long term who know about these conditions, as well as making our job easier when they end up being doctors and practicing.* [Dr F, Interview]
For Dr J, there is also a link to this the future medical teaching workforce as well:

... Yeah I mean other people have taught me in the past so ... well it’s not a duty but I want to teach the next generation so they can, you know, do a good job at being a doctor. Hopefully the people I teach will want to teach others. [Dr J, Interview]

And three teachers jokingly confessed an underlying selfish goal:

... as you get older you realise, damn, you know, I’m not going to be a doctor all my life and I’m going to be dependent on the up and coming residents and if I don’t train them I’ll get what I didn’t train! [Dr N, Interview]

Only one teacher mentioned having a clear altruistic purpose, seeing his teaching as ‘a way of contributing to the society’ [Dr P, Interview].

The medical teachers’ identities, then, are constructed in relation to these purposes, the value of the immediate personal enjoyment, with a sense of strengthening the profession (for different reasons) and the satisfaction of meeting a professional or social obligation. The ‘sense of responsibility to teach medicine’ (Starr et al., 2003) can be seen now as a multi-dimensional sense of responsibility, an ordinary mix of egoism and altruism that we might expect to find any human endeavour and the altruism does not usually extend beyond a commitment to the medical profession.

4. Teacher identity construction of medical teachers and the educational environment

Teachers also interact with features of their environments as they construct their sense of themselves as teachers. One feature of the context in which the medical teachers make their identities is the current status of teaching – in hospitals, in research-dominated universities, and in the wider Australian society. The other aspect of the context is the relationship medical teachers have with institutions with which they interact in their roles as teachers.

In response to the question ‘Do you think of yourself as a teacher?’ Dr Q stated unequivocally that medical teaching does not have the status of medical research and explained that this determines her preference for not thinking of herself as a teacher. In another interview and related to the idea of having meetings to talk about teaching, Dr T mused about how the status or ‘profile’ of medical teaching could be raised in the research-intensive UoM. Other participants mentioned that teaching is not well resourced, not given priority by individuals or
by the hospital or by the university. The impression they give is that medical teaching is not a high profile or high status job. Compounding this, the profession of teaching itself has a poor status in the wider Australian community, and over the past four decades or so, the teaching profession has struggled for professional respect. It is likely that otherwise high status professionals such as doctors may not be attracted to associating themselves with the identity of ‘a teacher’ – poorly paid and poorly valued. Furthermore, it is possible that a prevailing conservatism in the stereotypical way ‘the teacher’ is thought about in the community – as the remote, formal, disciplinarian – might be unattractive. Thus, the wider social context in which the medical teachers make their identities does not seem to offer a positive, attractive sense of what it is like to be a teacher here.

Looking to the other features of the environment in which teacher identities are constructed, the equivalent of the ‘school’ environment (Beijaard et al., 2004) is, for medical teachers, the hospital-university complex. In the hospitals, medical teachers’ knowledge features centrally in the way they think about teaching and about themselves as teachers: the knowledge, together with the medical practice it is associated with, provides them with their authority to teach. Also, some of that knowledge resides in the very places of and in hospitals. Juxtaposed with this, however, the teaching mission is not a priority for the hospital’s administration, and teaching has to be ‘fitted into’ and ‘juggled’ around clinical work. Dr S described the feeling of working as a teacher on ‘a tightrope’ (Dr S, Interview). This is the usual situation for teachers, although it astonishes observant visitors and researchers:

“The ward or unit is normally noisy, with public address announcements, the sociality of adjacent bedsides and their visitors, and the overall clamour of a clinical situation where medical treatment continues around the clock ... Astonishingly, or perhaps not so, the tutors never raised these matters with us. They worked oblivious to the heat of the action, and the intensity of their workplace” (Beckett & Gough, 2004, p.200)

Such an environment is not conducive to bringing a focus on the self as teacher. The immediate job of teaching is done, but with little attention beyond the moment of teaching. And, as I noted earlier, doctors interact with their colleagues on medical matters, but rarely on matters related to teaching, and never, it seems about being a teacher. The teaching and the teacher have importance only in the actual teaching encounters and that is where the pleasure and sense of value reside. The hospital environment is not one that supports or strengthens teacher identity-making.
Looking beyond the hospital environment, I found in this study that the medical teachers feel disconnected from the university, and that this further isolates them from potential influences on the teacher identities they construct. Their teaching practice is conducted in isolation from all except the students and the patients. Strongly and negatively contrasted with the sense of connectedness with students (see Chapter Four) are two expressions of this disconnection: a certain alienation from the university, and the absence of collegiate connections between medical teachers.

Dr T, in responding to my question about whether the medical teachers have meetings to discuss teaching, was prompted to consider that it would be a good thing (see 4.3, Chapter Four). He thought that, amongst other things, it would raise the profile of teaching. He mused further:

*You know the university is poor it doesn’t have to give us money. And the titles are important, because you know we have a common philosophy and the philosophy of the university is my philosophy and you acknowledge and respect the university’s mission which is to teach and research and with high standards, and I think the university could do worse than continue to um promulgate those and make sure we’re all involved. You know it’s just so important for educators and researchers to belong to the university otherwise you work in a vacuum … you get no feedback …* (Dr T, Interview)

Here, Dr T captures the significance – in its absence – of being connected by ‘philosophy … acknowledgement … involved … belonging … feedback’, leaving ‘a vacuum’. For him and other teachers in the study, payment for teaching is not important. However, he thinks that titles (‘professor’, ‘associate professor’, ‘lecturer’) do symbolize the acknowledgement that contributes to the sense of being a teacher and teaching as important. Two other teachers who mentioned titles were more ambivalent, a little cynical: a title is good for one’s CV (Dr C); or a title just buys the university your teaching time (Dr M). Aside from titles, though, Dr T captures a deeper understanding of what is important to the teachers and what might make a difference to the environment for teacher identity-making – the belonging, the shared philosophy, the involvement, the acknowledgement.

If identities are formed in collegiate relationships and impacted on by colleagues and the school administration (Beijaard et al., 2004), then the absence of these relationships and influences will be likely to affect medical teacher identity-making. The sense of teaching in an institutional vacuum is evocative; teaching is not the winner in the competition for status with
research, and the interactions with the executive administration (mostly devolved to the Clinical School) are limited. This reflects what MacLure found in her study of school teachers’ identities and she saw it resulting in a form of identity that she called a ‘spoiled identity’: teachers were found to form an identity from a deep sense of being alienated from the values and practices of the institutions (MacLure, 1993, p.317). This resonates with some ways that the clinicians think about themselves as teachers. MacLure found that such an experience of alienation engenders a pervasive sense of ‘bewilderment and frustration’ that the system does not recognize their virtues or reward their efforts’ (MacLure, 1993, p.313). Furthermore, she has found that alienation and a sense of not being valued makes teachers’ identities fragile.

From the first to the last interview in my study, I heard expressions of both a sense of isolation and a feeling of the teachers’ efforts in teaching the students not being valued or rewarded. As I have mentioned, the reward is almost never an issue of payment. Rather, the emphasis is on teaching without anyone knowing or caring – anyone, that is, other than the teacher and the students in the teaching moment. This isolation is particularly experienced in the absence of feedback that leaves the teacher undernourished (not ‘fed’ in Dr Y’s terms) and, for many, unsure how good they are (or if they are any good at all) compared with others. In another study with medical teachers the provision of feedback was seen as a sign of gratitude to the teacher from the employing/curriculum body (Seabrook, 2003).

There are other expressions of alienation from the university’s curriculum and educational values that affect how they think of themselves as teachers, too. It is, of course, related to what I have already discussed about knowledge. As well, in expressing their views of contemporary approaches to medical courses, many of the teachers were critical of students not being given and not taking sufficient time to learn around patients that would offer access to the essential knowledge they need. The institutions are seen to be responsible for this critical weaknesses; for example, the hospital makes decisions that reduce opportunities for students to learn in clinics (Dr I, Interview) and the university (represented by the Clinical School) timetables classroom teaching that conflicts with the student’s allocated time with a teacher and patients in OP (Dr S, Interview).

Thus, the teachers sense certain absences in the educational environment which affect how (or, whether) they think about themselves as teachers. It is not represented as an environment that opens up positive possibilities for rethinking identities; perhaps it may even be one that leaves old identities to ‘congeal’ (Clarke, 2008, p.195-6). From the medical teachers’ stories about their teaching and about themselves, many aspects of their identities seem to be
congealed around the past rather than the present educational environment, and there was no mention of the future. The ‘vacuum’ that two teachers identified seems not to be conducive to the (re)formation of teacher identities in tune with the changing educational environment.

