Teaching Doctors:

The Relationship Between Physicians' Clinical and Educational Practice.

Submitted by Lake, J as a thesis for the degree of Doctor of Education by Research in EdD, January 2013.

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Clinical and Educational Practice.

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ABSTRACT.

This thesis explores the relationship between physicians' clinical and educational roles in the context of UK General Practice (GP) education by investigating the experiences of seven GP trainers through an ethnographic approach employing Activity Theory (AT). The Introduction considers the philosophy and structures of GP education and outlines the author's professional biography to provide context. The Literature Review focusses on the development of medical education as a discrete field and identity formation in medical educators, concluding that: specialist medical educators are a relatively new group; and there is a paucity of knowledge regarding the impact on physicians of occupying dual clinical and educational roles. The thesis then focusses on three Research Questions (RQs), namely:

- 1. What is the impact of GP trainers' clinical practice upon their educational work?
- 2. How does GP trainers' educational practice influence their clinical work?
- 3. What are the social contexts for GP trainers' clinical and educational practice? These questions are addressed within a pragmatic theoretical framework to build up an ethnographic description of the participants' experiences. Data collection is through semi-structured interviews and observation of video-recorded teaching. Ethical issues associated with the study are discussed in detail, in particular the challenges of "insider" research. Four approaches are used for data analysis: global impressions; word cloud analysis; thematic analysis; and analysis shaped by AT.

 In answer to RQs 1 and 2, the study finds that GP trainers experience their dual roles as intimately linked, intuitively transferring their skills between their clinical and

as intimately linked, intuitively transferring their skills between their clinical and educational practice. The study also finds that GP trainers reconstruct their professional identities through teaching. With regard to RQ 3, engaging in teaching can lead to internal conflict for GP trainers and tensions with their colleagues, trainees and regulators. These findings are discussed in relation to medical education research methodology and the impact the study on the researcher is explored. The thesis closes by considering the conflicted position the participants occupy, concluding that teaching offers physicians the opportunity to reconstruct their professional identities so they can approach tensions in their practice with a sense of agency and optimism.

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ABBREVIATIONS.

AD	Associate GP Dean (senior GP education role)
AT	Activity Theory
BEI	British Education Indices
BERA	British Educational Research Association
ВМА	British Medical Association (doctors' trades union)
CAQDAS	Computer Assisted Qualitative Data Analysis Software
COP	Community of Practice
CSA	Clinical Skills Assessment (component of MRCGP examination)
DRC	Day Release Course
EBM	Evidence-Based Medicine
EdD	Doctorate in Education
ERIC	Education Research Information Centre
FY2/F2	Foundation Year 2 Trainee
GMC	General Medical Council
GP	General Practice/Practitioner
GPVTS	General Practice Vocational Training Scheme
IMG	International Medical Graduate (doctor with non-UK primary medical qualification)
IPR	Insider-Practitioner Research
MASL	Mutually-Agreed Statement of Learning
MRCGP	Membership of the Royal College of General Practitioners (licensing examination for GPs)
NHS	National Health Service
PDP	Personal Development Plan
PMETB	Postgraduate Medical Education and Training Board
RCGP	Royal College of General Practitioners
RCT	Randomised Controlled Trail
RSS	Really Simple Syndication
WPBA	Workplace Based Assessment

CHAPTER 1: INTRODUCTION.

I wouldn't be half the doctor I am if I wasn't a teacher.

Study Participant C

1.1 The Subject of this Thesis and Introduction to the Chapter.

In the Oxford English Dictionary (2012) the definition of the word 'doctor (n)' includes the following statements:

- A teacher, instructor; one who gives instruction in some branch of knowledge, or inculcates opinions or principles.
- A person who, in any faculty or branch of learning, has attained to the highest degree conferred by a University.
- A doctor of medicine; in popular current use, applied to any medical practitioner.

I find this entry enlightening for two reasons. Firstly, this multiplicity of definitions of a single word clearly illustrate the complex nature of human practices, an important theme which runs through this thesis. Secondly, because I am a medical doctor, a teacher of doctors as well as a doctoral student, all of these definitions apply directly to me in my professional life. The convergence of these meanings upon one individual also reflects the essence of my research project: to better understand what it means for me to undertake this triad of activities simultaneously in my working life. In short, this thesis is intimately linked to my professional history and development, and I will draw upon my experiences throughout this work.

In this chapter I will give the foreground for my research, principally by considering the variety of professional practices that I am engaged in, so that

the field in which I work and carry out my research can be appreciated. To do this I will provide the reader with a brief history of my own branch of medical practice - General Medical Practice in the United Kingdom (UK). Then, I will describe how General Practitioners (GPs) are trained and what the underlying educational philosophies are in this process. Next, I will examine the nature of educational research in medicine. After this, I will give some relevant details of my own educational and professional history, before moving on to consider how I chose an area to focus for my research. Finally, I will outline the structure of the remainder of this thesis.

1.2 A Brief History of General Practice in the United Kingdom.

GPs can trace their history back to apothecaries of the 15th and 16th centuries, who both dispensed medicines and offered general medical advice (Simon 2009). Over time, apothecaries became regulated by license and gained increasing status as they worked alongside other established medical practitioners: the physicians and surgeons. The 1858 Medical Act sought to end quackery by establishing a register of all medical professionals with the creation of the General Medical Council (GMC) which became the body responsible for regulating medical training.

Modern UK general practice is a unique institution, reflecting its gestation and development through times of great social turbulence in twentieth century Britain. The 1911 National Insurance Act resulted in GPs becoming responsible for the provision of primary health care through state funding, looking after a "panel" or "list" of patients; a system that still remains at the heart of many GPs' philosophy of professionalism to this day. The Beveridge Report of 1942

proposed the creation of a National Health Service (NHS) which was eventually achieved in 1948 after tense and protracted negotiations between doctors and the government (Webster 2002). Crucially, GPs remained independent contractors within the NHS, unlike hospital consultants who were salaried NHS employees. Many GPs retain ownership of their premises and nearly all contract for services with the NHS, rather than being directly employed by the government.

Simon (2009) describes the development of post-war general practice with the 1950 and 1960s witnessing a new GP contract accompanied by important structural changes in primary care, such as the move to working in state owned Health Centres, the emergence of larger group practices and the evolving role of the practice nurse as GPs struggled to cope with patient demand. In the 1970s and 80s information technology (IT) adoption became widespread in primary care, with the computerisation of medical records. The 1990s and 2000s saw further changes to GPs' contracts, reflecting changes in disease prevalence, the rise of consumerism and the prevailing financial climate. There were moves to reorganise care for chronic diseases with a more systematic and target-driven framework; the end of GPs' 24-hour responsibility for patient care, which passed to the local NHS commissioners; increasing pressure for GPs to become involved in managing local healthcare systems; and a growing requirement for medical practices to acknowledge and respond to patients' views about how healthcare was provided.

While many things have changed in GPs professional lives over the last century, three founding principles of NHS primary care have survived: GPs remain

independent contractors within a state-funded system which is free to all at the point of access; they continue to serve as "gatekeepers" for secondary care; and they retain responsibility for a "list" of patients. This consistency has created a medical speciality that is admired throughout the world as an exemplar of what well organised primary care can achieve (Starfield 2003). Indeed, the excellence of UK general practice probably provides a significant part of the explanation for the UK's broadly comparable heath outcomes with most developed nations, despite a lower *per capita* healthcare spend compared with the USA or many EU nations (Starfield 2003).

1.3 General Practice Education - Philosophies and Structures.

In this section I will examine the philosophy, processes and structure of GP education in detail. As stated above, the founding professional values of UK general practice include independence, equity and personal continuity of care, and these attributes remain key to understanding how the philosophy of general practice education developed. However, value systems are complex, dynamic, ill defined and vary between individuals and over time (Peile 2013); an example of changing values in primary care is the conflict between consumer demand and the GP gatekeeper role, which has been steadily eroded by the growing call for ease of access to professionals. There also remains a significant variation between the value systems held by many GPs and their colleagues who work in hospital medicine.

Linden West (2001) illustrates this difference as a form of "peripherality" in his ethnography of inner-city GPs, 'Doctors on the Edge'. West's view is that GPs occupy a professional space that is on the "boundary", in both its personal

aspects such as gender or racial identities; and on the boundaries of epistemology between hard scientific knowledge and the messy, contingent realities of clinical practice in an unpredictable world. This position is uncomfortable, and I recognise it well. I believe that part of the reason this discomfort persists is that what GPs are taught in school, university and in their hospital training about the practice of medicine conflicts with the realities they meet with when they enter the community setting, leading to tensions in their practice which can be difficult resolve constructively.

Offering a radical critique of undergraduate medical education, Bloom (1988, p294) suggests that medical schools' humanistic mission is a 'screen' for their research mission which remains the major aim of universities, going on to assert that medical graduates will inevitably move away from person-centered areas of medicine to more technical specialities when the education which they received is so firmly tethered to the world of biological science. Interestingly, similar tensions occur when medical students are first inculcated into the objective, scientific world of medical schools from their previous school and home environments; sometimes causing distress and even illness in those undergoing this process at the beginning of their careers as doctors (Cribb and Bignold 2006). There is, therefore, a need for GPs to significantly reconstruct their professional identity as they progress through their training, particularly when they enter the community setting, which has been termed the 'emancipation of general practice from hospital medicine' (Walker 1988, p282). However, I wonder if this process is really the emancipation of general practice from the hegemony of the biological sciences which dominate clinical medicine, to which I shall return in chapters 2,8 and 9.

In my view, the unwritten philosophy underpinning GP education is quite distinctive and recognisable as both: 'practice as a tradition of conduct' (Golby and Parrott 1999, p9); and, practice as the development of professional wisdom, or Aristotelian *phronesis*, seeking to achieve 'wise and prudent judgement which takes account of what would be morally appropriate and fitting in a particular situation' (Carr 1995, p71-72). Clearly, an education which achieves these aims will be personally and professionally transformational for those who undertake it successfully (Pring 2000). The educational concepts that this sort of education draws upon include legitimate peripheral participation (Lave and Wenger 1991), where the learner is encouraged to occupy an increasingly central role in practice; and the development of intuition and mastery, where tasks come to be appreciated contextually and holistically, with practitioners increasingly using intuitive skills to make decisions as they become more experienced (Dreyfus and Dreyfus 1980).

To facilitate the development of these skills, GP trainees are encouraged to be reflective about their practice in a tradition which draws upon the work of Schön (1983). Much of the learning in postgraduate GP education goes on in small groups or one-to-one tutorials with a GP trainer, and the format of learning in GP education remains very much in the oral rather than the written tradition.

This approach has not been without its critics, some claiming from within the profession that reflection is unhelpful "navel-gazing", while academics such as Eraut (1994) suggest that Schön's concepts of 'reflection-in' (1983, p49-69) and 'reflection-on action' (1983, p278) are inadequate descriptions of what happens when professionals learn from their practice, with the process being less structured and more complex in reality.

The structures that these processes fit within are detailed in a curriculum statement published by the Royal College of General Practitioners (RCGP 2012), which sets the standards and methods for assessment that are used to ensure GPs are fit to enter independent practice at the end of their training. This format is relatively new, as prior to 2007 there was no written GP curriculum document and qualification had evolved over the preceding 20 years from no explicit assessment at all, to a more formal exit-process (Simon 2009).

The provision of GP training is the responsibility of Deaneries which are NHS bodies who manage the postgraduate education of doctors across the UK, and are responsible for the recruitment and training of GPs. Doctors can only enter GP training if they have an undergraduate degree in medicine and have successfully completed the first two years' basic medical training, or Foundation Years, most of which takes place in the hospital setting. Entry to GP training is through competitive assessment of knowledge and interpersonal skills and there are approximately two applications for each GP training place over the whole UK. GP vocational training schemes (GPVTS) currently last for 3 years, though the government recently accepted the RCGP case to extend this to 4 years, without an agreement on how this will be funded or a timescale for implementation. GP trainees spend 18 months working in 3 or 4 hospital specialties which are considered relevant to primary care, and then 18 months in an approved GP training practice supervised by a GP trainer. The exit assessment includes: a multiple choice examination; a simulated surgery; and passing a Workplace Based Assessment (WPBA) which consists of a variety of assessment tools (such as observed consultations, patient and colleague feedback) and is continuous throughout the 3-year period of GP speciality

training. This training is recorded in an electronic portfolio, the "e-portfolio", which includes a reflective learning log that the trainee is expected to make submissions to regularly, prompting comments from their supervisor. Once all aspects of these assessments have been successfully completed, trainees are awarded Membership of the RCGP (MRCGP) and are licensed for independent practice as GPs in the UK.

Most of the teaching of GP trainees is done by GP trainers who supervise the day-to-day work of trainees in approved GP training practices. In addition, there is a weekly day-release course (DRC) for GP trainees which is provided on a locality basis, with all trainees from a particular geographical area gathering for a day's lectures, seminars and group tutorials. The DRC provides an opportunity for social gathering of GP trainees, the chance to learn from peers and a forum to explore topics which are best approached in small-group formats or which require expert resources to teach effectively. In my Deanery, to become approved as a trainer a GP must have at least 3 years' experience post-MRCGP, successfully undertake a trainer course, and (since 2010) complete a Postgraduate Certificate in Education. In addition, GP trainers must have the written support of their colleagues in their practice and be visited by a Deanery team (usually led by the local Associate GP Dean) where their premises will be inspected, colleagues interviewed and a video of their teaching assessed. As trainers, GPs are paid a grant by the NHS and the Deanery offers regular opportunities for educational development, such as conferences and trainer groups which run several times a year.

The role of the Deanery in GP education has changed significantly since the transfer of funding for GP training from individual practices to Deaneries in 2000 when the responsibility for GP trainee recruitment also moved from practice to Deanery level (Field 2003). While Field, writing from a Deanery perspective, sees this as an opportunity to encourage innovation in GP training, the loss of influence over the training of new GPs has not always had the full support of GP trainers, who may feel disenfranchised by this approach (see Waters and Wall 2009). This tension will be examined in more detail in chapters 8 and 9.

Perhaps a reflection of the growing regulation and loss of GP trainers' personal influence upon GP training is reflected in the deliberations that I made when choosing the term that I wished to employ in this thesis to describe GPs in training. The traditional term is "trainee", reflecting a time when the essence of learning was built upon a strong personal relationship between the GP trainer and their trainee, with a sense of mutual responsibility; though this term is now frowned upon as being rather paternalistic. The currently approved word is "learner", to me an ambiguous and subjective term. For example, though we might call someone a learner, how do we know if or what they have learnt? Biesta (2010) crystallises my concerns about the term "learner" with his critique of what he terms the "learnification" of education, drawing parallels between the learner and the consumer as someone who is given responsibility for their development with little power or influence over the ends of their education. In my experience, this approach to training can become defensive and adversarial, particularly when things go wrong. In the end, I decided to use the word "trainee" throughout this thesis as I believe this best describes the group of individuals who I am referring to.