5. Summary
This study has revealed three broad elements around which these medical teachers’ identities form: a deep inner commitment to their sense of clinical knowledge; a perspective on being a teacher as a natural part of being a doctor; and, a sense of being isolated from potentially positive influences in the environment for the teacher identity-making.

The place of the particular sense of knowledge with which the teachers identify was discussed from two perspectives. It can be seen as an argument and defence they mount for their place in the medical education hierarchy. Alternatively, it may be interpreted as an expression of their insight into and identification with a particular form of knowledge that is the essence of their practice and therefore of their teaching, but one that is not adequately acknowledged in the curriculum. Secondly, the teachers did not express a sense of separate identities as doctors and teachers but rather identify with an understanding that doctors teach because that is how the system works – they do not or cannot wear separate hats. Thirdly, the teachers expressed a sense of themselves as doing their teaching in isolation from collegial discussions about teaching, in hospitals where teaching is not a priority activity and for universities to which they do not feel a belonging. Their identities as teachers are formed in this environmental vacuum.

6. Discussion
In this section, I will discuss the findings through two lenses: the ways teachers’ identities affect their teaching practices; and, the contribution these findings make to existing understandings of medical teachers’ identities.

Teachers’ identities have been found to have four particular effects on their teaching: they shape the dispositions that teachers bring to teaching; they affect where teachers place their effort; they affect how teachers see their obligations as a teacher; and finally, teachers’ identities determine how they seek out professional development (Hammerness et al., 2005). According to Hammerness et al a teacher’s disposition concerns how the teacher supports students and works with them until they succeed; it involves the teacher being respectful towards students and having good relationships with them. As well, a teacher is thought to be disposed (or not) to reflecting on, and learning from the practice of, teaching. The discussion
of the medical teachers’ identities in this chapter highlights both of these aspects of the teachers’ dispositions, but does so in different ways. Separate from whether or not they explicitly think of themselves as teachers, many of the medical teachers think of being a teacher as a natural part of being a doctor, effortlessly connected to practice, and to a degree, commonsense. With teacher identities thus constructed, I have suggested, they are disposed in particular ways to their students: friendly and casual, enjoying the interactions, doing what seems to come naturally, sharing their unique knowledge with, and being supportive of, the students in front of them. Their teachers’ identities can thus be seen to positively shape their dispositions towards students. However, these teachers expressed little disposition to reflect on or learn from their teaching. I have interpreted this as related to their sense of being a teacher as natural for doctors and thus requiring little technique that might prompt reflection.

In considering where the teachers place their effort – the second effect of their teacher identities according to Hammerness – knowledge and interpersonal relations are the two dominant features (Hammerness et al., 2005). Their efforts are directed towards the students immediately in front of them (to the moment of teaching) rather than to other educational roles (such as assessment). In valuing the role they have in sharing and building clinical knowledge, they take the students to (and teach them about) patients because the knowledge that is important to their teacher identities comes from the patients. This knowledge is broadly conceptualized to encompass skills, professional and ethical behaviour as well as self knowledge. In Chapter Four, I discussed the investments the teachers made to the quality of the relationships that are important to them.

The third effect of teachers’ identities is on how teachers perceive their obligations (Hammerness et al., 2005). In this chapter I have discussed the prevailing and dominant sense of the teachers’ obligation to the medical profession. As teachers sharing their knowledge with students, they see themselves helping to maintain the profession; they are meeting their professional and social obligations through teaching. This orientation encompasses an obligation to teach so that the medical workforce is properly educated, stronger and safer and the medical profession itself perpetuated. There was almost no suggestion of these teachers’ identities linked to the university or its curriculum.

Finally, according to the Hammerness framework, it important to understand teachers’ identities because these determine how the teachers will seek out professional development (Hammerness et al., 2005). This study shows that few of these teachers had sought out professional development related to their teaching roles, and nor has it been widely provided
for them. Two had participated in courses and found the experience beneficial, and another two had less positive experiences. The ways that others talked about not reading journal articles or attending courses, suggested they are aware of such opportunities being available. Some also mentioned that medical teachers (in general rather than themselves in particular) ‘should’ be taught how to teach (this was the topic that a number of teachers chose to raise at the end of the interview). The sense of having the right knowledge for their work as teachers – combined with the view of teaching as ‘natural’ for them – are presumably not necessarily understandings that motivate them to make efforts towards professional development.

In this context, efforts to provide professional development for medical teachers in hospitals need to be considered. Other studies have indicated that the potential for professional development to effect change is at least partly determined by the identity a teacher brings to the activity (Jarvis-Selinger, Pratt, & Collins, 2010; Trowler & Cooper, 2002). The sense of what is important to these teachers – relationships more than technique, naturalness without effort, a commitment to a particular form of knowledge – is what medical teachers potentially bring to any consideration of and participation in professional development activities. Jarvis-Selinger also reported that a teacher with a ‘high’ teacher identity at the start of a programme can, if he feels that his previous experience as a teacher is not adequately acknowledged and valued during the programme, exit the programme with a ‘lowered’ teacher identity (Jarvis-Selinger et al., 2010, p.87).

Furthermore, Trowler found that the nature of the teacher identity that a teacher brings to a professional development activity will determine their willingness to change. They also found that these activities often imply that the teacher should give up their existing identity in favour of one preferred in the contemporary landscape. They noted that this is particularly the case for teachers who are positioned as ‘novices’ in such activities (Trowler & Cooper, 2002, p.224). The sense of medical teachers’ identities that emerged in my study suggests the need for new starting points for and fresh ways of thinking about and supporting their development as teachers.

So far in these reflections, I have considered how the findings reveal the impact of the teachers’ identities on the nature of their interactions with students, the extent to which they reflect on their teaching, what intrinsic obligations they try to meet and where they place their effort in teaching. As well, the discussion has revealed how elements in their identities, affected by the environment in which they are made, mitigate against the teachers initiating efforts to develop their teaching practice and their professional development. The other
purpose of this discussion section is to consider how the study contributes to the existing understanding of medical teacher identity in the medical education literature.

The understanding of medical teacher identities emerging in my study is in some ways different from and in other ways similar to the study by Stone et al (Stone et al., 2002). There are strong themes emerging from that study with excellent/awarded medical teachers which resonate with the teacher identity stories in my study particularly the desire to connect with students, a general enjoyment of teaching, and a sense of obligation to teach students. Stone et al also found an ‘underlying humanitarianism’ (Stone et al., 2002, p.182) associated with the teachers’ ways of thinking about themselves as teachers which in my study is evoked in the teachers’ intentions to teach students to be good human beings in their interactions with patients. One issue that concerned Stone was that the medical teachers seemed not to associate their identities with student learning. While this could also be inferred from my study, it might be explained by the focus of my study being exclusively on the teacher and the teaching – not the students and not their learning. However, the teachers in my study did not have what Stone et al found in terms of ‘a strong image of the self as a teacher’ (Stone et al., 2002, p.183). This is particularly evident in the teachers’ responses to my question ‘Do you think of yourself as a teacher’, but elsewhere too in the interviews. I did not find among my study group teacher identities associated with a familiarity with adult learning principles or understandings of other educational theories nor with the use of the language of education. Consistent with Stone’s findings, however, I did find teacher identities associated with them seeing their teaching as ‘just part of’ being a doctor. Stone et al found this characteristic in the participants’ sense of the ‘integrated role of doctor and teacher’ (Stone et al., 2002, p.183). However, I have interpreted this differently. While those authors regard this as a strength, and suggest that this feature of teachers’ identities will facilitate the understanding of teaching that their future faculty development programmes will promote, I have interpreted it in this chapter and the next, as more problematic. Like Stone, Starr and colleagues (Starr et al., 2003) also found a strong belief among the teachers that being a physician means being a teacher and concluded that this is readily translatable into faculty development programmes, that this belief will require only ‘a small leap’ from teaching patients to teaching students effectively (Starr et al., 2003, p.185). Again, my interpretation of the meaning and implications of these findings is different.

My study then suggests different ways of seeing the elements that comprise medical teachers’ identities than have been proposed in some previous studies. Having been with the teachers
in many teaching settings in hospitals, seeing and hearing them in the action, listening to their stories and arguments, and interpreting identities within wider contexts, new understandings have become available. Chapter Six includes further discussion about how these insights might contribute to refreshing the approach to support and development for this group of medical teachers.
Chapter Six

Conclusions, Reflections and Implications for Practice and Further Research
I came to this research with an interest sparked by my professional work with medical teachers in hospitals, and the focus of the study was influenced by reading about teaching and teachers in settings other than medical education. I was particularly interested in the notion of teachers having personal theories about teaching that affect how they go about teaching, which in turn affects how students approach learning. Also, there seemed to be room in the literature and in the practice, to focus on the teachers as people, so the research also sought to understand how hospital-based medical teachers think about themselves as teachers.