To close this section, I will offer an assessment of whether the current approach to GP education offers the trainee a "good" education or not. Biesta (2010) considers that education has three possible functions: firstly, it can offer qualification for those who undertake it, something the GPVTS clearly achieves for nearly all its students; secondly, education can socialize those who undertake it into their community of practice (drawing upon the ideas of Lave and Wenger), which I also think GP training does well; finally, education can give those who undertake it increased understanding of their own professional habitus, in their thinking and actions, which Biesta (2010, p21) terms subjectification. It is in this final function which I feel the current GPVTS is at greatest risk of falling short due to increasing regulation, documentation, the drive for accountability and the potential that trainers may lack the pedagogical skills to help trainees develop this level of self-awareness. These issues lead to a real concern whether the GPVTS is able to nurture practitioners who are thoughtful about what they do, or are simply competent (or perhaps compliant) to "deliver" the healthcare agenda that policy dictates. I will return to this anxiety in the concluding chapter of this thesis.

1.4 The Nature of Educational Research in Medicine.

Whitehead et al (2012) consider that the practice of medical education closely resembles the practice of clinical medicine, and an implication of this relationship is that the nature of the knowledge and the worldview underpinning medical education mirror the often unspoken paradigmatic assumptions that underpin clinical medical practice. In this section I will consider the nature of evidence that is given greatest importance in medical education, why this value system has evolved, and the impact of this upon medical education research.

In a review of the medical education literature, Cribb & Bignold (1999) found that the overwhelming majority of articles were couched in a broadly positivistic framework, focusing on the formal curriculum and specific interventions or innovations rather than considering the social or humanistic aspects of medical education. They went on to conclude that:

given the dominance of natural science-based models of research, the business of self-understanding is more likely to be classified as 'common sense', or even self-indulgence, than to be incorporated into the worthy category of 'research'. Indeed, as things are at present, where self-understanding is the goal - such as when medical schools seek to understand their role and effectiveness in educating medical students - it is likely to be mediated by a positivistic framework into a species of experiment and measurement in which reflexivity plays little or no part. (Cribb and Bignold 1999, p204-5)

In their content analysis of undergraduate medical education literature published over a twenty year period (containing 3689 articles) Dimitroff & Davis (1996, p60) also found that 'the research reported was overwhelmingly conducted in a naturalistic environment; was evaluative or comparative in design; used observation, testing, or questionnaires to collect data; and included inferential statistical analysis'. Approaching this topic from a more personal perspective, Kneebone describes his journey of developing new worldviews in medical educational research through coming to understand different research paradigms, writing that 'medical education is dominated by a positivistic paradigm which assumes the existence of a single objective external reality. This can seduce us into believing that positivism is not a paradigm at all,

but simply how the universe really is' (2002, p514). Outside the field of medicine, sociologists have also critiqued medical education research as being rooted in medical science traditions of positivism rather than social science approaches, claiming that this has limited the progress and impact of research in this field (Brosnan 2011). I shall develop these arguments further in chapter 3.

It is hardly surprising that medical educational research reflects medical research, but perhaps the key question at this point is why has the powerful association of clinical medicine and positivistic thinking developed? This is particularly interesting at a time when other "scientific" disciplines have moved beyond positivism to understanding the physical world as a complex, nuanced place beyond simple mathematical description. I believe one possible answer to this question lies in the "Evidence-based medicine" (EBM) movement which developed increasing influence in the early 1990s and has become the dominant knowledge paradigm in medicine over following 20 years. This approach to knowledge is strongly based in numerical comparison, a hierarchal approach to knowledge, and places the randomised controlled trial (RTC) at the pinnacle research of excellence with its stated aim of eliminating bias in research processes.

I suggest that several factors lie behind the current hegemonic position of the EBM movement. Firstly, it is impossible to argue *against* basing practice upon evidence, and few doctors know of any other evidence base than a positivistic one as a result of their natural science education and training. This training is rooted in laboratory-based physiology and biochemistry which are taught from the beginning of undergraduate training, resulting in an epistemic culture rooted

in the natural (biological) sciences (Knorr Cetina, 1999). Secondly, the information revolution has made statistical data immediately availability to clinicians, and the overwhelming amount of research and guidance that is produced means that doctors have little time to read in depth; doctors are more likely to engage with academic papers containing rapid numerical comparisons and simple headlines than lengthy narrative accounts. Thirdly, Peile (2004) argues that EBM has become synthesised into the political frameworks which regulate and govern medical practice - such as the commissioning of health services which must be "evidence-based"; and legal definitions of clinical negligence with the yardstick of acceptable practice moving from being based upon collegiate opinion to being judged against "best evidence". These changes are insidious but profound, and have generated relatively little opposition. Peile (2004, p115) argues that 'unlike teachers, the medical profession has accepted meekly the supposed benefits of an evidence-based culture', going on to state that the most powerful threat to EBM lies in its 'failure to answer many of the questions which are important to individual patients.'

At this particular moment there is perhaps a growing sense of disquiet with the place that clinical medicine has reached after twenty years of EBM. This unease is increasingly acknowledged in medical educational research, with calls for increasing diversity in the educational research tradition. Monrouxe and Rees (2009, p43) suggest that 'medical education research is not the 'poor relation' of medical research because it is not a relation at all. Instead, it belongs to a different family altogether'. Bunniss and Kelly (2010) challenge medical education researchers to consider different knowledge paradigms in their search for knowledge about their discipline, arguing that all research paradigms

have different strengths and weaknesses. Some have called for a closer alignment of medical educational research with new methodological approaches which embrace understanding rather than proof, such as complexity theory (see Sweeney 2006, Regehr 2010). However, others continue to argue for the validity of meta-theories in education, Norman (2011) writing that 'we can continue to accrue evidence (in the broadest sense) to help us elaborate the laws of learning and...contribute at a practical level to large improvements in the effectiveness and efficiency of teaching' (p558, my emphasis).

While similarities remain between clinical medicine and medical education in their approach to enquiry, the important issue of what constitutes valid evidence is beginning to generate increasingly divergent responses from the two disciplines. Albert (2004) approaches this debate through Bordieu's thinking, arguing that the focus is moving away from the particular content of the argument toward the larger struggle between two groups of researchers, a pattern common to other scientific fields, giving the opportunity for medical education to learn from the experience of others. That this debate has begun at all is due to the increasing maturity of medical education as a field in its own right, something that I will explore further in chapter 2. The discussions about methodology that are currently taking place in medical education research are dynamic and passionate; in contrast to the relative silence about methodology in the clinical medicine literature. While epistemology appears alive and well in medical education, its status in clinical medicine appears moribund. I will locate the methodology of my thesis in detail in chapter 3, but I wish to make it clear at this point that my research for this thesis adopts a nonpositivistic worldview. A consequence of this decision is that it is important for

me to explain my background and professional journey in more detail, a task I shall undertake in the next section of this chapter.

1.5 My Educational and Professional Biography.

My education could be described as "traditional". I attended a state boys' grammar school and, as I wished to become a doctor, I was encouraged to take "A-levels" in the sciences as only these qualifications would allow me to enter a degree in medicine. Looking back now, I wonder why this was: how could the natural sciences be viewed as the only post-16 qualifications that would equip a student with the academic credentials to become a doctor? I chose to attend a relatively newly established medical school - Southampton - which had gained a reputation for curriculum innovation. I hoped this would be a more stimulating prospect than the notoriously dry, theory-bound first two years of medical school which were traditionally spent learning anatomy, biochemistry and physiology before students were allowed to learn the practice of medicine with patients.

The publication of 'Tomorrow's Doctors' (1993) by the GMC during my medical school years cemented the growing view that the medical curriculum was overfilled with information that was often irrelevant for future doctors, much of it squeezed into the first two years of teaching. As a result of this report, medical schools were encouraged to innovate their curricula and integrate clinical practice into the early years of training. In retrospect, despite my choice of institution, these changes were peripheral to my educational experiences as a medical student. Essentially, I learnt to be a doctor in the way that medical students have learnt to be doctors since the mid-1800s, when the UK system of medical training and education was formalised and regulated. As I described in

the previous section, this approach to learning was set firmly within the positivistic world-view that knowledge was "out-there", attainable by experimentation, and should shape and control practice; and the world was understandable and amenable to reason. If you did not know the answer it could be found by looking in a book (the internet did not exist in any significant way for most students at that time), or by asking someone who knew more than you did. The essence of the doctor-patient interaction was that of detached observation by the doctor, leading to the finding of a solution through the application of theoretical knowledge to clinical practice. Bedside manner was considered important, but only as a means to achieve the ends which the doctor had decided already decided upon based on their moral, sapiential and cultural authority (Hilton 2008).

That this epistemic approach at my training institution was only one of a number of possible ways of seeing the world did not even begin to occur to me until ten years after I graduated, when I became interested in teaching and started a Masters degree in medical education. I began a distance learning course but found this uninspiring; then I moved to a course where I learnt alongside school teachers and the critical debate that ensued was enormously stimulating for me. Disconcertingly, the discussions about methodology and my reactions to realising the world was not the way I had been led to believe it was closely followed the disbelief, anger, frustration and then resolution sequence of a classical grieving process. This was despite my choice of General Practice as a specialty, which had already given me the first inklings that I was working in a world which was much more complicated than my training had prepared me for. For example, the constant stream of complex challenges that I faced as a

clinician made me develop a healthy sense of practicality that is a common thread amongst clinicians who deal in "undifferentiated" presentations; in other words professionals who work with people rather than diagnoses.

Despite some colleagues' incredulity, I find being a GP enjoyable (as I discuss in chapter 2 general practice falls towards the bottom of the medical status ladder) and I appreciate the uncertainty and possibilities for creativity that this gives my clinical work. I also value the professional independence and humanity of being a GP but, having been influenced by the writing of Illich (1976) among others, remain increasingly concerned about the growing medicalisation of citizens and the growth of illness (in particular health-related anxiety) caused by medicine itself. However, the need to gain promotion that drives many competitive professionals, particularly doctors, was still strongly within me and I began to progress up the ladder of medical education. I reached a senior educational management position (Associate GP Dean for South East Hampshire and the Isle of Wight), where my role was to oversee the education of all GP trainees in this geographical area. This included supporting GP trainers and carrying out re-approval visits. However, I found this role became unsatisfying as I had learned to enjoy asking questions about "why?" rather than "how?" and I left this position after four years. Instead, I opted to do more hands-on teaching as a GP trainer and, as an Associate Lecturer at a University, to pursue ambitions of becoming a medical education academic. Undertaking the EdD seemed a natural part of this process and followed on seamlessly from my Masters degree, as I still had many unanswered questions I needed to pursue.

Despite my initially mixed feelings about seeing the world in a new way, as I continued with my studies I began to realise that my journey has left me in a strong position as an educational researcher, and as a clinician, for several reasons. Firstly, my travels took me through different research paradigms, living in and using them, getting to know their strengths and weaknesses. This has made me aware of their backgrounds and sceptical of their claims - I have adopted a critical attitude. Secondly, my work as a GP, as well as an educator, exposes me to the complexities of human transactions in huge volumes every day, and I often feel as if my job is a piece of continuous fieldwork. The parallels between clinical, educational and academic work are what fascinate me and underpin much of this thesis. However, in other respects, my journey though the biological sciences and then into other research approaches has left me somewhat stranded. I'm an outsider: in the world of medical education the questions are still positivistic, and my views are atypical and on the fringes of debate; but in social research terms, as a doctor, I'm inevitably seen as a traditionalist. Above all, my journey has taught me to think for myself; to be critical and to challenge the accepted views I am presented with and the positions I am first inclined to jump to.

As I progressed through the EdD programme the theme that kept recurring to me was the intimate link between my clinical, educational and research practices. When I came to write my thesis proposal, I considered four research topics, but my main interest was always the nature of the relationship between physicians' clinical and educational practice. Thus my research focus closely resembles my professional journey and my field of research is the one in which I am currently active in as a GP trainer. I cannot separate myself from my thesis.

1.6 Structure of the Thesis.

This thesis is presented in nine chapters. Chapter 2 will provide a review of the literature about doctors who teach, locating the reader in my professional field in greater detail, before stating my research questions. Chapter 3 deals with methodological questions about my thesis, returning to some of the issues I have already raised in section 1.4. Chapter 4 considers my methods for data collection and analysis, and in chapter 5 I deal with some of the key ethical challenges I came across in my research. In chapters 6 and 7 I present the findings of my study and chapter 8 provides a discussion of these findings, placed within the contexts which I have outlined in this introduction. Finally, in chapter 9 I give the conclusions of my thesis.

1.7 Summary of the Chapter

The purpose of this chapter has been to introduce the reader to my field of practice, to me as an individual and to consider my professional biography. I have also dealt with questions about appropriate methodologies for medical educational research. In particular, I have described in detail the social system within which the activities of a GP trainer occur including its tensions, history, values, techniques, and objectives. I shall draw upon this description throughout this thesis, particularly in chapters 7,8 and 9.

CHAPTER 2: LITERATURE REVIEW.

To study the phenomenon of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all.

William Osler (1849-1919)

2.1 Introduction to the Chapter.

The aim of the chapter is to provide a clear picture of the landscape in which I worked as a researcher during my research. To achieve this aim, I will begin by describing the procedures I undertook when I carried out my literature search, and then move on to a critical commentary of the relevant literature. In addition, at the conclusion of this chapter, I will state my research aim and research questions that form the focus of the remainder of this thesis.

To briefly digress at this point, when I discussed my plans for this thesis with my supervisors they suggested that I would already be familiar most of the key literature in my field. While I acknowledged that they were probably correct, I was not actually aware of a great deal of literature that was relevant to my research question, and I began to consider why this was the case. After some reflection I came to the conclusion that the answer lies in the history of my research field. The modern General Practitioner (GP), working for the National Health Service (NHS) in a group practice is a post-World War II phenomenon, and the emergence of doctors who specialise in education is an even newer entity, probably existing as a genuinely differentiated specialty for less than thirty years. Hence the time to ask research questions about the professional roles of medical educators has only recently arrived.

2.2 Literature Search Strategy.

In this section I will describe the process of reviewing the literature in detail, with the intention of setting out the methodology of my literature search in a clear and transparent way. The literature search strategy initially focused on the key journals in medical education, namely Medical Education, Medical Teacher, and Education for Primary Care (formerly Education for General Practice). For each of these three key journals, I hand-searched through every issue from their inception until the time that the thesis was submitted. To ensure that I did not miss any recent literature as I was writing my thesis, I subscribed to email content updates from each of these journals or Really Simple Syndication (RSS) feeds, which kept me updated with articles as they were published either on paper or online. In addition, for all copies of these journals available online, I carried out internet searches using the following terms to ensure I had not missed any articles during my hand-search:

- general AND practice AND teach
- general AND practice AND train
- primary AND care AND teach
- primary AND care AND train
- teach AND teacher AND medical
- train AND teacher AND medical

I then reused these search terms to carry out searches in broader "general" medical journals (Journal of the Royal Society of Medicine, the British Medical Journal, Advances in Health Sciences Education, the British Journal of General Practice and Academic Medicine) all of which publish articles relevant to medical education and training from time to time. By including these journals, I

felt I would be likely to have captured all the key published papers in the medical literature.

My strategy then moved in several different directions. Firstly, I began to "snowball" search from articles I had found in my structured search, following up key references from papers I had identified. In addition, I found at least one useful new reference by putting my search terms into Google Scholar. I also continued my structured review by searching the British Education Indices (BEI) and Education Research Information Centre (ERIC), broadening my search terms by including the following terms:

- teaching AND mentoring
- teaching AND train
- nursing AND mentoring
- nursing AND train

Finally, I searched two databases of theses, EThOS and Index to Theses of Great Britain and Ireland, using the terms:

- medical education
- GP trainer
- GP education
- nurse mentor
- nurse preceptor
- · teacher mentor

My key consideration in the process of sifting literature was that to be included in the review, the source had to directly relate to either postgraduate or

undergraduate training in primary care. Through this process I identified a total of forty-seven pieces of literature that were relevant to my study. Of note, only around half of these papers presented empirical evidence and of these only 3 used any observational methods, the preferred data collection methods being interviews, focus-groups and questionnaires, a finding broadly comparable to a recent large-scale literature review of GP supervision in postgraduate education (Wearne at al 2012).

In the following literature review I will structure my approach by focusing down upon my research topic, which is the nature of the relationship between physicians' clinical and educational practice. To do this, I will begin by considering the emergence of medical educators; subsequently considering identity formation in medical teachers; then more specifically the professional development of GP trainers; and finally I will examine the literature about the nature of the relationship between physicians' clinical and educational practice. My aim is that by the end of this chapter, I will have set out the scene for my research questions.

2.3 The Emergence of the Professional Medical Educator.

The discourse about the developing specialisation of doctors as teachers first emerges in the literature in the late 1960s and early 1970s. An anonymous commentary from 1975 (Anon 1975) asserts that good teachers should be good doctors first, and that the development of medical teachers should be through student feedback and the gathering of a diverse group of doctors to teach students; the author considered that sending doctors on courses to teach them to teach would lead to a 'stereotyped pattern of teaching' (p2) and risk loss of

diversity amongst the medical education community. However, by 1987 a subsequent paper in the same journal (Anon 1987) was calling for financial rewards for medical educators and assessment of their teaching practice to improve poor standards of education. In a conference report, Parry (1987) supported this view and considered that of the three roles of the doctor as a clinician, researcher and teacher, the educational role was greatly undervalued with poor development of teaching skills. Parry (1987) also asserted that the links between good clinical and educational practice were already established in general practice, but it is unclear what evidence this conclusion had been based upon. The growing demand to train doctors how to teach, and for them to be held accountable for their actions as educators, is an important theme in medical education since these early papers.

More empirical research into the role of the doctor as a teacher began to emerge in the late 1990s. Spencer-Jones' (1997) interview investigation of five UK GP trainers' motivations to teach used a similar methodology to my own thesis; finding that GPs became trainers for a complex variety of trainer-centered, trainee-centered, practice-centered, and personal professional development reasons. Boendermaker et al (2000) used a Delphi study to elucidate the core characteristics of "competent" GP trainers which were described as the ability to give feedback, being good communicators and respecting their trainees. Though this study was carried out in Holland, Dutch general practice bears significant resemblances to the UK model and the findings are likely to be relevant to the UK setting, though the statements about what makes a good trainer are relatively uncontroversial perhaps due to the consensus-seeking nature of the Delphi methodology. Kilminster and Jolly's

(2000) systematic literature review of clinical supervision in healthcare also suggested that giving effective feedback and the trainee-trainer relationship were important educational skills for medical educators to develop. Kilminster and Jolly (2000 p827) also went on to suggest that there was 'little empirical or theoretical basis' for clinical supervision, asking for more structured and systematic research into the process; a call that has been echoed by others (Bligh 2005), though the proposed methodology of any such studies are not clear. Weaner et al's (2012) systematic literature review of primary care educational supervision found that the relationship between the trainer and trainee was vital and formed an important part of trainee's inculcation into their community of practice.

In contrast with these large scale reviews, Coles (2000) called for medical educators to be able to understand and reconstruct their *own* professional educational practice to enhance their development as teachers. Support for this view came from studies such as McLeod et al (2005) who compared the knowledge of pedagogic principles between experienced clinical teachers who had no formal training in education and medical teachers who had undertaken faculty development programs. They found that the experienced but "untrained" teachers (i.e those who had not gone on formal teaching courses) possessed a large amount of "tacit" knowledge about adult education which the authors suggested was built up by reflection upon their teaching practice, returning us to the assertion of the anonymous author who I cited first in this section:

Apprenticeship must continue to be the basis for the acquisition of clinical skills and attitudes. In the consulting room or at the bedside it is more important for the student to learn from a good doctor than from a

good teacher...If we make good teachers out of bad doctors we will do irreparable harm (Anon, 1975)

A note of caution must be exercised here. The idea of apprenticeship is a central part of medical training and the view that it is beneficial has become somewhat idealised in the medical world. Zeichner (1980) challenges educators to engage more critically with the idea of apprenticeship in his discussion of the myths about field-based teacher education, contrasting views that apprenticeship is either vital or simply replicative, asserting that it is the *quality* of field-based learning that demands further examination though ethnographic study. It is reasonable to suggest that making good teachers out of bad doctors (Anon 1975) is as dangerous as assuming that good doctors will be good teachers.

2.4 Identity Formation in Medical Educators.

Alongside the discussion about the structures, processes and standards that medical educators should adopt, there has been a growing literature about the nature of the professional identity of medical teachers. Roth et al (2001, p428-429) suggested that medical teachers could be viewed at three different levels of expertise ranging from 'teacher' to 'academic' and finally 'investigators' who would research education, emphasising the importance of the links between the teacher and the organisation in which they worked. In their study of identity formation in medical teachers, Stone et al (2002, p180) interviewed ten 'excellent' medical preceptors finding, much as Spencer-Jones (1997) had, that identity formation involved internal and external factors. In Stone et al's paper, there was a clear recognition of the inherent role-duality of being a doctor and

teacher, pointing to the weakness of the communities of practice for medical educators to learn from; contrasting this with the strength of the clinical communities that most doctors practice in. In my view, these communities of practice have developed unevenly throughout the field of medical education; for example, postgraduate general practice education enjoys relatively well developed communities of practice (through local trainer groups and regular conferences), whereas the situation in many hospital specialties or even in undergraduate GP education is often less strong. Starr et al (2003) also acknowledge the role-duality of medical educators as well as the internal satisfaction of teaching in their focus group study of community preceptors; and MacDougall and Drummond (2005) described negative and positive rolemodeling experiences of medical teachers from their own learning, citing the importance of these experiences and their influence upon identity formation. Finally, both Higgs and McAllister (2007) and Griffin (2008) cite the vital role of critical reflection upon educational experiences on identity formation in medical teachers, and gave suggestions how this can be fostered through reflective writing and mentorship.

I identified one further article in the field of identity formation of medical educators which is worthy of extended consideration. Walker (1988) carried out an ethnographic study of GPs undertaking their GP trainer course, collecting data through both interviews and non-participant observation. This study is unusual for several reasons. Firstly, it was carried out by a sociologist and reported in a sociological journal, meaning it was unlikely to be read by many medical educators. Secondly, it is a very early paper on medical educators' identity development, perhaps illustrating a tendency of medical educational

research to lag behind sociological research into medical settings. Thirdly, Walker uses observational methods which are relatively rarely employed in medical educational research. Finally, Walker specifically deals with the identity of GP trainers and suggests that the GP trainer course provides a space in which GPs begin to reconstruct their professional identity and move away from the prevailing medical school/hospital-centric view of medical practice (characteristically disease-centered and concerned with finding the "answer" to a clinical problem) to a more humanistic view of practice as being personcentered, situational, uncertain and complex. Walker considers the nature of the relationship between GPs and hospital consultants as being traditionally viewed and taught as a client-professional one, in which consultants have something GPs want (i.e the "answer" to the problem) thus locating the balance of power in hospitals. This power view was challenged through the course with a subsequent reconstruction of GP trainers' professional identity, providing a glimpse of more profound ways in which GP's educational development might influence their identity development and perhaps resolve some of the tensions in their practice that were identified in section 1.3.

Walker's findings link to Sfard and Prusak's (2005) theory of identity formation, which describes identity as a malleable construct which can be shaped by the narratives that we tell about ourselves and others tell about us. In this model, individuals have an *actual* identity, describing their current position, and a *designated* identity, indicating where or who they would like to be. Stories have the potential to move individuals through identity changes if they are powerful and significant enough, and Walker's (1988) work implies that these narratives can be rehearsed, reexamined and revised in educational settings. Expanding

upon this individualistic view of identity formation, Ajjawi and Bearman (2012, p1146) call for an understanding of these narratives to occur in context with their sociomaterial (or cultural) setting using approaches informed by activity theory (AT) to address research questions such as how physicians 'manage the potentially competing identity of doctor and teacher'. I return to this challenge in the final section of this chapter when I set out my research questions and again in chapters 7,8 and 9 as describes an important strand in this thesis.

2.5 The Development of GP Training and GP Trainers.

To achieve a better understanding of the contemporary role of GP trainers it is important to adequately contextualise their development. Any recent history of medical training in the UK should acknowledge the impact of the Todd Report, or Royal Commission on Medical Education 1965-1968, which recommended steps to make undergraduate medical education less didactic, led to the foundation of new medical schools, and advocated reform of GP training into 3-year Vocational Training Schemes (VTS) (Field 2003, Simon 2009). Until this point, doctors had been allowed to practise independently as GPs after completing their medical degree, followed by one year in hospital posts and one supervised year in general practice with no formal exit assessment.

In a response to the Todd report, Byrne (1968) began to sketch out the practicalities of establishing GPVTS, in particular noting the importance of developing a skilled group of GP trainers who had protected time and were rewarded with funding for teaching. Some, such as Ellis (1969), considered that these schemes should be based in the newly developed health centres, where the most "modern" practice was meant to occur. Pilot VTS began to emerge

around the UK, and were reported on by Swift (1968) and Byrne and Freeman (1970). Development of GPVTS continued with the adoption of novel pedagogical tools, such as video recordings of consultations (Morrison and Cameron-Jones, 1972), and in 1976 the UK Parliament approved legislation which required the completion of a GPVTS before a doctor could become a GP principal, though this legislation was not implemented until 1982 and mandatory assessment before entering independent practice as a GP only came into law in 1996 (Field 2003).

The evolving structures and processes of GP training are described in the literature with the establishment of basic standards for training practices such as the quality of the patient records, premises, supervision arrangements and trainer development (Periera Gray 1984). In 2000, the funding for GP training was moved from individual practice contracts to the regional NHS education structures, the Postgraduate Deaneries (Field 2003). In successive NHS reorganisations, the Deaneries moved from their original alignment with universities, to become part of Strategic Health Authorities; perhaps signifying a change in how Deaneries were viewed by politicians, as having more of a workforce function than being academic bodies. In addition, large-scale changes to GP assessment and accreditation processes were implemented in 2007, with the Royal College of General Practitioners (RCGP) becoming the body responsible for the assessment and certification of GPs, and the Postgraduate Medical Education and Training Board (PMETB) (subsequently subsumed into the General Medical Council (GMC)) becoming responsible for overseeing standards in postgraduate medical education (Simon 2009).

Taking stock of the effects of these developments upon GP trainers, Freeman et al's (2002) review of GP trainer courses across the UK revealed that of the 20 courses, 9 were linked to a Masters-level qualification in medical education and a further 6 were considering developing this type of academic credentialing. This suggests that GP training was becoming professionalised, perhaps because of the rapidly changing external contexts for medical education which I outlined in the paragraph above. A 2005 survey found GP trainers complained of increasing workload, more challenging trainees, and growing regulation as significant disincentives to train (BMA 2005). Nonetheless, other means of assessing training were being developed alongside Masters qualification, such as Mutually-Agreed Statements of Learning (MASL) from GP trainer courses (Hall et al 2005) and the argument was being made that through gaining teaching qualifications accredited by universities, medical educators could command financial and professional rewards for teaching, and trainers' educational decision making would be more robust (Eitel et al 2000, Rashid and Siriwardena 2005).

In an investigation of GP trainers' views of their own developmental needs, Waters and Wall (2007) carried out a questionnaire of all GP trainers in one UK Deanery which found that professionalisation of training was more strongly supported by trainers who also held additional educational roles (such as course organiser or university appointments). Many trainers preferred formative development through reading or watching videos of themselves teaching, to gaining a formal educational qualifications. In addition, female GPs and those in urban areas found it more difficult to get time for professional development. Waters and Wall (2008) also commented that many trainers found the Deanery

increasingly distant and saw it as primarily an administrative body. Jones (2011) used a combined focus-group and Delphi methodology to investigate GP trainers' learning needs, suggesting that an improved understanding of exit assessments for GP training, and learning more about critical thinking, leadership and change management were what GP trainers wanted from their own professional development; rather than developing their skills in teaching or learning *per se*.

Overall, the picture that emerges from this section of the literature review is of a divergence between what regulatory bodies stipulate GP trainers should do, with a drive to professionalise GP trainers; and what GP trainers themselves want for their own professional educational development in their role as teachers.

2.6 The Relationship between Medical Educators' Clinical and Teaching Roles.

The final part of my literature review focuses upon my research aim which is to investigate the relationship between GP trainers' clinical and educational practice. In this section I will consider the literature relevant to this question from three perspectives: the social contexts in which practice occurs; the effect of clinical roles upon educational practice; and the effects of educational roles on clinical practice.

In social terms, both Parry (1997) and Stone (2002) describe how medical education occurs in a community of practice (COP), a term first used by Lave and Wenger (1991) where participants are initially peripheral in organisations and then become more fully involved in the community as they gain skills,

knowledge and experience. In the clinical setting, learning occurs from peers and involves critical reconstruction of doctors' own practice (Parboosingh 2002), such processes being described in GP training by Cornford and Corrington's (2005) study where undertaking consultations with patients was a key mechanism for trainees to become part of the COP. Both Waters and Wall (2007) and King and Jenkins (2009) emphasise the importance of the GP trainers' colleagues (in particular their professional GP partners) in the COP and the potential for colleagues to challenge, block or even derail the training process. These findings lend some support to Stone et al's (2002) assertion that physicians' educational COPs can be under-developed when compared with their clinical COPs, though as stated in section 2.4 these educational COPs vary greatly in their format across different medical specialities.

Considering the impact of clinical work on educational practice, Benjamin and Hossam (1993), Pitts et al (2001) and ten Cate (2006) all suggest that physicians use their clinical problem solving skills when dealing with educational problems, though none of these papers was based upon any empirical evidence. There are several examples of educational development drawing on established clinical structures, such as: Pitts (1996) use of tutorial video analysis to develop a model of teaching which was influenced by general practice consultation models; Pitts and Curtis (2008) description of MASLs on GP trainer courses which were used as educational professional development plans (PDP), akin to clinical PDPs; and Nicol et al (2008) transferring professional development techniques from the clinical setting to the educational setting. Finally some have suggested that physicians *inherently* consider teaching as part of their professional identity, MacDougall and Drummond

(2005) writing that medical educators draw on their experiences with patients to help them develop as teachers, and Starr et al (2003, p824-25) assert:

many preceptors have a strong belief that being a physician means being a teacher...physicians may recognize that the skills they use teaching patients are similar to the skills required to teach students. This would help explain why preceptors are willing to perform as teachers with little or no formal teacher training

However, the risk of doctors uncritically transferring teaching skills from clinical to educational practice is that they fall prey to the assumption that the two practices are identical.