To guide the study, I took up three research questions: How do hospital-based medical teachers think about teaching? How do they go about teaching? How do they think about themselves as teachers? I designed a qualitative study and adopted a non-directed approach drawing on ethnographic methods for observations and interviews so that answers to my questions came from the teachers’ own emphases. The approach allowed me to explore how the teachers framed their work rather than seeing how they measured up against pre-framed typologies.

In this final chapter, I will summarise the findings and then present reflections on those findings before considering what this study means for medical education practice and future research.

1. Summary of Findings and Conclusions

In Chapter Three, I discussed how my research with this group of medical teachers showed that for them teaching is about knowledge and their pedagogical role in enabling students to access a particular form of knowledge that is ‘real’.

The teachers revealed how they value the knowledge derived from work, from a doctor’s life and from their work with real people, knowledge from work with individual patients who cumulatively and one-by-one provide the doctor (and student) with knowledge. Thus, the teachers’ particular conceptualisation was that the knowledge is intricate, messy, uncertain and dynamic in nature and acquired only through clinical practice with patients in the workplaces. The teachers value the uniqueness and tacit-ness of this knowledge.

Conceptualised in this way, clinical knowledge was seen as superior to (codified, formal) textbook knowledge. Textbook knowledge they see as orderly, static, appearing in the form of lists and stable sets of instructions – the antithesis of clinical knowledge which is essentially flexible, emerging from and applied within the uncertainties of practice with people, and tacit rather than codified/written down. Furthermore, according to these medical teachers, learning
from textbooks and lectures at university – in classrooms with teachers who are not practitioners – does not provide students with knowledge of how to behave around people: only time with medical teachers and with patients in the lively knowledge-rich places of the hospital can do that. They value their role in the knowledge-transformation processes, turning one form of knowledge into another, a process seen to involve taking the students to their patients, to their clinical rooms and wards, and teaching them in their own hospital classrooms. They see themselves as engaged in contextualising the knowledge through making links and bridges – to and from theory and practice, clinic (corridor) and classroom, cognitive and affective, textbook ideals and patient/hospital realities. The formal and more traditional notion of ‘applied’ knowledge is not for these teachers an appropriate conceptualisation. For them the interconnectedness is made through dynamic linking and putting together. They see this as essentially new knowledge, not just applied; it is differently constructed and a fundamental part of what students need to know and develop themselves.

Ultimately emerging from these processes is a form of knowledge that is dynamic and complex, constructed patient by patient, sometimes thought of as (practical) wisdom. As well as coming from patients, this clinical knowledge is seen to reside in the places where practice and teaching happens, providing a new understanding of the important choices teachers make. In addition, one of the characteristics of the form of knowledge that the teachers value is what they learn from patients – certain patients, certain circumstances and certain conditions and this knowledge becomes part of their store of medical knowledge that they have forever.

In Chapter Four, I showed that alongside the primary value placed on their knowledge, the personal and interpersonal factors associated with teaching were also highly valued by these medical teachers. The enjoyment in medical teaching seems to be a reward in itself, a positive feature of their working lives, and for some a pleasant change from the routine of clinical work. Key to that enjoyment is the connectedness with students which is often expressed in a preference for physical closeness, a preference for teaching that feels casual, something like a conversation, a need to know the students, and a commitment to pleasant and friendly interactions. Strongly influencing these preferences, were the teachers’ memories of their own teachers resulting in both a determination to repeat what they experienced as a positive commitment to teaching and, conversely, a passionate desire not to do the harm they experienced or witnessed. My observations confirmed that teachers relied on the strength of personal and interpersonal aspects of pedagogy; they prefer an approach to teaching that they
see as not requiring too much extra technical effort – especially given that it has to be fitted into and around clinical and other commitments. For all of the teachers in my study there was a need to enjoy teaching. For some, teaching was stimulating, others simply enjoyed sharing their knowledge, for others it relieved the routine of clinical practice, or relieved the isolation of the work with patients ... and some said they just like talking. Like teachers in other settings (Entwistle, 2009; Palmer, 2009; Pratt, 1992), hospital-based medical teachers invest much of themselves in their encounters with students although this personal investment is mostly unrecognised by others.

I found that the technical aspects of teaching featured less in the teachers’ discussions of teaching than do expressions of enjoyment. As well, my observations of the teaching revealed that most teachers talked and asked questions more than they employed other pedagogical techniques. In many instances, their pedagogy was of course completely suitable. However, across the group, I observed a lack of technical expertise in managing questioning that would otherwise enable them to achieve more of the sophisticated and higher order pedagogical goals to which many of them aspire (including ‘conversations’ that might generate attitude change, or actions that would enhance ‘professionalism’). At times, the inadequate teaching technique left teachers appearing uncomfortable and even lost. This is a key area for medical teacher professional development.

In the absence of other professionalizing influences in the contemporary educational environment, it seems that the personal theories of teaching that these teachers developed when they were students persist into the present (Biggs, 2007). Given the period of reform of medical education curricula and systems that I discussed in Chapter One, the stability of these ways of thinking about teaching is notable. Many approach teaching as a commonplace and commonsense activity – important and pleasant, but not complex or difficult. I have interpreted the persistence of these limited personal theories as problematic.

Feedback to teachers was also missing. Many teachers referred to not getting feedback about how well they are doing, not knowing whether the students like their teaching, nor having a perspective on how their teaching compares with how others do it. There is not a university conversation for them about teaching, and the idea of being involved in discussions about teaching was seen as novel but also potentially useful – even improving the profile of teaching and teachers. Overall, there was an absence of a professional collegiality around the teaching activity. The other institution, the hospital, has clinical care, not teaching, as its prime mission – and teaching is just fitted in.
My professional work is with medical teachers in one specialty and I came to that role from a position in the teaching of another medical specialty. However, in setting out on this research, I was neither looking for nor did I find differences among teachers’ approaches to teaching (in talk or action) according to their medical or surgical/procedural specialties. Rather, I included participants from a variety of medical and surgical specialties and found that the physicians and proceduralists alike share similar histories as learners and teachers, have similar pedagogical values and goals, and seem to practice in similar ways – although of course with individual stylistic variations. It was apparent, though, that the few physicians who successfully employed a wider range of classroom teaching techniques than did others, operate (or have operated in the past) in environments that encourage them to be thoughtful about their teaching – reflecting on their teaching, seeking professional development and having conversations with colleagues about their teaching.

‘Teacher identity’ was the subject of Chapter Five, and I explored there the understanding emerging from the study that knowledge is at the core of these teachers’ identities. Building on a number of existing theories of knowledge and identity, I distinguished between two approaches to understanding the central place of clinical knowledge in the teachers’ identities. One way is to see this construction of their teacher identities as arguments, using their knowledge, to make a claim for their place in the hierarchy of medical education; the other view is that knowledge is the keystone of all professionals’ identities, and for the medical teachers, it is their conceptualization of clinical knowledge and their place in making it that differentiates them and gives them their authority to teach.

Also central to these teachers’ ways of thinking about themselves as teachers was their embrace of teaching as natural. They may (or may not) see themselves as teachers because, they said, it is just part of what doctors do, it is how the profession is maintained – and, after all, to most of them the maintenance of the profession is a primary reason for teaching. Part of this particular sense of self as teacher was that teaching should not need to be a burden, it does not (and cannot) require much effort; teaching is essentially experienced as pleasant and enjoyable. Less important to their teacher identities was thinking of themselves as technical experts. The argument is made in that chapter that as long as medical teachers think of being a teacher as a natural part of being a doctor, they do not have to be too concerned about it: their current expertise, commitments and personalities can carry them through.

It is important here to move the focus beyond stories of the individual selves, towards an appreciation that teachers’ identities are constructed in interaction with their environment.
These medical teachers’ identities are constructed in something of a vacuum in terms of the educational environment they experience. A lack of connectedness with teaching colleagues and with the students’ institution leaves them isolated. This sense of not being part of or connected to the university or to a teaching community contrasts starkly with their experience of and preference for a connectedness with students. The universities are remote from their medical teachers in the hospitals, the academic mission seen to be dominated by research, and in medicine, dominated by the teaching of bioscience. Thus, the educational environment for them to do their identity-making was represented as neither friendly nor fertile: teaching does not have a high status; teaching and teachers are poorly profiled in both their hospital workplaces and in the universities; and, they experience a sense of alienation from the values and priorities associated with medical education beyond their immediate and satisfying interactions with students.