Moving on to how educational work might influence clinical practice, Walker (1988) found that prospective GP trainers hoped that their consultation skills would be enhanced by becoming teachers; however, trainers described tensions between adopting a more patient-centered consultation style, and concerns about running late during surgeries. In their review of GPs as teachers, Howe and Carter (2003) suggest that becoming teachers improves GPs consultation skills, knowledge base and critical enquiry skills, but offer no empirical evidence to support these views. Waters and Wall's (2009, p251) study, found that GP trainers thought they were 'better with patients as a result of being an educator', but did not specify how this might be manifest.

Walters et al (2009) analysed video consultations of GPs when they were supervising medical students, and found that having students present in consultations increased the amount of time spent on history taking, and reduced

the context of the differences between undergraduate and postgraduate teaching as supervision in the postgraduate setting will usually be much less intrusive on the teachers' clinical practice. Wearne et al (2012, p1168-69) reviewed 290 abstracts about GP educational supervision published between 1991 and 2011 and though they state that the educational and clinical roles of GP supervisors are 'intertwined', they continued that they could find 'no empirical research on the effect of supervision on clinical encounters'. Finally, three recent studies suggest that undertaking educational roles such as medical student teaching (Grant et al 2010), mentoring (Stenfors-Hayes et al 2010) and work-based teaching (van der Wiel et al 2010) gave clinicians opportunities to deliberate in more detail about their own practice, but did not go on examine the effects of these deliberations in detail. While the opportunity to think carefully about what happens in practice would seem to be an inherently useful experience, Atkinson and Claxton (2003) warn that such deliberation has the potential impair the intuition that experienced professionals rely upon in their day-to-day work.

the time for examination and administrative tasks. These findings must be put in

2.7 Conclusions of the Chapter and Research Questions.

This review of the literature has demonstrated that the emergence of specialised medical educators is a relatively new phenomenon, thus the body of research into doctors who teach is comparatively sparse. However, the literature is growing quickly with 16 of the 47 papers I cite in this review published in the last five years, though empirical research is not always the norm and the use of observational methods rare.

Teaching appears to involve a significant reconstruction of physicians' professional identity and the impact of this role-duality has not been investigated in detail or with empirical approaches; in particular, the social contexts of the shift between clinical and educational activities have not been considered in depth (Ajjawi and Bearman 2012). GP trainers constitute a relatively well established group of medical educators and thus a potentially rich source of experiences with which to investigate these issues, particularly if this research collects empirical data. The aim of my EdD thesis is to explore the relationship between GP trainers' clinical and educational practice, which I plan to do by asking three research questions, namely:

- 1. What is the impact of GP trainers' clinical practice upon their educational work?
- 2. How does GP trainers' educational practice influence their clinical work?
- 3. What are the social contexts for GP trainers' clinical and educational practice?

Having stated my research questions, I shall now move on to explain the theoretical and practical approaches I undertook during this thesis in the following two chapters.

CHAPTER 3: THEORETICAL FRAMEWORK & METHODOLOGY.

Agnosticism...is an act of intellectual honesty.

Dewey J (1929, p154) 'The Quest for Certainty'

3.1 Introduction to the Chapter.

In this chapter I will consider the methodology of my thesis in detail. As something of a caveat at the start of this section, it is worth noting that the term "methodology" is itself contested and has different meanings to different people. For example, Wellington (2000 p22) defines methodology as 'the activity...of choosing, reflecting upon, evaluating and justifying the methods you use'. To me, this definition seems to describe a predominantly technical exercise of weighing up different the practical advantages and disadvantages of various data-collection or analysis methods and then selecting the approach most likely to be effective in the given circumstances. However, an alternative view of methodology suggests that the researcher needs to consider the nature of knowledge, and reality, as part of the research process; thus moving the topic of methodological debate into philosophical territory. The majority of this chapter will be spent considering the latter of these views of methodology, offering the reader a broader and more profound discussion to build a credible philosophical basis for my thesis.

The first section of the chapter will deal with issues pertaining to "ways of knowing" the world in which we live, giving a critical view of different ways of understanding human existence and the forms of knowledge that permeate it.

After this, I will focus on a philosophical school of thinking that has significantly influenced my thinking during this research journey, that of pragmatism. I will examine what pragmatism is, as well as how it might be relevant to professional

educators and educational researchers. Finally, I will explain how the theoretical framework I have developed in this chapter informs my views about research methodology and in turn influences my decisions about the selection of data collection and analysis methods, which I will discuss in detail in chapter 4.

3.2 Ways of Knowing - The Nature of Reality.

The world we live in can be understood in many different ways and during my doctoral studies I have been encouraged to examine my views about the nature of knowledge (epistemology) and the nature of reality (ontology). At the start of their textbook on educational research, Cohen, Manion and Morrison (2007, p5) write 'ontological assumptions give rise to epistemological assumptions; these, in turn, give rise to methodological considerations; and these, in turn, give rise to issues of instrumentation and data collection'. Put in these terms it seems straightforward: I simply need to choose our particular view of reality, select an appropriate epistemological approach, then proceed to a logical methodological decision, and the answer to our research question will appear. The novice researcher is further assisted by writers such as Crotty (1998), who systematically describe the various approaches to ontology and epistemology in more detail to help those carrying out educational enquiry to settle upon a philosophical position in relation to these types of questions.

Crotty (1998) considers there to be three views of knowledge, or epistemological positions. Firstly, objectivism suggests the world can be viewed externally and understood through observation and experiment. Key to this view is the division between theory (mind) and practice (body), suggesting that theory can inform practice and that practice can be understood through external

observation. Implicit in this approach, and an important assumption made when occupying an objectivist position, is that theory occupies a superior intellectual plane to practice with theoretical issues enjoying philosophical primacy over practical ones. This separation of theory and practice can trace its origins back to Greek philosophy, although both Biesta and Burbules (2003) and Carr (1995) argue that the modern view of this ancient epistemology has metamorphosed Greek ideas into something radically different to Aristotelian conceptions of the "practical life" (praxis) and the "contemplative life" (theoria). Despite this distortion, the post-Enlightenment view of theory and practice has dominated the intellectual and political landscape for over two-hundred years and faced little significant challenge by philosophers of epistemology until after the second half of the Twentieth century.

The second epistemological approach Crotty (1998) describes is subjectivism; the view that knowledge is whatever each individual experiences. This view was developed during the twentieth century by philosophers reacting against the dominant objectivist world-view. Crotty (1998) is critical of excessive application of the subjectivist approach, cautioning that it can lead to unhelpful concentration on an individual perspective, and even a tendency to narcissism in educational research. Nevertheless, the idea of a subjective universe has been a highly influential one in many spheres of social research.

Finally, constructionism is the view that the world, and reality, is constructed through the interactions of the individuals and objects that make up our universe. This final view describes an existence that is made and re-made continuously with meanings being negotiated through social interactions. A

subtle, but important, part of a constructionist view of the world is that mind-body duality is no longer an essential part of the epistimological proposition.

This shift in thinking alters the nature of the debate about theory and practice in highly significant, and often unexamined ways, which I shall return to in section 3.5 when I discuss pragmatist philosophy.

3.3 Theoretical Perspectives - Positivism and Alternative Views.

Crotty (1998) suggests that each of the three different epistemological positions leads to a particular theoretical perspective for the researcher. In this section I will consider three different theoretical perspectives and research approaches which follow the corresponding trajectories of Crotty's logic; these being positivism, interpretivism and critical theory.

Within the objectivist tradition, positivism is a widely accepted way of viewing knowledge. The term "positivism" is closely associated with the Enlightenment philosophers such as Comte and Descartes, and implies that knowledge is proposed, or "posited", and tested objectively, preferably through the means of a controlled experiment. Mind-body duality is an important element of positivistic epistemology, and the primacy of theory over knowledge is evident in much positivist discourse. Positivism enjoyed its high point of influence from the Enlightenment until the early years of the twentieth century, but has come under sustained criticism since then. Physicists such as Böhr and Einstein developed models of wave-particle duality and theories of relativity which suggested that the nature of matter was infinitely more complex than Newton had suggested in his model of a "mechanical" universe. In addition, Heisenberg's uncertainty principle asserted that through the act of observation the researcher changes

the very thing they are observing, posing a radical challenge to objectivist thought. That these critiques arose from the world of physics, a natural science built upon positivistic thinking, is particularly significant in the context of this thesis given my stated view in chapter 1 of medicine as field dominated by positivism. This suggest a level of reflexivity present in the physical sciences which has failed to emerge strongly in the world of medicine and the biological sciences.

However, this debate did lead to the questioning of positivistic thinking in other areas of knowledge, in particular the social sciences where the task of understanding human relationships had always been difficult terrain for positivists to hold, with its inherent complexity and uncertainty. Subsequently, philosophers of science began to challenge the central tenets of positivism: Kuhn (1962) contesting the rationalist narrative that scientific progress was a logical and stepwise process, with his model of unpredictable scientific "revolutions"; and Popperian falsificationism (1963) which turned the idea of generalisability upon its head by proposing that the function of science was to reject hypotheses, not to prove them. Despite these challenges, positivism remains the dominant philosophical paradigm in our lives; and importantly for my work, the practical worlds of education, medicine and politics are still highly positivistic ones, though Golby and Parrott (1999) contrast this with the world of academia which has largely moved to a post-positivistic view of the world. This intellectual schism can sometimes feel like a crevasse in the professional lives of those of us whose career spans both academia and the more practical world of medicine or education.

The challenges of adopting a positivist view of the world in education are perhaps best summed up by three different critiques which I shall briefly outline here. Firstly, positivism is very difficult to apply in social situations, such as the classroom or other educational settings, where the circumstances cannot be "controlled" to minimise external influences on the process being examined; so that the elimination of bias (a key measure of validity and reliability in positivistic research) is usually impossible in such settings. Secondly, positivism encourages researchers to question the means of what is done, but not the ends of what happens in the world. However, asking value-laden questions such as "what should we do?" and "why should we do it?" is essential in deciding how best to act in uncertain social situations, which occur frequently in educational and medical practice. Both Biesta (2010) and Pring (2000) encourage the educational researcher to ask questions of both ends and means and they are critical of the hegemonic view permeating educational policy (due to the pervasive influence of positivism in management and politics) that researchers may challenge means (by searching for efficiency) but not ends, thus rendering them mere technician-implementers rather than true practitioners of research in a democratic setting. Thirdly, there is an irreconcilable paradox linked with adopting an objective worldview. Positivism is itself a value-laden and personal choice of research paradigm made by individual researchers themselves, which contradicts the objective mode of thought that positivism itself proposes. Despite these critiques, the pervasive nature of positivism will influence any research taking place at the present time, it simply cannot be ignored as it is part of our collective consciousness. Indeed, Kvale (1996, p61) notes 'the positivists have contributed to moving social research beyond myth and

common sense' and aspects of positivism have much to offer the educational researcher.

What alternatives might exist to a positivistic view of educational research and knowledge generation? During the early years of the twentieth century, sociologists such as Weber began to develop a new school of social research that became known as interpretivism. This school proposed that the world could be understood by examining the interactions that occurred between people. Such an approach clearly fitted within a subjectivist or constructionist world-view and began to challenge the primacy of objectivism. However, interpretivism itself was criticised by a more radical group of social philosophers who had been influenced by Marxism and became known as the 'Frankfurt School'. This group of philosophers argued that to be relevant, social research should challenge the norms and values of society and be rooted in social change. This approach has been termed "critical theory" and become a highly influential voice in the midlate twentieth century after the Second World War, particularly in the sphere of action research. However, like all philosophical views, it is not without its own detractors and I will briefly present two important criticisms of critical theory here.

Firstly, it has been suggested that critical theorists have presented a limited and rather negative view of what interpretivism is and does. Writers such as Carr and Kemmis (1986) have suggested that interpretivism is a way of understanding the world but not changing it in any meaningful way, which is where critical research picks up the mantle of social reform and change. To me, this seems to be a partial view of interpretivism and one that suits critical

theorists rather too well in justifying their own research paradigm as being something that genuinely distinctive from interpretivism: surely changing understanding itself is an important step in changing the nature of the world? Secondly, it has been suggested by Cohen, Manion and Morrison (2007) that critical theory is unrealistic about the possibilities for social research and that, while undoubtedly producing something significant and valuable for themselves and perhaps their workplace, most action researchers working with critical theory will not go on to produce profound social change though their work.

This argument begins to move the philosophical debate into the challenging territory of generalisability, which is vaunted as an important property of objective research and its limitations within other research paradigms is often cited as a significant shortcoming of non-positivistic research approaches.

Generalisability implies the ability to predict future events, a conception which Biesta (2010), drawing on Dewey, criticises suggesting that this premise is something of a philosophical "sleight-of-hand" to seduce potential practitioners and consumers of educational research. Biesta (2010) asserts that the future simply cannot be predicted, a position to which I shall return in section 3.6.

Following on from Biesta's reading of Dewey, knowledge must always be seen as provisional, under constant reconstruction and permanently open to revision. This message is an important reminder of the limitations of the concept of generalisability, but still leaves me as a researcher without a coherent theoretical framework to work within.

3.4 From Nothing to Something?

At this point, I am left in a methodological "no-mans-land", having considered and then rejected the various dominant educational research paradigms. This mirrors the concerns of some educationalists, such as Bradley (2003, p296), who argue that there is a 'crisis in educational research' and that this crisis is due to four fallacies, namely:

- 1. The false dualism between objectivism and constructionism.
- 2. The false primacy of positivism.
- 3. The false certainty that positivism offers.
- 4. The false expectations that citizens and policy makers have put upon research.

In Bradley's view, taking a pragmatic approach can offer answers to each of these fallacies - but what exactly does this "pragmatic approach" mean in practice? I began this chapter with a quote written by John Dewey, the American pragmatist philosopher, whose thinking has been particularly influential in the sphere of educational and social research. What was Dewey suggesting when he wrote 'agnosticism...is an act of intellectual honesty'? When I first read it, this quote resonated strongly with me, as it seemed to sum up my views of knowledge and research and resonated with Biesta's (2010) view which I stated at the close of the previous section of this chapter: that knowledge is provisional and open to revision; and uncertainty is to be explored and celebrated.

Such a view of knowledge is disorientating to those of us brought up in a "mechanical" universe through our educational and cultural inculcation as biological scientists, as I describe in my educational background in section 1.5.

However, when I examine the research approaches I have written about in the previous section I find them all open to criticism and revision. I am not prepared to "believe" in any of them. To me that would be against the essence of "scientific" thinking, in the broad rationalistic sense of this dangerously misused word. However, for this to be a viewpoint that was more than intellectual grandiosity, or even stubbornness, I needed to find a way of framing and informing my thinking within a doctoral thesis that went beyond the negativity of post-modernism and led me to more productive ground. It was with some sense of relief, then, that I began to discover the work of the pragmatist philosophers, in particular Dewey, and to articulate my personal form of intellectual agnosticism.

3.5 What is Pragmatism?

The term "pragmatism" was initially used to describe the thinking of a school of philosophers who worked in the United States of America during the late-1800s and included William James, George Herbert Mead and latterly John Dewey. Although highly influential in the USA in the early years of the twentieth century, traditional philosophical history states that reach of pragmatist philosophy gradually receded after the First and Second World Wars and became marginalised by more dominant philosophical discourses, such as that of the analytic philosophers. Proposing an alternative view of history, Bernstein (1992) asserts that pragmatist thinking never truly disappeared, but was subsumed into and influenced the work of post-modernist thinkers such as Foucault and Derrida. In either case, over recent years, pragmatism has returned to the fore of philosophical discourse, most notably in the work of Richard Rorty and Hilary Putnam, the latter himself a convert from the analytic school of philosophy.

In terms of philosophies of research, the word "pragmatism" has been used to describe a variety of different things. This proliferation of meanings is a source of potential confusion to new and experienced educational researchers alike. In my view, it also forms a significant barrier to the broader adoption of pragmatist approaches to research methodology. Thus, it is worth examining four contrasting ways the term "pragmatism" has been applied in educational research:

- 1. Pragmatism means "what works is right". This is, sadly in my view, a commonly held view and in my opinion sits a very great philosophical distance from Dewey's conception of pragmatism. This definition is based on practical results, efficiency and effectiveness, means but not ends. An approach such as this takes the researcher into morally and ethically dangerous ground and has quite rightly been criticised by academics as failing to ask the important value-based questions in social research. Sadly, it has also been used to label the entire project of pragmatism as being hopelessly relativistic, which I hope to demonstrate is far from the conception proposed by Dewey. Thus, I reject this as a valid definition of pragmatism.
- 2. Crotty (1998) presents pragmatism as an important influence upon the development of interpretivism. As stated above, this approach is predicated upon a constructionist ontology, something that fits well with Dewey's theorisation of knowledge production through action and social transactions. Crotty's desire to fit research traditions into a convenient system of classification does, perhaps, open him to

accusations of technicism and his view of the influence of pragmatism seems to be limited. The pragmatism that I am seeking does more than simply influence the choice of research method as it changes the researcher's very mode of thinking. For this reason, I cannot fully accept Crotty's view of pragmatism.

- 3. In my initial writing about pragmatism during the EdD (Lake 2010), I moved toward a view of pragmatism that was articulated by Mackenzie and Knipe (2006). This view was that pragmatism describes a type of mixed-methods research, blending qualitative and quantitative work and focusing on the research question, rather than building an external theoretical framework first. On reflection, I think this view is valid, but limited. For me, the missing element in this conception of pragmatism is a depth of understanding of what Dewey's framework is and how radically different it is to the more commonly utilised research paradigms. Consequently, the search for a valid pragmatism cannot end here; I must move on to approach Dewey's thought system in greater detail.
- 4. Dewey's pragmatism. This is something more subtle, complex, radical and, as I have written several times, misunderstood. It deals with the dualities of mind and body which are deeply ingrained in our world and almost impossible for us to recognise, as they are so much a part of our everyday existence.

It is this fourth and final view of pragmatism which I shall now move on to examine in greater detail.

3.6 Deweyian Pragmatism - Beyond Epistemology.

The writings of John Dewey are copious and not easily penetrated. However, in Biesta and Burbules (2003) the nascent pragmatist has a valuable and critical guide, and I shall draw on their readings of Dewey in some detail during this section of the chapter. Sennett (2008, p14) defines this type of pragmatism with the suggestion that 'its distinctive character is to search for the philosophic issues embedded in everyday life'. Rorty (1991, p211) writes, somewhat mischievously, that pragmatism is 'a rationale for non-ideological, compromising, reformist, muddling-through'. To a GP such as myself who is well versed in dealing with uncertainty, this is indeed manna from a philosophical heaven.

The starting point for Dewey's pragmatism seems simple: the researcher cannot presuppose epistemology before they begin their enquiry, thus Dewey turns the research proposition upside down. In other words, we cannot adopt a view about the nature of knowledge until we have constructed that knowledge through action or social discourse. Dewey asserts that it is only by *taking actions* that we can know, and then (perhaps) the researcher will have developed some ideas about what the nature of this knowledge is. Vitally, these ideas must always remain open to debate, criticism and revision. Biesta (2007) reminds us that research can only give information about past practice to help professionals make more intelligent decisions about possible future courses of actions. Knowledge will also always be provisional - while theories are static,

action implies constant change - and this temporality of knowledge gives rise to Biesta's (2010) assertion that while research cannot predict the future, it can help us act more intelligently. This inherent openness, and indeed invitation, to criticism and the constant testing of ideas about knowledge led some to consider Dewey a positivist. To make this claim is to confuse Dewey's view that the provisional nature of knowledge implies that research findings are always contestable; with the positivist view of Dewey's era that knowledge could be viewed objectively and known with certainty. Dewey does not reject the idea of epistemology, but he extends it. Dewey goes beyond a traditional view of epistemology.

Importantly, Dewey's framework rejects the concept of mind-body duality; theory and practice inform and interact with each other on a level playing field. There is no question of which comes first or which has primacy over the other; this situation simply cannot exist in Dewey's view of knowledge. Biesta and Burbules (2003) consider that much of the confusion about what modern science can and cannot do results from the inappropriate application of ancient Greek ideas of mind-body duality to principles of Enlightenment rationalism. This is the heart of the struggle behind Dewey's moral project: to find balance between the twin perils of 'the *inhuman rationality* of modern science or the *human irrationality* of common sense' (Biesta and Burbules 2003, p17 original emphasis).

This theoretical framework fits within constructionist ontology, avoiding the increasingly fragmented world-view of subjectivism and the austerity of objectivism. Pragmatism also provides an alternative to the intellectually

attractive, but ultimately nihilistic, postmodern stance. Bernstein suggests classical pragmatists were a form of "pre-modern postmodernists", skillfully avoiding the postmodern trap of negativity, cynicism and binary thinking by setting as their creative task 'learning how to live *with* irreducible contingency and ambiguity – not to ignore it and wallow in it' (1993, p838 original italics). This view is echoed by Rorty's view that the pragmatists had already articulated what post-structuralists, like Foucault, were writing about 80 years later.

Perhaps the most significant criticism of Deweyian pragmatism is that it inevitably leads to relativism. This charge can be difficult for pragmatist philosophers to reject, because it implies so profound a misunderstanding of what pragmatism is by those who make it, that a well-informed debate is almost impossible. Both Bradley (2003) and Biesta and Burbules (2002) remind us that an essential element of Dewey's philosophy of education was an equally strong focus on both the social and scientific contexts of knowledge. This dual approach helps the researcher avoid the trap of relativism by reminding us to always ask questions about means and ends. It is not enough to ask "what works", we must also ask "why should we do this?" Through this dualistic approach, and by the construction of knowledge through interaction between individuals, Dewey hoped we might find balance in dealing with social and educational problems. There does, however, remain one obvious paradox in pragmatism - that the decision to use pragmatism as a framework is, in itself, an example of an a priori choice of a philosophy that argues against the application of theoretical frameworks. This is irreconcilable, but for me does not detract significantly from the power of a pragmatic approach as it seems something of a philosophical game, rather than a serious challenge to the validity of a pragmatic approach.

Dewey's approach to educational research has influenced many thinkers and researchers. Pring cautions against the dangers of false mind-body dualisms in research, calling for quality in educational research that must be relevant to practitioners and that is capable of 'tentative generalisation' (2000, p120). While Pring's views may lean too far towards positivism for some, to me they seem firmly pragmatic in their approach, and his call for means and ends to be examined in educational questions is both reassuring and appropriate. Golby and Parrott argue in favour of a case study approach to educational research, which is 'both a pragmatic and principled response to the special factors and complexities encountered by educational researchers and practitioners' (1999 p45). Using recognisably Deweyian language, Golby and Parrott write that case study aims to 'investigate practical problems and render them *intelligible*, to seek an appropriate course of action' (1999 p72-73 my italics).

This concludes my consideration of Dewey's influential and profound ideas about pragmatism, which are central to the theoretical basis of my thesis and lie behind the assumptions and choices in my methodology. I will now move on toward the final question that I will deal with in this chapter, my choice of methodological approach.

3.7 The Ethnographic Approach.

To return to Crotty's (1998) classification of the research process, I have made my case for my constructionist epistemology and a pragmatic theoretical perspective but have yet to be clear about my methodological approach; in other words how will I relate my philosophical position to what I propose to do in practice? In my research, I am attempting to understand the perspective of GP trainers in their dual roles as doctors and teachers. For me, it is vital to understand the experience of my participants and 'the meaning they make of that experience' (Siedman 1991, p3). In this process I hope to better understand the experience of others by seeing the world through their eyes. Robson (2002), Wellington (2000) and Gibson and Brown (2009) all suggest that a methodological approach well suited to this particular search for knowledge is ethnography.

Ethnography developed from the field of anthropology, with its roots in the study of isolated cultural groups such as Pacific Islanders. The traditional view of ethnography is of an outside researcher entering the field from an external viewpoint, using non-participant observation as a method and then leaving the field to complete the research process. For various reasons, which I shall now expand upon, this is *not* what I propose to do. Firstly, this traditional view does not sit with my epistemology and theoretical perspective. Constructionism asserts that knowledge is co-created by the researcher and participants, and that knowledge is not "out there" waiting to be found by the researcher. The pragmatic approach I have written about is also based upon knowledge being found in physical and social activity, and this knowledge as being provisional and temporally bound. Secondly, I am not an outside researcher, I am a GP and

a medical educator and I am investigating my own field of practice. There is no question of me entering or exiting the field of research - I am already deeply within it, and have no intention of leaving it. Thus the sort of ethnography I will write is different to the anthropological view, and more akin to what Wellington (2000, p44) has termed an 'ethnographic approach', rather than being a traditional ethnography. But what does the difference in these terms imply?

The differences between "traditional ethnography" and an "ethnographic approach" are well illustrated by contrasting two different research projects in medical education. In 'Making Doctors - An Institutional Apprenticeship', Sinclair (1997) provides a traditional ethnography of undergraduate medical training, offering an analysis of a year's non-participant observation of the lives of medical students and junior doctors. The research is clearly presented by an outsider offering an external view and interpretation of the lives of those who are observed. On the other hand, in 'From Novice to Expert - Excellence and Power in Clinical Nursing Practice' Benner (2001) offers an examination of the development of nursing expertise through paired and group interviews mixed with observation. It offers a picture of the development of clinical nursing practice, and while the researchers are not completely positioned as insiders in their field of work, there are clear links between the lives of the researcher and the study participants. To better locate my research approach for the reader, my intention is that my form of ethnography will have more in common with Benner's than Sinclair's work.

Researching as an insider in my professional field is a challenging concept for me, given my epistemological background rooted in positivism. It raises

questions of objectivity, that Sikes and Potts (2008) deal with firstly as a hangover of the dominant positivistic view, suggesting they are thus only marginally relevant to insider research; and secondly, as less important than concerns about the relevance, quality and ethics of insider research. Expanding upon these concerns, Laxley and Seery (2008) write that great care must be taken with insider research to ensure that the researcher's position does not compromise either the researcher or the participants' dignity. If this can be achieved, they assert that 'in order to generate sufficient trustworthy knowledge of a cultural group, it is both necessary and sufficient that the producers of such accounts are also members of that community' (Laxley and Seery 2008, p22). Certainly, insider research quickly negates Wellington's (2000) challenges of traditional ethnography - that of acceptance by participants and of access to the field. Smyth and Holian (2008) appear to agree with my view that an insider approach to research is congruent with my constructionist and pragmatic framework, and provide helpful advice about the importance of the insider researcher remaining mindful to their dual role as a researcher and colleague, as well as the importance of a supportive supervisor or mentor which I return to later in chapter 8. In addition, Sikes and Potts (2008, p7) comment that 'ethnographers are often exhorted to 'make the familiar strange' and 'the strange familiar', a maxim which Robson (2002) considers particularly valuable for those carrying out insider research.

A form of ethnography that pushes an "insider" research stance to an even greater extreme is auto-ethnography, which focuses on the researcher's own personal experiences. Such an approach has been promoted in educational research by Tripp (1993) and Brookfield (1995), and in medical education by

Fish and Coles (1998) who term it 'Insider Practitioner Research' (IPR). At times, the boundaries between reflective practice and research are blurred by auto-ethnography (or IPR), though this is less of a concern to me if the work meets the standards of quality, relevance and ethics that Skies and Potts (2008) set out. Perhaps the greatest risk with IPR is that the researcher slips into 'vanity ethnography' (Maynard, 1993, p329), and Crotty warns that 'when the focus on the object is lost, inquiry rapidly becomes very subjectivist - even, at times, narcissistic' (1998, p85). In a way, all of this EdD thesis and the journey that underpins it could be considered a form of auto-ethnography. I cannot separate my personal journey from my research and my experiences inevitably form part of "the evidence" of my enquiry, though I do not intend to include a specific piece of reflective writing or a personal account in my data.

To avoid the excessive subjectivism that writers such as Crotty (1998) and Atkinson, Coffey and Delamont (2003) caution the insider researcher against, I will strive to maintain high standards of quality in my research practices. This involves openness and honesty about ethical issues in my research journey (which I address in chapter 5); seeing my research through some of the alternative lenses that Brookfield (1995) offers the critically reflective practitioner, including the literature (as I outlined in chapter 2); and a clear explanation of my research procedures (which I will set out in chapter 4).

3.8 Conclusions of the Chapter.

This chapter has been a selective journey through thought and knowledge spanning over two thousand years of philosophy. For me, it is the summary of several years of thinking, reading and writing; though, remaining true to my pragmatist leanings, its conclusions remain provisional, contextual and open to debate. My aim in this chapter was to present a balanced and critical view of educational research philosophy and provide sufficient evidence to support my adoption of a constructionist and pragmatic view of knowledge and educational enquiry in this thesis. I have also used this discussion to inform the next step in my enquiry by choosing my research approach of ethnography.

In the next chapter I will consider my decisions about the choice of research methods in greater detail, and move on to develop an appropriate analytical framework for my study.

CHAPTER 4: DATA COLLECTION & ANALYTICAL FRAMEWORK.

Unlike a star, chemical or lever...if given the chance to talk freely, people appear to know a lot about what is going on.

Siedman I (1991, p2) 'Interviewing as Qualitative Research'

4.1 Introduction to the Chapter.

The quotation at the start of this chapter summarises my approach to methods in social research during the conduct of this thesis: if you want to find out more about people's lives then a powerful way of doing this is by speaking to them or observing them. This chapter will address issues about how I gathered the data for my thesis in the field, and then move on to consider the framework which I devised to analyse these data.

4.2 A Form of Methodological Triangulation.

Following the adoption of a pragmatic theoretical framework for my thesis and my stated ethnographic research methodology outlined in the preceeding chapter, my next set of research decisions surrounded my choice of data collection methods and subsequent analytical framework. To remind the reader, my research aim was to explore the relationship between GP trainers' clinical and educational practice, by addressing the three research questions in section 2.7.

While my methodological thinking evolved, I realised that my data-collection and analysis methods needed to satisfy **three** different elements of the research process. Firstly, it was clear that there must be congruence between the research method and the **research question**; Charmaz (2006, p15) advises the social researcher to 'let your research problem shape the methods you use'. For

me, my research question, theoretical framework and stated views about social research at the start of this chapter all pointed to the use of methods that can collect rich data about complex social settings. Data-collection methods which are suitable for this purpose include observational methods and interview, as both can be used flexibly in the field and can gather detailed information about professional practice.