2. Reflections

The findings of this study offer a new understanding of the medical teachers in Australian hospitals, offering evidence of the core values and personal theories of teaching that these teachers bring to their contact with medical students. The study suggests an opportunity for renewing respectful and productive interactions with the teachers in the interests of medical students and, ultimately, patients. This draws attention to a concern expressed in the literature relating to the failure of efforts to reform medical education despite much experimentation with curriculum (Bloom, 1989). It also helps to understand the concern about the prevailing conservatism in the field (Bleakley et al., 2011) along with the view that medical education has remained largely unchanged since the massive structural reform in the early 20th Century (Cooke et al., 2010a).

The study articulates much that the teachers do not articulate themselves and highlights the value of having focused on the hospital-based medical teachers, and to having listened to them and observed them teaching. The teachers’ ways of thinking about knowledge emerged immediately and persistently as an uncontested value in their approaches to teaching. In (re)considering the different literature on knowledge (Bernstein, 2000; Young, 2008) and clinical knowledge, I found that the teachers’ conceptualization adds new dimensions to existing models of the components and construction of this knowledge. Irby’s typology suggests that the components of medical knowledge are ‘integrated’ and that there is a background ‘context’ for this knowledge construction (Irby, 1994). My study – twenty years on, with a group of (not necessarily distinguished) medical teachers in Australian hospitals –
suggests two different ways of thinking about this. First, ‘integrated’ does not capture the vitality of the knowledge or the dynamics of its construction; and it leaves unspoken the convention of privileging scientific over practical knowledge. Second, the idea of ‘context’ as background is challenged by the teachers’ sense of knowledge residing in the places in which they teach and practice. Thus, my study suggests the need to broaden and revitalise the way that clinical knowledge and its construction is described.

Another programme of research in this area continues to inform theory and practice (Bell, Boshuizen, Scherpbier, & Dornan, 2009; Dornan, Boshuizen, King, & Scherpbier, 2007; Dornan et al., 2011; Dornan, Boshuizen, & King, 2007). In these studies, the composition and construction of clinical knowledge have been further elaborated, including the students’ viewpoints – they too value clinical knowledge gained around patients as ‘real’. Extending Irby’s typology, the patient is thus soundly positioned as the third party in the clinical learning experience and is given a legitimate and equal position in the well-known clinical learning triad. Further research has extended this model so that learning from clinical experience is represented in a complex experience-based learning model (Dornan et al, 2009).

The findings of my study draw attention to the ways these models continue to position the context (also referred to as the setting, or the workplace) (Teunissen & Wilkinson, 2011) as the background to the learning or as a part of the process of learning. My study offers a different understanding. The teachers have placed a new active element, a new actor, on the medical education stage. Rather than being (just) the stage upon which the action happens (that is, the context for teaching), the places are now part of the teaching and learning action of knowledge-making. This is consistent with the emerging interest in actor network theory (ANT) and activity theory in medical education (Bleakley, 2012; Bleakley et al., 2011), a new recognition of places and artefacts as non-human actors. The ‘place’ can be seen as an active constituent in the knowledge and the knowledge-making. Thus, following the triad, a ‘tetrad’ emerges:
While this tetrad gives the places a new position in the knowledge-making, it is still not a sufficiently accurate picture. It does not capture the essential character of the knowledge, its uniqueness, nor does it represent anything of the dynamic process of the knowledge-making that the teachers in my study suggested they are engaged in. The concept of a clinical knowledge ‘network’ would capture more of the essence: the status, the complexity, the places and people, the interconnectedness, the sense of clinical knowledge as intricate, dynamic, fluid and messy – and the teachers’ sense of their important role in the knowledge-making processes. There is an organic quality (Beckett & Hager, 2010) to the network that needs to be captured.

The findings of this study suggest that a graphical representation of this dynamic interconnected network of knowledge would be attractive and meaningful to the teachers and others. However, while it is desirable, the very dynamic and messy nature of the knowledge, (its organic character) makes it not only difficult but also somehow inappropriate to display. My preference at this stage of my research is to conceptualize the clinical knowledge network as a multi-faceted, fluid and dynamically interconnected network adapted to and by the people and environments in which it is found.

Further to this refreshed understanding of clinical knowledge, the strong evidence in this study of the intrinsic rewards experienced by the medical teachers in their relationships with students suggests an opportunity to reconsider what is ‘good’ or ‘excellent’ in medical
teaching in hospitals — and the implications of this for the teachers and others. The finding is consistent with studies of medical students (Cooke et al., 2010a; Sutkin et al., 2008) and other university students (Entwistle, 2009) and reveals the high value the teachers place on the relational aspects of pedagogy. It draws attention to the quality of the teacher as much as to the quality of the teaching. In the context of the poor profile of teaching in hospitals and medical schools (as well as in the wider society), there is an opportunity to promote aspects of excellence where I have found it, and to value the teachers’ personal qualities and their commitments as core rather than peripheral or incidental. Those involved with medical education – teachers, students, curriculum developers, course administrators, evaluators and researchers – might be moved by this study to reconsider the current undervaluing of medical teachers as fillers of gaps in timetables, just ‘jobbing’ or ‘just doing’ the teaching (Bleakley et al., 2011).

In essence, there is an opportunity for a new approach to judgments about what is good medical teaching and, subsequently, an opportunity to promote (and reclaim) the importance of teacher-learner relationships. At the same time, some teachers want support to develop more technical expertise. My observations confirmed that the technique most commonly employed and in need of development is the use and management of questioning. As Pratt’s research has confirmed, while questioning is a fundamental method used in (medical) teaching, doing it well requires significant expertise (Pratt et al., 2001) and a teacher’s fundamental beliefs and philosophy will affect how well they can enact the method (Pratt, 1998). My study found that many of these hospital-based medical teachers would benefit from support that is more informed and in more than clichéd ways of thinking about their teaching to better express what they are aiming to achieve and how they go about it.

In supporting them to develop technique, it is critical that these teachers’ commitments to teaching and the high value they place on the personal connectedness with students is appropriately recognised and valued. Part of the rebalancing of attention to both the relational and technical aspects of pedagogy, implies the need to value a more pluralistic approach to teachers and teaching. There are opportunities to challenge the dominant singular view of what makes good teaching that results in, for instance, the denigration of lectures regardless of a teacher’s intentions and achievements in them. Similarly, there is little value in promoting small group learning if the requisite teaching techniques have not been developed.

These findings illuminate some empty spaces, the opportunity to bring these teachers into a comfortable and productive place in a university-teaching hospital community of teachers. It
also suggests the opportunity to engage the teachers in defining the nature of the relationship. The study has shown the teachers’ preferences in relation to teaching and their disappointment in relation to the institutions, particularly the university. While the relationship needs to be improved by each party, there is an implicit challenge to the University to initiate the connectedness. The response requires a determined, ongoing commitment of effort and resources to this medical teaching workforce.

Underpinning any response to the teachers, though, is the need for sensitivity to the complexity in these medical teachers’ identities that my study has identified. Their identities as teachers are essentially connected to matters of knowledge, relationships and the sense of teaching as natural and this understanding has value for the teachers themselves, for the institutions and of course the students – on behalf of their patients. In particular, there are important ramifications of the teachers’ sense that being a teacher is a natural thing – an easy, straightforward part of their overall role as a doctor. While comfortable for them, this position may also be protecting them and their teaching from positive scrutiny. If no attention is drawn to it, the teaching can continue as it has always been done: teaching in a way they were taught, doing or not doing what was done to them. It maintains the autonomy that doctors have traditionally held regarding what and how they teach. That position may also help to perpetuate a resistance to the instructions, lists of objectives and guidelines to teachers that have accompanied new curriculum. If natural, they just do it, and it is commonsense, not requiring institutional interference.

This feature of the teachers’ identities works both for and against them and, similarly, has mixed effects on the system that provides medical education. From this viewpoint, neither the university nor, especially, the hospitals have to recognize (or recompense) the teachers because the teaching just happens – and nothing changes. But this approach also perpetuates the disconnect, the lack of acknowledgement and the poor profile of teaching in the institutions. And, within this environment, the misconception of teaching as commonsense prevails. The interests of students, teachers and the institutions are not well served by perpetuating the notion of teaching as easy or commonsense. My study suggests that the required response, while determined and ongoing, also needs to be sensitive and even individual.