Secondly, it was important that the methods I selected were also acceptable to the **participants** in my research project. I will consider the specific ethical issues to my research in chapter 5, but there were also other, perhaps more subtle, challenges to finding a fit between my data-collection methods and my study participants. Important issues I considered included the forms of communication that study participants were used habitually in their professional lives; and adopting a means for constructing data that suited participants' lifestyles and working patterns. Such practical decisions will often be based upon the researcher's knowledge of the field of practice, and in my case as an "insider" researcher I had a significant advantage over those approaching the field as "outsiders". I was already privy to the subtleties of medical cultures and practices, as I outlined in chapters 1 and 3, and I believe that this rich contextual knowledge made me well placed to take informed decisions about these matters.

Thirdly, the research methods also had to suit the **researcher**. I needed to be confident and skillful in the application of the data-collection methods I had selected to use; I needed the time and resources available to use the methods to my best advantage; and to be temperamentally suited to adopting them in the

research field. I had used interviews to collect data in my MA dissertation and enjoyed this approach to data collection and felt I was competent at it. Kvale (1996) considers interviews to be more of a craft than a science, but notes that formal training in interviewing is not commonly available to most research students. In contrast, I was able to draw upon my clinical life as a medical practitioner, where I spend much of my time in one-to-one clinical interviews with patients. I have also been fortunate to have had a great deal of teaching and training about interview practice and consultation skills as a GP, as well as during my time working as a trainee in psychiatry. This educational process included watching my own consultations on videotape, having an experienced doctor observing me while I consulted with patients and, latterly, working as a GP trainer observing and giving feedback on real-time and video recorded consultations. These experiences have been highly formative for me, and I continue to reflect upon the doctor-patient interaction as a model of social transaction, valuing its complexity and richness. While I accept that in some aspects medical interviews are different from research interviews (I consider these contrasts further in section 4.5) there are also many important similarities between medical interviews and research interviews. Perhaps the best summary of these similarities lies within Kvale's (1996, p125) assertion that 'the research interviewer uses himself as a research instrument'; a statement that invites parallels with Balint's (1957) view of medical practice where the doctor uses themselves as the "drug". In summary, I concluded that my in-depth training and prevailing interest in consultation skills as a clinician, make interviews and observation apt choices of data collection method for me as a researcher.

It could be suggested that fitting the data-collection method to the research question, study participants and the researcher is a form of "methodological triangulation"; though others, such as Wellington (2000), use this term to describe the practice of using different methods to study the same issue; or different issues being studied with the same method. Indeed, care must be taken with the term "triangulation" itself as to some writers (see Atkinson, Coffey and Delamont, 2003) it carries quasi-positivistic connotations of reaching the "right" answer if the researcher can measure a particular property in a number of different ways. As Golby and Parrott (1999, p82) warn, educational researchers should beware of adopting an approach of simply adding more 'instances in the misguided hope that you will be improving your sample'. In this EdD thesis, the term "triangulation" refers to my process of approaching a problem from a variety of directions to deal with the challenges of data collection. The research methods that best satisfied the interests of my research questions, participants and my preferences as a researcher were interview and observation. My preferred approach of these two methods was interview due to the challenges of access and complexity of collecting observational data.

4.3 Data Collection Methods in Ethnography.

In chapter 3 I set out my research methodology as an ethnographic approach – wanting to better understand my participants' lives and to build up a rich picture of their practice as clinicians and educators. Robson (2002, p88) suggests that ethnographic studies have three characteristic features:

- 1. the selection of a group of interest;
- 2. the immersion of the researcher in that setting;
- 3. the use of participant observation.

While my research approach clearly fitted the first two of these criteria, I need to consider the third criterion more carefully, particularly given my stated preference for interview as a data-collection method at the end of section 4.2, and I shall deal with some of my concerns now. Firstly, an interview can be considered a piece of participant observation in its own right. Denzin (1978, p129) writes that 'a good interviewer is by necessity also a participant observer. That is the interviewer is participating in the life experience of a given respondent and is observing that person's report of himself...during the interview-conversation'. Robson (2002, p281) also considers that a 'long interview' (by which he means detail rather than necessarily duration) might be substituted for observation in "real life" research settings due to time constraints which can make observation very difficult to achieve. Wellington (2000, p80) also considers 'ethnographic interviews' which are reflexive and nonstandardised, and can be used to help test and develop hypotheses; and Kvale (1996) and Gibson and Brown (2009) add to the supporters of an "ethnographic style" of interview research.

An example of building up an ethnography through a series of interviews is provided by West's (2001) work with inner city GPs in his book 'Doctors on the Edge'. In this research project, participants had a series of in-depth interviews with the researcher over a period of several years, culminating in a rich description of the lives of the GPs, despite the absence of any formal observation. The use of interview in this setting is perhaps particularly appropriate as West had no medical training and thus may have struggled to understand many of the subtle facets of practice that he might have observed in the interactions that his participants undertook, not to mention the additional

challenge of maintaining doctor-patient confidentiality with an additional person observing the consultation, for the purposes of pursuing their research agenda.

Ethnography undertaken through interview alone is not without its critics, though. Bourdieu (in Jenkins 2003, p54) disapproved of the use of interviews as ethnography, suggested that eliciting information from participants by interview led: to inaccurate 'official' accounts of events, due to failure to question participants' tacit assumptions of their practices; skipping over detail without explanation; and exaggeration of extremes in social situations. I would respond to these criticisms by proposing that many of these shortcomings can be mitigated by careful reflexive interviewing techniques and purposive participant selection. In any case, Jenkins (2003, p55) goes on to note the 'methodological promiscuity' of the anthropologist (or ethnographer), whose data collection methods might vary from social survey to observation; and from videotape to interview. In an alternative critique, Atkinson, Coffey and Delamont (2003, p112) argue that qualitative research has become inappropriately reliant upon interview through the 'interior life of personal experience', and that participant observation has been marginalised as a data-collection method in ethnography. They move on to suggest that detailed, contextual descriptions of social events through interview alone are problematic to construct, considering that the absence of any observation in ethnographic research must be seen as a significant methodological issue and potential weakness in these studies (Atkinson, Coffey and Delamont, 2003).

Awareness of these well-founded concerns about using interview alone to construct ethnography made me consider my data-collection methods carefully.

While I wished to collect the majority of my data through interviews, I also decided to include data from observations of teaching sessions involving participants and their trainees in my analysis, which I shall give more detail about in section 4.6. In summary then, while I am confident that high quality interviews can be an appropriate data collection method to use within an ethnographical methodology, I felt the strength of this thesis will be significantly enhanced by combining the interview data with data collected using observational methods.

Kvale (1996) suggests that the validity of the interview process can be assessed by the appropriateness of the theoretical and technical procedures that the interviewer follows. I will now go on to consider interview as a research method in more detail, by dealing with both the theoretical issues and then some technical questions pertinent to interview research.

4.4 Interviews - Theoretical Issues.

Kvale (1996, p6) defines the research interview as 'a conversation with a structure and a purpose', and describes face-to-face semi-structured interview as a means for understanding 'participants' lifeworlds' (p5). Kvale conceives the interview situation as a 'construction site of knowledge' (1996, p2) involving both interviewer and participant, thus providing congruence with my stated constructionist epistemology. Furthermore, Rorty's (1979) stated view of 'knowledge as conversation', suggests that interview can be seen as a method which fits with a pragmatic philosophy of educational research.

Kvale's metaphor of the interview as a journey, which can change both the interviewer's and participant's understandings of their life experiences, suggests a potentially therapeutic element to the interview process. While therapy *per se* is not an explicit aim of my research process, I will still seek to enhance the professional lives of those who participate in my research and such an outcome would fit with Golby and Parrott's (1999) view that educational research should benefit those being researched.

Kvale (1996) writes that the interview conversation must balance the dual demands of the personal interaction between interviewer and participant, and the 'knowledge' created during the interview process. Analogous to this is Neighbour's model of the doctor-patient interaction where he writes that the doctor must have 'two heads during the consultation (1996, p56): the 'responder', who listens to the patient and attends to the relationship between doctor and patient; and the objective 'organiser' who monitors the consultation, gathering data and planning strategic direction. As before, care must be taken when comparing the research and medical setting so that while GPs are urged to be "patient-centered" as clinicians, in a research role the interview conversation is initiated and directed by the researcher, though Wellington (2000, p72) writes that interview 'offers people...an opportunity to make their perspectives known, i.e. to go public. In this sense interview empowers people - the interviewer should not play the leading role'. To summarise, Charmaz (2006, p27) offers the view that interviews are 'contextual and negotiated' and these negotiations involve power differentials between participants and the researcher as well as reflecting differences in age, gender, sex and race, with the interviewer needing to remaining flexible and reflexive throughout the interview process.

4.5 Interviews - Technical Questions.

Having considered some of the theoretical questions about using interview as a research method, I will now consider some of the practical challenges that faced me as the researcher when using interviews to collect my data. To organise my writing here, I have turned to Kvale's advice about how to report interview studies (1996, p264) and will present this section of the chapter in five sub-sections.

1. **Study design**. Wellington (2000) considers different types of interview, ranging from unstructured interviews to fully structured questionnaires administered by the researcher. Both Wellington (2000) and Kvale (1996) consider that the compromise design of the semi-structured interview can combine both flexibility in administration with relative ease of analysis. For me, the importance of collecting data about non-verbal communication meant that face-to-face interview was really the only valid form of interview for my purposes. I preferred the interpersonal trust that one-to-one interviews could promote, hoping to encourage the construction of rich detailed data during the interview conversation; as opposed to the more socially complex setting of group interviews, which may have inhibited some of the participants from contributing fully to the conversation. I carefully considered whether to carry out my research with trainers in my own locality, or to work with trainers outside my usual field of practice. While I felt that researching outside my area had the potential to avoid complicating relationships with colleagues and might reveal activities that did not happen on my own patch, I finally decided to carry out my study with my own professional colleagues. The primary reason for this was that based upon my prior knowledge of working with different trainers, I was able to easily

identify participants who I thought were likely to be able to participate in the type of discussion I wished to have. My considered view was that with adequate ethical safeguards, the advantages of my insider position outweighed the possible disadvantages. To improve the validity of my sample, I sought to speak to a variety of GP trainers in their geographical location (both urban and rural settings); stage of career; experience as a trainer; and of gender. In some respects, the main risk of this strategy was that I sought out people who were likely to be somewhat similar to me in their educational and, perhaps, sociopolitical views. However, true as that might have been, I was constantly surprised during the analysis phase by the novelty of the ideas and experiences that the interviews generated. In terms of number of interviews, I cautiously followed Kvale's pragmatic advice to stop interviewing when I had enough data, as well as heeding the advice of my supervisors and fellow students. By the seventh interview, I found that much of the later questioning phase of the interview was based around checking data from previous interviews and covering some topic areas I had not been able to deal with in the earlier interviews and I felt that I had collected as much data as I needed to from the interview phase of the study. In addition the length of the interviews reduced as the study progressed from the more exploratory stage to the stage of checking and verification in the latter interviews, though there remains a risk that this sense of data saturation was incorrect or based on participant behaviour which was particular to the seventh interview.

The interview situation. I approached the participants by email, which included the Participant Consent and Information Form, shown in Appendix 1, as I felt this gave them an opportunity to decline to participate politely with minimal professional discomfort. Some participants requested more information about the types of question I was likely to ask before the interviews, others were content for us to meet and "see what happened". If asked, I provided further information by email or telephone. I interpreted this as more of a desire for some individuals to have time to think about possible answers to my questions, rather than suspicion or concern about the research study. All those I approached agreed to participate, and I then organised a time and location to meet for an hour at the participants' convenience. During the interviews, I took great care to satisfy Kvale's (1996) dual interviewer roles of interpersonal relationship development and knowledge creation. Questions were loosely based upon the data collection instrument shown in Appendix 2, however this was not adhered to in a rigid fashion, rather I saw it as a guide, or framework, through the interview process. Generally, broad open questions were asked first, followed by more closed and focused questions and finally questions aimed at checking my data and the quality of interview process. After time, I found that the interview questioning began with listening to the participant's clinical and educational life history, followed by guestions aimed specifically around my study's research questions. As well as altering the interview structure in the light of previous interviews (Kvale 1996), I was mindful of Gibson and Brown's (2009) advice to avoid a strict demarcation between the data collection and analysis phases, by assessing the relevance of information constantly as it was constructed during the interview. I also wrote a short commentary on the interview immediately after each discussion was completed, as Gibson and Brown (2009) recommend, with the details of the

meeting and my initial reflections on the encounter, and how my subsequent research strategy might change in response to the data I had collected.

3. **Transcription**. From my previous experiences of conducting interview-based studies, I was aware that the transcription phase of interview studies can be a source of error and frustration for the researcher. In view of the amount of data that I recorded (approximately 275 minutes in total) I used a professional transcription company to transcribe the audio recordings to an electronic document, as Kvale (1996) recommends. I was cognisant of the compromises that this decision entailed for the study, but I believed that a professional transcriber would be both more accurate and faster than I could hope to be. I selected the transcription company with care, looking for prior experience with academic transcribing and ensured that a confidentiality agreement was signed with the organisation (See Appendix 3). I chose to have transcription written as "intelligent verbatim", which is described by the company as:

background noises and 'um', 'eh', 'you know' etc not included for either interviewer or respondent. No repetitions, descriptors or tripping over words included. A tidying up of the transcript but without losing or adding to any of the important data, include ((laughs)) to show emotion of respondent. (AudioSec Limited Booking Form, 2011)

My particular concern with this process was the use of the term "tidying up" which I wanted to ensure did not result in distortion of the data. To prevent this, I adopted several specific procedures in my data collection. Firstly, I made short field notes during the interviews, commenting on points that

seemed particularly important or key non-verbal cues, so I could add this data into my transcript. Secondly, I followed Gibson and Brown's (2009) advice of checking my transcripts against the original recordings to minimise errors and misrepresentations that had crept into the data and to improve quality of the transcript. Kvale (1996) also recommends that the interviewer transcribes at least part of the recording themselves, advice I was forced to follow when my digital dictation machine failed and I was left to rely on my cassette recording for part of one interview (I used two recording devices in each interview in case of equipment failure). I went through each typed transcription and annotated it with emphases I found in the recording of my field notes to improve the quality of my data, and listened to each of the original recordings several times to better "know" the data. An example of a complete transcribed interview is included in Appendix 4, for which I specifically sought the consent of the participant as including the transcript in its' entirety increases the risks that they might be identified.