This is a particular study, though, and the findings and implications will not necessarily resonate in all other medical teaching settings. First, it is a study of Australian teachers, and the setting here is different from the USA and Canada where medical teachers in hospitals are
perhaps better connected to the universities and perhaps more likely to identify as teachers in that environment. The arrangements in Australia are more like those in the UK. Second, UoM is a large, established university with a strong tradition of research and, in terms of medical education, has long-established relationships with many hospitals. A study of medical teachers associated with a smaller, newer university may find different relationships and other emphases. Third, I selected the three sites and the sample of participants to achieve a diversity, estimating that these hospitals and the individual volunteer participants would best enable me to study in detail the phenomena I had determined were important – the teachers, the teaching and the teacher identities.

3. Implications for practice
The findings of this study also have practical value to the teachers, academics and institutions involved in medical education. First, the new understandings of the teachers’ values and perspectives imply new possibilities for acknowledging their contribution and the provision of support and development for them. Second, the study offers an opportunity to act on the new sense of clinical knowledge that is in tune with the teachers’ understanding of their work in medical teaching. A final statement proposes areas for further research.

3.1 Acting on the teachers’ perspectives on pedagogy
An institutional response to the teachers’ expressed needs for support, development and connectedness is needed and the study highlights key principles that would underpin this response based on the teachers’ values and perspectives. What is required is an unequivocal and ongoing appreciation of the nature and significance of their version of clinical knowledge and their role in the making of that knowledge. To be avoided is an over-emphasis on the technical aspects of pedagogy that could potentially suck the life out of the teaching that they are professionally and personally committed to – and enjoy. (Similarly, to be avoided is the recently promoted view that developing expertise in teaching is as important for medical teachers as is developing their clinical skills (Calkins, Johnson, & Light, 2012)). The principled starting point I suggest is to ‘complexify’ but not over-complicate teaching that currently feels natural and is conducted willingly and without too much effort.

Based on these values, the response also needs to be based on the realities of the teachers’ experience of their situation and their perspective on the local educational milieu. They function within a tradition of medical practice that values heroic individualist doctors (Ludmerer, 1999) and the teachers are influenced by a tradition of teaching where the power of the person is dominant. Their identification with the workplace, its busy-ness and vitality,
makes the hospital workplace the best site for contact with them given that teaching is just a small part of their clinical role. However, the sense of being isolated from the university’s mission and the educational values and reforms currently alienates the teachers and this needs to be addressed prior to and as part of the support and development response. Taking into account the teachers’ situation and values, the response needs to be personal/individual, workplace-based, ongoing and uncomplicated – but it must still address and challenge the teachers’ existing theories, misconceptions and approaches that are not serving them or their students well. It would be appropriate to get teachers thinking about their beliefs about teaching and learning, to involve them in ‘perspective transformation’ (Pratt, 1998, p.12). In this, the university needs to be the leader, the hospital needs to be the site and the teaching experts need to be the facilitators, guides and mentors.

Two concepts now appearing in the (medical) education literature can be taken into the support and development response: one-to-one coaching and workplace learning. The one-to-one approach responds to the culture of individualism in medicine and medical teaching, but also takes account of the need to resist perpetuating the one-size-fits-all attitude to teaching and learning. Most importantly, in considering the evidence of how expertise in teaching is developed and the practicalities of these teachers’ working lives, this is an appropriate approach. Berliner’s work highlights that while talent is important, it is less important than deliberate practice and that even more important are the conditions of the workplace (Berliner, 2001). He suggests a model to accommodate these three features and calls it ‘coaching’, working alongside the teacher in their actual teaching encounters so that some of the external conditions are taken into account. My study shows that the technique that needs most attention is the teachers’ management of questioning – the dominant technical pedagogical device, and I propose that Berliner’s approach is appropriate. According to Berliner, nothing will happen (even if the teacher attends a course) until someone helps the teacher to specify what he or she is going to do and then monitors and helps her achieve the effects (Berliner, 1982). This requires collegiality, observation and a meta-knowledge of pedagogical techniques (McLeod, Steinert, Meagher, & McLeod, 2003) as well as an ability to explain the educational principles underlying the action and the action itself.

The term ‘coach’ may be acceptable here, the person who offers the one-to-one support (although my experience with junior doctors is that a ‘coach’ is not always accepted as an attractive title for what they do as teachers or supervisors in clinical practice). Berliner’s idea of the ‘connoisseur’ might also be appropriate. The connoisseur need not be a superior
teacher themselves, but ‘they must know good teaching’ (Berliner, 1982, p.14) and be able to help someone else appreciate it. Those who ‘know good teaching’ may include medical teacher peers who have gained new insights and knowledge through professional development activities and have themselves become connoisseurs.

Given the advice in the literature related to the place and possibility of reflectiveness (Day, 1999; Pratt, 2002; Pratt et al., 2001), providing teachers with opportunities to reflect is also important – but not easy. The connoisseur must know not only how to enter the teacher’s workplace and how to provide feedback to teachers, they must also be able to provide triggers for teachers to reflect (Malkki & Lindblom-Ylanne, 2011). As well, they must be able to continue to support the teacher to take on new ways as appropriate – and thus to evolve their identities as teachers. The one-to-one model implies respect for the highly individualist culture of medicine and responds to the value of personal authority and interpersonal relationships. It also avoids positioning the teachers as novices that may alienate them. The connoisseur can provide an opportunity for the teachers to ‘debrief’ (Dr T) thus opening up meaningful conversations about teaching that can positively affect how they think about themselves as teachers. One-to-one support seems like a sensible feature of a sound approach to the professional development of medical teachers in hospitals and would form part of the recently proposed frame for research in the area (O'Sullivan & Irby, 2011).

3.2 Acting on the teachers’ conceptualization of clinical knowledge

The second implication for practice emerging from my study is the need to re-tune the materials associated with the curriculum to the teachers’ understanding of clinical knowledge and of their place in it. The richness and messiness of clinical knowledge are missing from documents and discussions related to the curriculum; also missing, are the teachers’ perceptions of their unique contributions to it. From their perspectives, detailed and definitive lists belong to bioscience knowledge and textbooks, so for them other textual styles are needed to capture the rich life-breath of tacit knowledge that is at the heart of clinical practice and at the core of their identities as teachers. Both documents and discussions need to represent and explicitly value the knowledge that is uncertain, disordered, unwritten, interconnected and fluid. But at the same time formal representations in documents and discussions need to preserve the essential vitality that distinguishes clinical from bioscience knowledge. Along with other support and development, this action could contribute to redressing the sense of isolation and alienation that the teachers’ currently experience from the educational and other professional values of the university.
As well as the value this would have to the curriculum, there is also a pedagogical value in acknowledging the knowledge that the teachers see residing in the patients and the places where clinical practice and clinical teaching happen. Much of the vitality in the knowledge comes from its location – corridors, cafes, clinic rooms and wards. It is often this sense of the liveliness of the places – the people, the bustle – that determines the teachers’ decisions to teach in these places and to teach with patients present. Those places are contrasted with the unattractiveness of teaching in classrooms which are thought to have a dulling effect on students, draining the life out of clinical material and even uncomfortable for some teachers. Supporting teachers to develop more technical expertise, particularly in managing questioning and discussion, could contribute to making classrooms more attractive, less uncomfortable and better for teachers and learners.

However, professional development is not the whole answer and individual approaches are not all that are needed in the system. Rather, the way that clinical knowledge is talked and written about needs to acknowledge that some of it is gained just by being in the places. This view at least partly determines the choices that medical teachers make for where they teach. In both this research and my own professional work with medical teachers over many years, I have noticed that students and medical trainees are often taught around patients when there is often no apparent need to teach there – they are close to the patients but not interacting with them, often talking about the patient but not to them. Helping to explain this choice is the understanding that the teachers have of knowledge residing in the places per se. If made more explicit and the insights shared, this new understanding could assist teachers (and administrators) to make more informed decisions about when teaching does and does not need to take place around patients so that rational decisions are made about ‘the dose’ required.

In considering the implications for further research, the findings suggest four areas for further investigation. First, a similar methodology could be employed to study other groups of medical teachers to determine how transferable these findings are to other settings. In particular, studies could be conducted with General Practitioners and with doctors in regional hospitals who are connected to newer, smaller medical schools. Second, further qualitative research is needed to explore the meaning of ‘place’ in the conceptualisation of clinical knowledge as suggested by this study. Third, with the emerging interest in workplace learning, there is a need for research into how to support and develop hospital-based medical teachers in the workplace using models such as coaching and communities of practice. Such research would
include trials of tools and processes that trigger and promote reflectiveness and foster more understanding of teacher identities. The fourth area of research draws on the many references in this study to the practice of some medical teachers humiliating students. If this practice is still persisting, it requires a contemporary understanding on behalf of the students and the institutions.
Appendices
APPENDIX A: Letter of Introduction

[16 May 2011]

Dear Medical Teacher,

We are writing to let you know of an education research project in which doctors at [NAME] Hospital will soon be invited to participate. Given the importance of the role of medical teachers in hospitals, a doctoral research project has been established in Melbourne with the aim of better understanding how hospital-based medical teachers think about teaching and about being teachers.

The research is being supervised by Professor Lyn Yates, Pro Vice Chancellor (Research) and Professor Geoff McColl, Director of Medical Education and Training. The [NAME] Hospital has agreed to be one of three sites for the study which will involve a total of approximately 30 doctors. The methodology involves both interviews and observations of teaching. We believe that the study will involve us in a worthwhile medical education research project without being too great a burden on any one individual doctor’s time.

Jenny Barrett has worked in medical education for many years, most recently as a Senior Lecturer in the Department of Paediatrics and at the [NAME]. A feature of her current work is the support for senior medical trainees in their teaching roles; this includes workshops as well as observation of their teaching in different settings.

For her doctoral study, Jenny will observe teachers in both ‘classroom’ and patient-based teaching settings and after each observation, meet to talk with the teacher. All observations and interviews will be audio-recorded, and the total time in interview is expected to be approximately one hour. It is important to stress that this is not a study of ‘effective’ or ‘excellent’ teachers, and is not an ‘evaluation’. Rather, Jenny is seeking a better understanding of how doctors think about teaching and being teachers and the observation of teaching provides a stimulus for the discussion in the interview.

The research project has been approved by the XX Hospital HREC as a minimal risk project, [number].

Jenny will contact a number of medical teachers over the next few months with an invitation to participate in the study. Participants will be given a formal Plain Language Statement and be asked to sign a consent form. If you wish to discuss the project, please call either of us.

Yours sincerely

Jenny Barrett [jenny.barrett@rch.org.au [0417546840]

[NAME of CLINICAL DEAN] [Email address] [phone number]
APPENDIX B: Email invitation

From: Jenny Barrett
To: Dr [NAME]
Date: 1 June 2011
Subject: Medical Teacher Study

Dear Dr [name]

Recently [CLINICAL DEAN] and I wrote to let you know about my study of medical teachers. I invite you to be one of the ~30 participants in the study and have attached a brief overview that has been approved by both University and Hospital ethics committees for my Doctor of Education project.

I would be delighted to hear from you to arrange for me to observe one or two of your teaching sessions (lecture, tutorial or patient-based) and subsequently interview you.

Kind regards,

Jenny

Jenny Barrett
Senior Lecturer, Department of Paediatrics,
The University of Melbourne &
Medical Educator, Royal Children’s Hospital
M: 0417546840
APPENDIX C: Plain Language Statement and Consent Form

Project Title:
“Medical Teachers’ Conceptualisations of Teaching”

The Purpose of this Document
As a medical teacher, you are invited to take part in this research project. This Plain Language Statement is to explain to you the procedures involved in this project before you decide whether or not to participate. Please read it and ask the researchers any questions you wish to ask. Participation in the research is voluntary and you may withdraw at any time.

Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form which indicates that you understand the information and that you give your consent to participate in the research project.

We will provide you with a copy of the Consent Form to keep as a record.

The researchers:
Professor Lyn Yates, Principal Researcher, Melbourne Graduate School of Education, The University of Melbourne, Ph: (03) 9035 8166/5873
Professor Geoff McColl, Director, Medical Education Unit, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne, Ph: (03) 8 344 8049
Jenny Barrett, Student Researcher, Senior Lecturer, Department of Paediatrics, The University of Melbourne, Ph: (03) 93456860

The Study: Purpose and Background
It is important to understand how teachers think about teaching in order to understand their teaching practice. The teaching of medical students in large hospitals associated with universities is a complex educational setting and many doctors who teach medical students in hospitals do so with little preparation for or recognition of their teaching. There has been no empirical research into how these medical teachers think about teaching or what teaching means to them. This study seeks to address this gap in our knowledge.

The participating medical teachers will be observed teaching in both classroom and clinical settings. These sessions will be audio-recorded; following the observations, the teacher will be interviewed. It is expected that approximately 20 medical teachers from three different Melbourne hospitals will participate.

You are invited to participate in this research project as you are currently teaching medical students in both patient-based and classroom settings. Participants’ names were located on the student teaching timetable at each of the three hospitals. The findings of the interviews and observations will provide us with an enhanced understanding of what is important to hospital-based medical teachers. The results of this research will also fulfil the requirements for Ms Jenny Barrett’s Doctor of Education (DEd) degree.

Procedures (see page 2)

Procedures (cont)
Participation in this project is completely voluntary. If you decide to participate you will be asked to:

- Sign the Consent Form (attached);
- Allow the student researcher, Ms Barrett, to attend and audio-record two of your teaching sessions – one in a lecture theatre or tutorial room, one with a patient in the ward setting;
- Agree on a convenient time and place to take part in audio-recorded interviews with Ms Barrett to talk about how you think about and carry out your teaching. These interviews could take a total of approximately one hour;
- Take part in a brief phone conversation to provide you with an opportunity to raise or discuss thoughts you have had subsequent to the interview that you consider would be relevant to the research;
- Consider a written summary of the findings of the study and comment on them by phoning or emailing the researcher.

**Possible Benefits**
The potential risks in this kind of project would be either that the experience of being observed or interviewed might be distressing, or that confidentiality could be breached. In the event of the former, you are welcome to discuss the experience with a member of the research team by contacting them on the telephone. In relation to confidentiality, the researchers are experienced and senior academics and will take all steps to avoid such breaches.

The researcher is not evaluating your teaching and will not give you feedback or evaluative judgements during the research. If however, you want to take the opportunity to discuss your teaching and get this feedback, the researcher could meet with you following data collection and analysis.

**Possible Risks**
The research team do not anticipate that there are any risks to you, but if you were to experience any discomfort or distress, you are welcome to discuss this with the student-researcher or the other members of the research team by contacting on the telephone numbers provided above.

**Privacy, Confidentiality and Disclosure of Information**
Your decision to participate in the research is completely voluntary and will not affect your relationship with the University or, specifically, the Medical Education Unit. Also, any identifying information obtained in connection with your participation in this project will remain confidential. It will be disclosed only with your permission, except as required by law. If you give us your permission by signing the Consent Form, we plan to publish the results in a non-identifiable way. In any publication, information will be provided in such a way that you cannot be identified.

Any identifying information such as your name, contact details and medical specialty will be kept separately from any personal or sensitive information you supply us with. Furthermore, all transcripts will be de-identified and pseudonyms will be used in publications and presentations. Only the student researcher will have access to identifying information. The named researchers, Ms Barrett’s supervisors, will have access only to the de-identified data. The de-identification of data collected by the student researcher will ensure that the confidentiality and anonymity of participants is maintained. Ms Barrett, who is also an employee of the University, will not divulge any
information about you or your teaching to any other employees of the University who may be in a position to affect your teaching role or status.

The transcribed data will be kept securely in the Ms Barrett’s University office for five years from the date of publication, and destroyed unless permission is sought for re-analysis as part of another study.

Results of the Project
All participants will be offered access to the results and final report of this study if they wish to read them.

Further Information
If you require further information, or if you have any concerns about this project, you can contact the Principal Investigator:

Professor Lyn Yates,  
Pro Vice-Chancellor (Research)  
Alan Gilbert Building,  
University of Melbourne  
Vic 3010  
Ph. 03 9035 8166/9035 5873  

December 2010
Consent Form: Medical Teacher Study

Date

Dear

You have agreed to participate in the research project 'Medical teachers in hospitals'.

The members of the research team are:

Professor Lyn Yates, Principal Researcher, Melbourne Graduate School of Education, The University of Melbourne, Ph: (03) 9035 8166

Professor Geoff McColl, (Secondary Supervisor) Director, Medical Education Unit, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne, Ph: (03 8 344 8049)

Jenny Barrett, Student Researcher, Department of Paediatrics, The University of Melbourne, Ph: (03) 93456860

We wish to stress that involvement in the project is completely voluntary and that you are free to withdraw at any time and to withdraw unprocessed identifiable data that you have contributed.