- Analysis. This section of the interview process will be considered in detail in section 4.7 of this chapter.
- 5. Verification. Kvale (1996) suggests that verification means that several different aspects of the interview have been carefully considered to ensure the process has been one of appropriate quality. Firstly, I carried out a pilot interview and asked the participant for feedback on process and content of the interview to ensure my data collection was likely to be understood by the following participants, and that I was collecting the information I was seeking. My selection of a pilot participant was initially based upon previous

informal conversations with an individual about my EdD thesis and their thoughts about being a clinician and educator and how doctors master the diagnostic process. I had obtained the consent of this person (participant D) to interview them as I felt their interest in this area would make the pilot interview a more discursive process and help me to broaden my thinking and questioning during subsequent interviews. In the event, my pilot participant was unable to meet at the arranged time and I had already set up an appointment with my next participant (A) so this became my pilot. Thankfully, participant A was extremely thoughtful about the questions I posed, having had some time to consider my research questions in detail before I interviewed him, and gave me useful feedback on the questions and interview style. During the interview process, the administration of the questions became notably smoother after the second interview. Secondly, when considering the transcript, Kvale (1996, p145) writes that high quality interviews are characterised by spontaneous rich answers; short interviewer questions and long answers; the interviewer following up and clarifying points; lack of interruptions; verification during the interview; and selfcommunication (meaning the transcript should make sense in itself without interpretation). Having checked through my interview transcripts (see sample transcript in Appendix 4) I hope that all of these traits can be seen in my work, and I will consider this again in my Discussion in chapter 8. Thirdly, I sent each participant a copy of the annotated transcript following the addition of information from my field notes and by listening to the recording while reading the text. I hoped the participants would gain some benefit from having a record of the conversation, and I also wished them to have the opportunity to correct any material errors or misrepresentations in the text as well as the chance to review their consent to participate again after seeing their words on paper. Some participants replied to me with emails which contained further thoughts on the conversation we had had, and I included these communications at the end of the transcripts to add to the data with the participants' consent. One participant asked for some personal information to be removed from the transcript which I agreed to, replacing my initial transcript with the version that they approved. Finally, Perayalka (2004, p285) considers that the reliability of ethnographic research 'entails whether or not...the ethnographer would expect to obtain the same finding if he or she tried again in the same way'. In the field, this entails careful justification of what was recorded as well as the technical quality of recordings and the adequacy of transcripts; something which I worked hard to achieve though my interview and transcription process.

This concludes my consideration of interview as a data collection method. I will now move on to discuss my observational data before considering the analytical framework of my study in more detail.

4.6 Observational Methods.

Robson (2002, p187) writes that observation is 'difficult, demanding and time-consuming' providing a strict list of reasons for why researchers might want to use (and avoid) observation, and Wellington (2002, p93) agrees that observation 'is difficult to achieve'. Despite these challenges, I decided to include some data from observation in this study for a number of reasons. Firstly, as stated above, there are significant critiques of ethnography described through interview alone. Secondly, Robson (2002) suggests that the quality of social research can be enhanced by

combining complementary data-collection methods, and interview and observation sit well together in this respect. Thirdly, in this study, observation had the *potential* to be relatively straightforward data-collection method for me to employ, an unusual situation compared to the time-consuming and delicate nature of observation in many settings.

The reason observation was accessible in this instance is that when a GP is approved as a trainer, part of the assessment process includes the preparation of a video-recording of the trainer teaching a trainee. This process is carried out at least every three years, and thus GP trainers are well used to recording their teaching on video. I felt that the fact that these recordings were routinely produced and could be accessible to me to view as a researcher, given informed consent from teacher and trainee, provided an opportunity that I should not miss to collect observational data.

Observational methods can describe a variety of different approaches that the researcher adopts in the field. Wellington (2000) describes a spectrum of observation from "complete participant" (where the researcher is part of the process they are investigating) through to "complete observer", where the investigator is a detached outsider. In addition, Robson (2002) considers a range of observation from "unstructured" to "systematic" approaches. In this study I would be viewing video-recordings of GP trainers teaching, thus I would be a complete observer, quite literally sitting "outside" the teaching situation I was viewing. This contrasted with my data collected from in-depth interviews, and provided an alternative viewpoint for my analysis. In addition, the video recordings had been produced before my study had been conceived and not for the primary purpose of research, so that I would be less liable to distract the educational process as an observer and reduce the risk of a

Hawthorne effect, where the behaviour of the participants was altered by the research process itself.

I asked six of the seven trainers who I had previously interviewed if they would be prepared to allow me to view a video of them teaching, excluding one trainer who had expressed concerns about the nature of the personal information that the interview transcript had contained who I felt uncomfortable about asking for further data. In the end, I was only able to access two video-recordings of teaching for reasons that I shall discuss now. Participants B and D had not recently undergone a trainer re-accreditation visit and thus had no available recording of teaching. Participant F had a teaching video available and initially consented for me to see it, indicating that it would be sent on by post. However, shortly afterwards his practice underwent unforeseen and significant difficulties due to staff illness. No video arrived and I felt that I could not continue to prevail upon F to send me a copy of the video at such a challenging time. Participant C gave consent for me to use their teaching video and I was also able to gain consent from the GP trainee who was involved in the teaching session. The complicating factor in this instance was that this was the practice in which I worked, meaning that I needed to gain particularly careful consent from the participant and trainee; this was forthcoming. Participant G also consented for me to use their teaching recording, but had no video available of recent work, though they did have a recording taken 4 years ago. I was able to contact the trainee involved in that teaching session and they consented to me using the recording in my research. The recording was on VHS format but I was able to have this transferred to DVD professionally (CTS Photographic Services, Southsea, UK) and I spoke the technician responsible for this personally, to assure confidentiality through this process.

Finally, participant A and their trainee both consented to me using a recording of their teaching session. However, the trainee concerned was having significant difficulties in their placement and shortly after I gained their agreement to use the material the relationship between A and the trainee broke down, resulting in a need for the trainee to move to a different training practice. Although I had gained verbal consent from the trainee, and they had indicated they were happy to sign a consent form, I took the decision not to use this recording in my research as I felt that the trainee was in too vulnerable a position to give truly informed consent, and that using the video in research purposes had the potential to further disrupt an already difficult training process. In addition, at that time I was working in a supervisory role for both the trainee and trainer (as Associate GP Dean) and I felt the potential for a conflict of interest that arose from me involving this trainee in my research was too great. I was very keen not to blur the boundaries between supervision and research in this particularly challenging situation.

Thus, in summary, from seven participants I was only able to access two teaching video-recordings. While initially I felt somewhat disappointed by this outcome, the process of accessing the videos and gaining informed consent from all the participants illustrates the complexities of insider research, even for a researcher who enjoys privileged access to colleagues. However, I hope that the withdrawal of at least two potential sources of data by me as the researcher demonstrates one of my key ethical principles in this project; that is to put my professional relationships with colleagues (including trainees) before my research interests.

When analysing the recordings, I firstly watched the teaching video it in its entirety to gain an appreciation of the teaching session in its whole. I then focused on sections

of the teaching that specifically fitted the purposes of my study, noting the times of relevant sections on a data-recording sheet. As I was using observational data to enhance the Activity Theory (AT) analysis of the participants' clinical and educational practice, I carried out structured observations of the teaching I watched using the nodes from the AT analysis described in section 4.8 and Figure 4.2, collecting descriptions of verbal and non-verbal behaviours that I considered consistent with the nodes and tensions within an activity system.

This concludes the discussion of my data-collection methods. I shall now move on to describe the analytical framework I developed for the study.

4.7 Analytical Framework.

When I approached this study I was keen to heed Wellington's (2000) warnings of the qualitative researcher collecting too much data and failing to analyse it with sufficient depth and care. I was also mindful of Kvale's (1996, p176) 'one-thousand page question', namely how does the interview researcher make sense of the 1000 pages of transcripts that he has created? The answer, Kvale suggests, is to think about analysis before data collection and thus avoid creating the problem in the first instance.

Analysis was in my mind from an early stage of the conception of the study and two events were important in the early development of my analytical framework. Firstly, my very first conversation with my supervisors included some discussions about data analysis, with the suggestion that I might find Cultural-Historical Activity Theory a useful lens through which to view my data. I had made a brief acquaintance with Activity Theory (AT) during the first part of the EdD but, at that early stage, I could not

see how it applied to any research that I might undertake in medical education. However, as it became a more important part of my thinking, I realised the potential power of applying AT to my data. It quickly became clear that I would need to understand AT in depth, and I will discuss my understanding of AT further in section 4.8. Secondly, in the same conversation with my supervisor, we spoke about different "dances" of data and how the same data could be analysed with several different frameworks in one study. As an example of this approach, Gibson and Brown (2009, p132) contrast the process of 'empirical coding' of data in a study with 'a priori coding' which draws on a pre-existing theory. This approach resonated strongly with me and re-emerged when I was later marking an MA thesis (Sykes 2011) in my role as an Associate Lecturer at the University of Winchester. The candidate had used a word cloud (or tag cloud) to analyse their data collected from focus groups, and the dramatic visual representation of a huge amount of textual data condensed into a single page struck me as a powerful tool to use in textual analysis. It also particularly spoke to me as a person who prefers learning from images rather than words, and another possible analytical lens through which to view my data emerged.

Word clouds (or tag clouds) are a Web 2.0 technology that provide a weighted visual representation of textual data. The 'tags' are typically single words and the frequency count of each word is shown by increasing font size for increased incidence of words in the original text. While initially used in web formats, word clouds have been employed by social researchers, as described by McNaughton and Lam (2010) who suggest tag cloud analysis is well suited to studies that involve analysis of written or transcribed text. In medical research, word cloud analysis has been employed for textual analysis in studies by Turchin et al (2007) and latterly Gill and Griffin (2010) who analysed several versions of medical professional guidance documents using a

tag cloud approach. Word clouds are attractive to the qualitative researcher as they facilitate rapid analysis of large textual documents, allowing the frequency of words to be seen, rather than exploring their interpreted meanings. McNaughton and Lam (2010) suggest that word clouds can be useful for preliminary analysis of data and validation of previous findings in qualitative research, but do accept that decontextualising words in word clouds can lead to ambiguous interpretations of some terms and may result in loss of the overall sense of texts. Consequently they recommend tag clouds should always be combined with other data analysis methods.

It is important to recognise that word clouds need careful manipulation to realise their full potential – a process which contains many value-judgements on the part of the researcher, such as how many words to include in the cloud and which apparently meaningless words to omit. Following a process similar to Gill and Griffin (2010), I used www.wordle.net to create and then manipulate the word clouds from my interview transcripts. I entered the complete transcription into the word-cloud generation programme, following the advice of McNaughton and Lam (2010) who advise entering texts in their entirety, including my own questions to the participant (which were transcribed in capital letters as opposed to the participant's responses in lower case) as I felt this best reflected the co-creation of data I wished to achieve in the interview process. Next, I accepted the rejection of "high frequency" words which would confuse the images - such as "a", "the", "and". To improve legibility I orientated the text in a horizontal plane, selected an easily readable font (Lucinda Sans Serif), displayed the words in alphabetical order from left to right and used black-and-white colouring. I hoped this would reduce distraction by word cloud colour or shape, and ensure that I could focus on the tag cloud primarily as a means of representing word incidence in the text. Finally, I selected the thirty most frequently occurring words and then manually removed a few words in each cloud. Specifically, I removed: words such as "JL", "oh" or "uh"; words which were duplicated by including either both past and present tenses or singular and plural; one of "yes" and "yeah" in the same text; the same word starting with both a capital and lower case letter (where I removed the least commonly occurring form of the particular word). I was careful to follow the same procedures and to remove the same words from each of the transcripts I generated for each interview, with the aim of producing a word cloud that contained the most commonly used words in each interview after this process of manipulation. This resulted in a word cloud that gave me a visual picture allowing me to compare the words occurring in the elicited texts generated through the interview process. In addition, I took a note of the numerical counts of the words in each word cloud and entered these into an Excel spreadsheet to further develop this part of the analysis, which I will discuss in chapter 6.

I also needed to analyse the fine detail of the data in my transcripts in a way that could represent the richness of the narratives that I hoped they would contain. Gibson and Brown (2009, p132-4) term this process 'empirical coding', where analytical codes are generated by coming to understand the data through repeated readings. These codes may be based on specific attributes of the data, such as particularly strong themes, recurring issues, mistakes, or disagreements in the text. By identification of codes within the data I hoped to draw out significant or recurrent themes in my analysis, hence the alternative term 'thematic analysis'. This approach to coding the data is "in the spirit" of the original conception of grounded theory, where repeated readings of data are used to generate theory. However, I was sympathetic to Atkinson, Coffey and Delamont's (2003) critique that the application of grounded theory principles has become something of a restrictive and convergent

practice in qualitative analysis, and wished to retain sufficient freedom in my coding to represent the original data as closely as possible, thus preserving the voices of those who participated in the study in an authentic way. While computer assisted qualitative data analysis software (CAQDAS) packages, such as NVIVO, are popular with researchers analysing qualitative data, I made a decision not to use them in my study. My view was that while CAQDAS might be useful for representation and storage of data, they could not automate the key aspect of the analysis - the decisions about when to apply codes - and the time and effort spent in learning to use a new package outweighed the potential benefits CAQDAS might offer me.

Contextualising this decision to avoid CAQDAS in my thesis, Robson (2002) notes that the central requirement in qualitative analysis is clear thinking on the part of the analyst. Writing in agreement with this view, Garcia-Horta and Guerra-Ramos (2008, p164 quoting Richards and Richards 1994, p461) write that 'qualitative data analysis 'is probably the most subtle and intuitive of human epistemological enterprises, and therefore likely to be the last to achieve satisfactory computerization'.

My final method of analysis has already been alluded to above in section 4.5 where I wrote a rapid summary of the interview immediately after each encounter. To do this, I wrote a global impression of the conversation that had just taken place, as recommended by Gibson and Brown (2009) and Drake and Heath (2008) to capture the "big picture" of each interview immediately after it occurred. My notes included some simple details such as the date, location and duration of the interview as well as more subjective comments in these documents such as the process of the interview (eg rapport and atmosphere), and any particularly striking part of the conversation that had taken place. I also used these notes as signposts to indicate where my research was heading next and to remind me to follow up any particular

issues or change specific strategies after each interview. The particular elements of the conversation that stood out after each interview often surprised me, and I would often be almost unaware of how I generated these conclusions; the findings simply seemed to "appear" as I wrote after the interview. Such an approach might be considered as an example of data "emerging" through consideration and reflection, a property that is often associated with complex adaptive systems such as languages or the human brain (Cilliers 1998). Emergent phenomena are unpredictable and involve the interaction of many interconnected elements organising themselves with no understanding of the overall process taking place. Researchers such as Innes, Campion and Griffiths (2005) have described complex phenomena emerging in the clinical medical setting and more recently Jones (2011) used complexity theory to better understand educational situations. Additionally, both Regehr (2010) and Mennin (2009) have proposed that complexity thinking can be a powerful tool in educational research as it avoids the positivistic fixation with outcomes (and its attendant risks of reductionism) through offering an alternative approach that accepts the inherently rich nature of social interaction.

To ensure that my analysis was sufficiently robust, I turned to the advice of Kvale (1996, p209) who suggests that such 'control of analysis' can be achieved through two principal means. Firstly, multiple interpreters can analyse the same text; though this option was not practical for me for resource and time reasons. In addition, Kvale (1996, p209) suggests another approach for analytical verification which he terms 'explication of procedures', where the researcher 'lays their cards on the table' about their analytical procedures which I aim to achieve throughout this thesis. In addition, the four procedures I used to analyse my data were split between: focus on big picture or fine detail; being theory or data led; and using data from interview or

observation. My hope was that this would help me to avoid the pitfalls of overfamiliarity with my ethnographic setting which Atkinson, Coffey and Delamont (2003) and Smyth and Holian (2008) warn the insider researcher against.

I shall conclude this section of the chapter by presenting my framework of four approaches to data analysis in pictorial form in Figure 4.1, below before moving on to a more detailed consideration of activity theory in the penultimate section of this chapter.

Figure 4.1: Summary of Analytical Framework.