If you consent to participate, the researchers will ask to attend two of your teaching sessions (one lecture or tutorial) and one patient-based teaching session. Each of these teaching sessions will be audio-recorded. After the researcher has recorded each of your teaching sessions, she will arrange a brief meeting with you, one for 15-20 minutes and a second interview of 30-40 minutes, both of which will be audio-recorded. The recordings will be transcribed by the student-researcher who will remove any identifying information including names of individuals, subject taught, medical specialty and the hospital. The de-identified written transcripts will be analysed by the student researcher and some will also be read and analysed by Professor McColl. Ms Barrett will maintain confidentiality of observations of your teaching and discussions with you subject to legal limitations.

The study and the study findings will be reported in Ms Barrett's Doctorate of Education thesis and in education and medical education journals. It is likely that the findings will also be presented at medical education seminars in Australia and overseas.

If you have further questions about the project before signing this consent form, please contact Ms Jenny Barrett or Professor Lyn Yates on the phone numbers above.

If you wish to participate please sign and give this form to Ms Barrett:

Name ________________________________

Date ________________________________

Signature ____________________________
APPENDIX D: Plain Language Statement Part B for Bystander Participants – patients, families, other staff and medical students

Project Title:

“Medical Teachers’ Conceptualisations of Teaching”

The purpose of this document is to explain to bystanders the purpose of observing and recording medical teaching sessions.

My name is Jenny Barrett. I am a teacher and I work in medical education for the University of Melbourne. Currently, I am conducting research into medical teaching and I am observing doctors teaching and later interviewing them.

I am seeking your permission to observe and audio-record this teaching session. The recording will be used for my research but any reference to you will be removed during the analysis as the focus of the research is the teacher. I am happy to answer any questions or give you more information that would help you understand my research.

Thank you.

Melbourne Graduate School of Education
The University of Melbourne Victoria 3010 Australia
T: +61 3 8344 8285  F: +61 3 8344 8529  W: www.edfac.unimelb.edu.au

[HREC HREC: 1035147.1; Version: 1]
## APPENDIX E: Data Collection Records

<table>
<thead>
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<td>Tutorial</td>
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<td>Clinic</td>
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<td>Phys</td>
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<td>Totals</td>
<td>Proc: 7</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

Phys: 18
### APPENDIX F: Participants’ references to ‘real’

| Dr A | So, how do you actually get the idea that a [patient type] is a real person and a valuable person, and again that’s the attitudinal stuff I like to challenge. … We actually want them to say well what have you actually seen in the hospitals and how are you going to cope with the things that aren’t going to be ideal, it’s not come out of a textbook um how do you deal with those uncertainties … so how do you think you will actually cope with it in real life. |
| Dr C | … try to give them a bit of the history of natural disease as well because causes of diseases change over time and often what they read in texts is not what happens in the real world … the fact that we had a case of that today was interesting and I could put it in a real context for them … I’ve seen actors being used as patients … [but] usually for examining in postgrad here they’re usually real patients from the rooms or the hospitals. They use actors in the OSCE [for medical students] |
| Dr D | … You know I remember when you’re a student you’re so sick of textbooks and stuff, the facts are interesting, but it’s a lot more interesting when you get a bit of real world info behind it so I tell them about health budgets and that sort of thing … I think it gives them a framework and you’re much more likely to remember stuff if you’ve got this broad framework of how it all fits in, I’m sure they’re much more interested to find out you know directed donations’ and what happens there [ref to bit he did in the tute] than say ‘you are not allowed to do a directed donation’ [voice mimics the textbook info] well I say this is the sort of thing, you know, this is what happens in real life, very awkward. That’s what I try to do, because one of the most annoying things is to be told you can’t do something, but not told why … |
| Dr K | … I think it makes it more real … involve me in the conversation and made it seem real … I’m getting involved more in simulation teaching … I just find it enormously stimulating. You know, it’s a real buzz. I’m trying to create scenarios that mimic the real world and put people in stressful situations … I get a real kick out of it if it works … writing programmes and making it real, that’s quite fun, and again you get a real buzz, you can see that people learn |
| Dr M | … so you’re teaching them two things, you’re teaching them how to examine the patient properly, you’re teaching them how to do it in the exam and they’re two different ways of doing it ‘cause 7 minutes isn’t real life, um you’re not under the clock oh maybe you are I guess but that’s what they want to know teach me the 7 minute exam for the OSCE and I wanna teach them that but I wanna teach them this is how you do things properly and if you go out of order it doesn’t matter … in real life you can go back and listen and go back and have a third listen and the next day and it doesn’t matter … |
| Dr N | … I guess give them a chance to see what a real life … real time clinic is like, what it is like to talk to people to get a history from them and ah get personal material. And what language issues are like you know when you have got an interpreter how you deal with those situations … real time |
| Dr Q | … the first thing they said is you have to do this test and that test. You know, and I said no you ask the patient and in the real world that’s a lot of what we do we try to work out with the patient what’s going on and the patient will tell us things |
### APPENDIX G: Participants’ references to ‘interactive’

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The content was pretty typical, but I’d have to say that they were a much more interactive group than many I get, they were fantastic, they took more of the discussion. I hate didactic teaching some I like, you know if you tell me I have to get up and give a lecture I don’t engage with that very well, you know big group lectures I don’t like, small group teaching interactive I think is much more enjoyable.</td>
</tr>
<tr>
<td>B</td>
<td>well I suppose within that large group it is basically information giving and I try to make that as interactive as possible so that you can have some idea that they’ve got some knowledge and that they’re listening to what you’re saying. so I find it very difficult to be more interactive than that in a big group and then after that I tried to make sure that they asked questions and interact.</td>
</tr>
<tr>
<td>C</td>
<td>I try to get a little more interaction and feedback, but if their response is not immediate, I tend to answer my own question</td>
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<tr>
<td>D</td>
<td>they’re a pretty good group... I try to make it interactive, I try to ask them lots of questions rather than just ... ah ... tell them stuff</td>
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<tr>
<td>E</td>
<td>you know they get spoon fed with things and I want them to be interactive, they’re going to have to make decisions about things, they’re going to have to be active and engaged and be able to tell people things and frame things</td>
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<tr>
<td>F</td>
<td>they were actually a good class, often they’re a bit less interactive and a bit quieter, or often there’ll be one or two who are a bit more interactive and involved and answer questions and there’ll be a few who don’t talk at all, but there was a good spread of them and they all seemed to be pretty bright and keen to learn</td>
</tr>
<tr>
<td>I</td>
<td>look you know I like to be interactive and today’s there wasn’t so much opportunity the other tutes I like to require people to do things and say things and be interactive giving them laser pointers and getting them to point things out being more interactive I like that because you learn better than sitting there [mimes sitting as though bored] so you try to present it in more of a conversational way like I did this morning maybe try to be a bit more interactive with some of them, be a little more self aware of that sort of thing, about meeting them at a level</td>
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<tr>
<td>J</td>
<td>I like to make it interactive and get them to tell me some examples of patients they’ve seen so it’s probably not as interactive as I do for the Intern training sessions there was more interactive, a couple of people said things a few times but the questions came from all over the room</td>
</tr>
<tr>
<td>M</td>
<td>what’s the opposite of didactic ... interactive teaching I’m not sure whether that was didactic or interactive what I just did ... probably bits of both there’s a right balance of didactic and interactive and you’ve got to teach them</td>
</tr>
<tr>
<td>Teacher</td>
<td>Quotations</td>
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<tr>
<td>something and if you ask them a question and there’s blank stares and no one says anything then you’ve got to say something otherwise you’ll all just be sitting there</td>
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<td>we do go around and make it sort of interactive but it’s just so they don’t fall asleep really</td>
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<td>something like [pain] is better off in a small group where you can sort of discuss and that’s a bit more interactive.</td>
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<tr>
<td>it’s very group dependant, some groups will just sit there and almost writing all the time … other groups are very out there and it becomes a very interactive</td>
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<td>other settings where in different circumstances where I try to make it much more interactive and I’ll vary it I’ll try to vary it as much as possible depending on ah what messages you want the audience wants and where they’re coming from and what their interests are. So, for example, medical students they’re primarily thinking ‘I’ve got to get a whole lot of stuff for the exams’ … so you need to go into a whole lot more detail and hard facts to make it more matter of fact. [with other professional groups] I know what I want them to get out of it at the end of the session and they’re going to learn a lot more by being interactive with me and being open and flexible about it rather than just going through the slides</td>
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<tr>
<td>it’s nice to have a way of throwing a …thoughts from the students and have them on the board and be able to discuss it in a more interactive way, rather than just someone says something and it’s just forgotten.</td>
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<tr>
<td>they’re kept awake because it’s quite an interactive session, but when I get to the slides, some people do sort of nod off</td>
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<tr>
<td>I think interaction is important, I think not scribbling away is important, you know just having not thinking about it but just writing things</td>
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<td>sometimes it there is a little bit more interaction so I think that I don’t know what the variables are that make that happen</td>
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</table>
APPENDIX H: Responses to interview question “Do you think of yourself as a teacher?”

Dr C
Oh … um … only an amateur teacher (laughs) … Oh yes yeah but I wouldn’t think I could ever make a career of it or anything like that you know but I enjoy it as a part time, it’s more a hobby than a career, I think.

Dr E
Do I see myself as a teacher? Yes. Not a good one, I don’t consider myself a good one, I think I’m quite bad at it in fact because I’m impatient, and all sorts of things that teachers should not be in my picture of a teacher however yes I do see a critical part of what I do is teaching so that makes me a teacher.

Dr G
I don’t think that’s my … I think that’s part of my role, but I don’t think of myself primarily as a teacher, but because we have junior medical staff I’m teaching them all the time so every time I see them in every clinical setting I have to be teaching someone um so …

Dr L
No. No, not really. But the best, well the circumstances in which I like best to, is if somebody comes with a question to just talk about what one can do about it … a patient or whatever: that’s what I like

Dr M
No. [laughs] I don’t. I don’t really. I’ve never thought of myself as a teacher no. Don’t know whether I should.
Researcher: In every part of your clinical work you’re teaching, it’s interesting isn’t it …

I don’t want to see myself as something else … I see myself as a cardiologist, a director, and a researcher and if I have to take on another hat I’ll go nuts I think and I’ll just have another, I’ll worry about it, I’ll think oh I’m a teacher too, I’m not doing enough or something.

Dr N
Probably not [laughs] no I probably think of myself as a clinician rather than as a teacher but I must have some of the teacher in me because I enjoy it yeh but I wouldn’t say I was a teacher if I were asked first off. I mean I guess I have always worked in the public system so with public hospital appointments you always get your registrars and you have to teach and I mean the whole training programme in [SPECIALTY] is an apprenticeship and it wouldn’t work unless you taught them and allowed them to do things

Dr O
Researcher: You describe doing so much teaching, do you see yourself as a teacher?
Dr O: Not primarily, but ... cause primarily I’m a doctor and a clinician. So ... [smiles]

Researcher: So where does the teacher bit fit in your picture of yourself?

Dr O: Well I see it as one of the roles I do. As a doctor ah I see four areas, I suppose, clinical work, teaching, research and administration. The clinical work would be the primary, but the teaching would be next, and I do some research but I don’t do much administration, I avoid that [laughs].

Dr P
Um, laughs, I don’t know I don’t know I’m ok I guess [laughs]. Um ... yes, a part time teacher [laughs]

Dr Q
Dr Q: Um ... I ... wouldn’t say that that’s my primary role, I’d say that my primary role is as a researcher.
Researcher: Do you think of yourself as a teacher at all? What would that mean?
Dr Q: Ah ... I would prefer to be known as a good researcher. You know with teaching it’s a very if people think you’re a good teacher it’s very ... local ... your reputation. Whereas with a researcher what we try to do is things that are important, that gets into the medical literature etc

Researcher: And teaching doesn’t do that?
Dr Q: No it doesn’t.

Dr R
I have at some stages but that’s probably not now, but it would have been in an earlier stage of my career been a bigger role than it might be now. I also do a bit of mentoring for the postgraduate students doing higher degrees and I help junior colleagues write scientific papers, I chair a writing group where they bring papers that they’re writing and I help them with it. So as time’s gone on I’ve got a different role, and I see myself preparing to hand on the torch. I’m teaching a different group.

Dr S
Oh [laughs], ah, I think that’s a different answer from do I like teaching ‘yes’. Do I think of myself as a teacher, probably not.
Researcher: So when you are in there that tute, you think of yourself as a doctor, but you’re teaching. You don’t actually think ‘I’m a teacher now’.

Dr S: You can’t do that. If I worked as a doctor for 2 days of the week and then wore a dedicated teaching hat for 2 days or whatever, that might be the case. My hospital life is full time and I teach on the ward round with the interns, I teach my registrars, teaching is always there but not with the dedicated teaching hat on, I guess that’s the difference.
Dr T
Yeah, definitely. I mean ... I remember as a student and a lot of my philosophy comes from being a student ... sitting in the lecture theatre at [NAME OF HOSPITAL] there’s a little plaque with a stool on it and the stool had three legs and each was a component, one was the patient, one was teaching and one was research, all three are important, and that’s kind of been my philosophy of medicine ever since.

Dr U
Um [pause] [laughs] I wouldn’t think of myself as a very good teacher, I must say, um I think I’ve thought of it more after doing the teaching as you go course definitely. So without doing that course I wouldn’t have thought of myself as a teacher I think, but after doing that course I think I’m more reflective and I think more about it, yeah.

Dr V
Yeah, yeah I think that’s an important aspect of my role yeah absolutely and as a clinical educator and I would never want to give that up I always want to do more [laughs] and perhaps I think as time goes on I would like to do more of that and maybe less sort of shift work and it’s just yeah I find it very rewarding.

Dr W
Do you think of yourself as a teacher?
[pause] Uh I don’t think so actually. I feel as though I bring my experiences to them in some ways. I guess that’s teaching (upward inflection) I don’t know, I don’t think I’ve actually seen myself as a teacher even though that’s part of some of the job I do I guess.

Researcher: So what’s important to you as a person to be a teacher?

Dr W: [pause] I think it’s just part and parcel of the whole role. Because you do it in your everyday work when you’re ... have medical students, registrars, residents, it’s part of the package, I don’t see it necessarily as separate. Um and you know I think about my um people whom I have looked up to in the past and they make it so much part of their job [names] um you know I find that they’re fantastic, so ....

Dr Y
Not really I think of myself as a doctor really. Although [muses] there are lots of similarities because what we’re doing really is teaching families about their children’s conditions and how to manage them, so it’s kind of similar, so I guess I do think of myself in the wider way as someone who needs to help people understand things they previously haven’t so I think there is a lot of teaching in medicine, particularly in being a physician as compared with being a surgeon or a proceduralist or where you might have to explain things but I guess we’re really trying to impart knowledge to the point where families can self manage their conditions. So I guess it is teaching although we don’t think about it. I wouldn’t describe myself as someone who was interested in teaching, that’s not how I think of my work, I think of myself as a clinician.
### APPENDIX I: Excerpt from student course guide (Block V Guide, p8)

**Learning Objectives for Semester 8-9**

As a result of study and experience within Integrated Clinical Studies students are expected to:

1. **Develop the following knowledge:**
   - general and systemic pathology that can be applied to diagnosis and management of patients and their diseases;
   - clinical features, pathogenesis and natural history of common and important medical and surgical diseases;
   - understanding of the health system and the role of the doctor within the system;
   - understanding of the scientific basis of the investigation and management of patients and their diseases;
   - understanding of the importance of health promotion and disease prevention and knowledge of the techniques that can applied to prevent disease in an individual and within a community.

2. **Develop the following skills:**
   - communication with patients, their carers and families;
   - integration of the medical history and physical examination;
   - synthesis of investigation results with clinical information to arrive at diagnoses;
   - performance of common and emergency practical procedures;
   - critical appraisal of health-related literature.

3. **Develop the following attitudes:**
   - the importance of understanding personal and professional limitations and working within them;
   - the importance of behaving ethically;
   - the importance of maintaining patient confidentiality;
   - the need to understand and respect the diversity of human cultural backgrounds.

**Generic skills**

In this subject, students will be given the appropriate opportunities and educational support to develop to high level skills in:

- clinical problem identification and problem-solving;
- self-directed learning and independent enquiry;
- application of scientific knowledge to practical problems in the workplace;
- collaborative learning and teamwork within a multi-disciplinary team;
- professional ethical understanding and behaviour;
- effective communication with a wide range of professionals and the general community;
- acceptance of diversity of ethnic background, beliefs and lifestyles.
Bibliography


Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Barrett, Jeanette Kaye

Title:
Medical teachers in Australian hospitals: knowledge, pedagogy and identity

Date:
2013

Citation:

Persistent Link:
http://hdl.handle.net/11343/38356

File Description:
Medical teachers in Australian hospitals: knowledge, pedagogy and identity