Global Impressions Data-led Big picture Interviews	Word Cloud Theory-led Fine detail Interviews
Thematic Analysis Data-led Fine detail Interviews	Activity Theory Theory-led Big picture Interviews & observation

4.8 Activity Theory.

Activity Theory (AT) can be understood as a framework for understanding, human activities within their social, cultural and historical contexts. Kain and Wardle (2011, p1) describe AT as something which 'gives us a helpful lens for understanding how people in different communities carry out their activities', helping the researcher to

see possibilities in their data and to "expand" learning. Russell (2001, p66) describes AT as 'less a tight theory than...a heuristic framework for asking important questions that other theories may not raise so clearly, and for seeing relationships among those questions', allowing the researcher to understand the often "messy" world of learning in real-life settings. Kaptelinin and Nardi (2006, p72) consider that using AT 'starts from the problem and then moves to the selection of a method', fitting well with my pragmatic research approach, and Russell (2001) agrees that AT is compatible with a variety of data collection methods.

Activity theory originated in the work of the Russian psychologists Lev Vygotsky and Alexei Leont'ev, which spanned the twentieth century. Vygotsky's work focused on the idea of human actions being mediated by "tools", or artifacts, which could include materials, such as computers or stethoscopes, but also cultural tools such as language or ideas. Leont'ev built on this thinking to focus upon "activity" as the basic unit of human practices, avoiding the Cartesian split between the mind and body in a way that is congruent with pragmatic philosophy. Leont'ev's ideas have been developed by Engeström, who describes so-called 'second generation' activity theory (Engeström, 2001, p134) which includes a detailed description of the cultural contexts *underpinning* the activity system: the rules that are followed in the system; the community of practice involved in the activity; and division of labour in the task. This type of second generation AT is perhaps best understood diagrammatically, as in Figure 4.2.

In this pictorial representation of an activity system, the "nodes" of the system are the points of the triangle; these represent the different aspects of the activity to allow the researcher to analyse it in more detail. Arrows indicate relationships, and tensions (or

contradictions) between the nodes. These tensions can occur in four different ways; primary contradictions occur within one element (i.e. tools) where there are value conflicts present; secondary contradictions occur between different elements, such as tools conflicting with rules; tertiary contradictions occur when a new form of practice emerges externally; and quaternary contradictions occur when two different activity systems conflict.

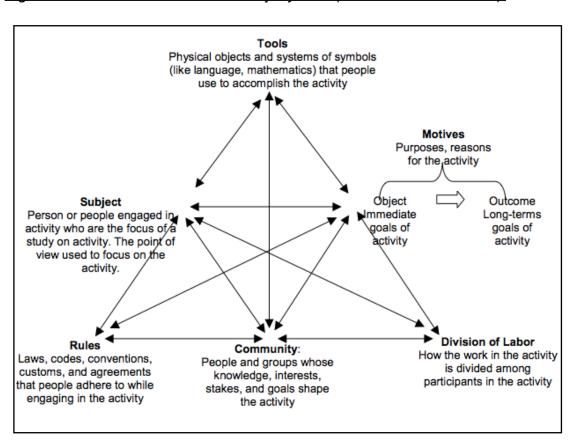


Figure 4.2 The Structure of an Activity System (Kain and Wardle 2011).

Importantly, the view that Kain and Wardle take of object and outcome motives of an activity system may differ from others interpretations of these terms. For example, Skinner and Postlethwaite (2012) suggest that the object of an activity system is the *intended* immediate goal; whereas the outcome is the result of the activity, or what *actually* occurs in the real world.

Engeström (2001) suggests that activity systems follow five principles:

- 1. The activity system itself is the prime unit of analysis.
- 2. The activity system is multi-voiced.
- 3. The activity system has an important history.
- Contradictions in the system are seen as sources of change and development.
- 5. There is the possibility of transformation and change in the system.

Russell (2001,p 70-71) notes that 'the world does not come neatly divided into activity systems. It is up to the researcher/designer to define the activity system based on the purposes of the research study or the design task, to focus the theoretical lens AT provides'. In my study I chose the teaching encounter between the GP trainer and learner as the primary activity I wished to study, and enhanced this with data from the interviews to understand more about the broader practices which occur in GP education.

An important benefit of using AT in data analysis is that it encourages the researcher to think broadly and ask "why" questions about their data, thus expanding the possibilities of their research. AT also helps the researcher to consider the often neglected social aspects of human practices and look for possible solutions to problems within the activity system, seeing tensions within practice as possibilities rather than as problems. Edwards et al (2002, p 120) consider that an important advantage offered by AT over thematic analysis is that it offers a 'shift in attention from an obsession with outcome, which calls for a simplistic focus on cause and effect, to attention on how people learn to think, act and change their environments'.

Introducing ideas which I shall return to in chapter 8, Edwards has developed AT concepts into the notion of 'relational agency' (2007, p4) which she defines as:

a capacity to align one's thoughts and actions with those of others to interpret aspects of one's world and to act on and respond to those interpretations....a capacity to work with others to expand the object that one is working on by bringing to bear the sense-making of others and to draw on the resources they offer when responding to that sense-making.

To this point, AT may seem to be a somewhat abstract way of understanding human relationships, so I will now offer some examples of the uses of AT firstly in education and then in clinical medicine. In the field of mathematics education, Page and Clark (2010) carried out an AT analysis of primary mathematics teaching practice, using data collected at interviews, from written journals and lesson observations which was then analysed according to both the nodes of the activity system shown in Figure 4.2 (i.e. community, rules, division of labour etc), and the tensions present in practice. This analysis resulted in the development of activity systems for two teachers, illustrating their practice in detail and highlighting strengths and tensions that the researchers may not have been aware of without such an approach to analysis. In clinical medicine, Engeström (2010) analysed the integration of healthcare across primary and secondary care providers in Finland. I recognised many of the challenges and findings that Engeström described in his paper, though, frustratingly, I had never been able to articulate them as clearly as he does through AT. The solutions that Engeström helped the clinicians reach through AT were highly creative and demonstrate the power of this type of analytic framework in a lucid and practical way.

Bleakley (2010) suggests that using AT in medical education research is a way of understanding complexity in physicians' teaching practice; and Ajjawi and Bearman (2012) consider AT as a useful lens to examine the social aspects of educational practice in medicine. At present though, AT is not a well established approach in medical education and the only paper which used AT in my literature review was Walters and Wall's (2008) analysis of GP trainers' attitudes to professional development using focus-groups. The studies outlined in the previous paragraph helped me see the possibilities for using AT to analyse my data from interviews and observation to better understand GP trainers' professional practice within its' social contexts.

Langemeyer (2006) contests that AT's weakness lies in its neglect of subjects' personal perspectives by focusing upon a collective space as the source of development and change, though this may suggest an alternative understanding of what data contributes to the "subject" node in an activity system. In this thesis, I will mitigate this critique by offering AT as one of four modes of data analysis, with my global impressions and thematic analysis offering opportunities for appreciation of individual experiences within my data. I will describe the activity system of my participants by identifying the nodes and tensions within their practice, in a similar vein to Page and Clark's (2010) approach in their paper. This analysis will be done by reading the transcripts of the elicited interview texts, and combining this with video recorded data when available to develop these activity systems. The interrogation of my data through AT will encourage me to consider the social contexts underlying the individual participants' activity systems. I hope that application of a theoretical framework in my research will expose tensions and possibilities in my data that I may not have recognised through an empirical approach to data analysis. Kain and

Wardle (2011, p8) contest that 'an outsider - someone who is not part of a particular activity system - can never fully grasp the hows and whys of that system'. With my deep contextual understanding of the processes of my participants professional practice I hope to be able to reach a deep level of understanding of my participants activity systems.

4.9 Summary of the Chapter

In this chapter I have outlined in detail my choice of data-collection and analysis methods. I have tried to link the decisions about my methods with the theoretical framework and methodology I presented in chapter 3, and to make the reasoning behind these choices in my research methods explicit. In chapters 6 and 7 I will move on to describe how I applied my analytical framework to my data to generate my findings. Before I reach this stage in the research journey though, in chapter 5 I will first deal with the important ethical considerations that I faced during the course of my research project.

CHAPTER 5: ETHICS.

Ethical questions arise whenever people interact.

Golby M and Parrott A (1999, p90) 'Educational Research and Educational Practice'

5.1 Introduction to the Chapter.

In this chapter I will start by considering three ethical frameworks which are commonly applied to the social sciences – those of consequentialism, utilitarianism and virtue ethics. I shall then move on from these general frameworks to consider how ethical issues can be dealt with in the more specialised field of educational research. I shall then examine in greater detail the particular ethical challenges I faced during this research project, and how I dealt with some of the principal ethical questions that arose during my EdD thesis.

5.2 Ethical Frameworks.

As a foreground to this section, I will begin with a discussion of the main influences behind my views about ethics, as I consider these to be essential to understand the position I presently occupy in my own "ethical thinking". To begin with, in my undergraduate experiences as a medical student, ethics were regularly discussed in informal settings when considering uncertain or challenging clinical scenarios.

However, my total "formal" education in ethics was a two-hour lecture to a group of over 100 students in the penultimate year of our studies. During this lecture, we were presented with a version of what I now recognise as Kant's consequentialism, though it was described to us as deontology. In this framework, the doctor was required to meet four ethical duties in their clinical practice. These duties were described as: beneficence, or seeking to do good; non-malificence, seeking not to do harm; justice, such as equity in the distribution of resources; and respect for the autonomy of the patient, which was seen as the paramount duty of a doctor. Such a variety of

competing demands appeared challenging enough in a simple situation; that doctors were required to meet these duties all the time, in the uncertain world of clinical medicine, seemed to be to be overwhelming in its ambitions for everyday professional practice.

At a later stage of my clinical education, during some time spent in public health, I became aware of another ethical framework; that of utilitarianism. This framework seemed much simpler to me, and more immediately appealing. Utilitarianism is based upon the thinking of Jeremy Bentham and John Stuart Mill and, in its simplest terms, it is the ethic of seeking to do "the greatest good for the greatest number of people". When I was working in public health, utilitarianism was widely applied to many different situations I encountered, but I was never completely comfortable with the central premise behind the philosophy. I always had a concern about using utilitarianism to justify disregarding those who were not in the majority, and a greater anxiety with who decided what was "good" and what was "bad". I saw utilitarianism as the sort of ethic that could result in wonderful human endeavors, such as Balfour's vision of the welfare state; and I also viewed it as a framework that could be used to justify societal disasters, such as ethnic cleansing and genocide.

Despite these concerns about both consequentialism and utilitarianism, I continued my work as a doctor and educator for many years without giving ethical issues much further significant consideration, until I began my MA dissertation and then moved on to my EdD. This educational process led to profound changes in my thinking about ethics, which I shall now describe. Firstly, I began to realise that ethics was not something which was simply "done" at the start of a clinical, education or research transaction and then put aside; rather, I began to see ethical thinking as something

that was continuous and occurred as part of all human practices and linked with them intimately. This conception of ethics as a *practice* is most elegantly described by Golby and Parrott (1999) in the quote that opens this chapter. Reflecting on this change in my thinking now, I can see that my initial view of ethics was a positivistic one where I adopted an objective stance in a search for the "right" answer; this change in my view of ethics over time could be seen as part of the general shift of my methodological thinking towards non-positivistic ideas. Secondly, I realised that my education to date in ethics had been very limited, and as a result of this I began to develop a more critical approach to ethics or, as it might be alternatively termed, "meta-ethical" thinking. These two realisations helped me to see many of the limitations of the consequentialism and utilitarianism, and to recognise them for what they truly were: models for thinking about problems, not solutions to problems themselves. This habit of removing one's position from various models proposed to explain practice, and then critiquing the model and using it as a tool for thinking is a key skill that I have developed through the EdD. It facilitates a profoundly different view of practice though it is all too easy to slip back into uncritical ways of thinking, and I try to remain vigilant about the temptation of approaching problems through familiar and comfortable paths.

A further development in my thinking about ethics came from some readings in an EdD module about virtue ethics. This was an ethical framework that I had not knowingly encountered before and it seemed to fit very closely with my emerging views of methodology, in particular it linked closely with pragmatism. Annas (2005) writes that virtue ethics dominated ethical thinking from Greek times, and was only challenged by Kant's ethical philosophy in the Enlightenment. However, the fact that I had never been formally exposed to virtue ethics as a potential framework suggests

the dominance of utilitarianism and consequentialism as externally imposed ethical frameworks in the world of clinical medicine. Indeed, both of these ethical frameworks are compatible with positivistic epistemology, and thus fit well with the approach to knowledge that has come to dominate the modern world including the biomedical science view of knowledge which dominates medicine as described in chapter 1.

Kvale (1996, p122) writes that in virtue ethics 'the personal integrity of the researcher, the interaction with the community studied, and the relation to their ethical values is essential'. Both Kvale (1996) and Annas (2005) agree that the role of practical reasoning is vital in virtue ethics, and emphasise the development of ethical practice through personal experience. At the core of virtue ethics is the idea of the person improving themselves through practice, Annas writing:

Virtue ethics gets a grip whenever we realize that the ethical beliefs we live by are inadequate, that, for example, they may imply sexist and racist attitudes, and that we need to become <u>better people</u>. Virtue ethics develops from the reasonable thought that <u>I</u> have to improve myself; no teacher or book can do the job. (2005, p9 original emphasis).

Annas' warning that the application of external ethical frameworks can have adverse consequences resonates strongly with my personal discomfort with deontology and utilitarianism. As Parker Palmer (1998, p95) summarises 'the truth is not determined by democratic means'.

In the framework of virtue ethics there are no definite endpoints or targets to be met, and no clear rules for the practitioner to follow. Decisions are contextual, open to revision and based upon individual experiences rather than conforming to externally imposed rules. Such a description of practice fits closely with Dewey's ideas about

pragmatism which I discussed in detail in chapter 3, and the struggle to find a path between inhuman rationality and human irrationality. The practice of virtue ethics seems to fit closely with my personal views of research, clinical and educational practice, as well as my stated epistemological position in this thesis. It also fits well with the complex and inter-subjective world of research into human practices and the social sciences in particular, where the application of *a priori* rules and principles is likely to lead the researcher into impossible paradoxes and conflicts of interest.

Having considered some of the broad ethical frameworks in common use, I shall now move on to discuss how ethical frameworks may be applied in the field of educational research.

5.3 Ethics in Educational Research.

Educational researchers can draw on several texts to inform them in their pursuit of ethical practice in their work. Golby and Parrott (1999, p91) suggest that the fundamentals of ethical practice in educational research are 'openness and honesty', with careful monitoring of the ethical dimension of research in their work. In particular, Golby and Parrott recommend that researchers make their intentions clear to all participants, including how the results will be made available at a later stage. They also emphasize maintaining participants' confidentiality, including the important reminder that presenting findings anonymously does not guarantee unrecognisability.

Pring (2000, p143-5) divides ethical research practice in education into 'general principles' of action, and personal 'virtues' of the researcher; an approach that again fits closely with the values of virtue ethics. By general principles, Pring (2000) refers to things such as respect for individuals and their confidentiality, as well as the pursuit

of the truth. He accepts that these principles may conflict and suggests that it is important that participants are aware of these conflicts and that they are informed as fully as possible about the potential consequences of the research in which they are involved. By personal virtues Pring (2000) refers to the researcher's personal characteristics as honesty, modesty, humility, concern for those who participate in the research, as well as intellectual rigor and bravery in their work.

In an alternative model, Kvale (1996) divides ethical issues into: obtaining informed consent; maintaining confidentiality; and a regard for consequences of the research process. All of these principles need to be considered continuously throughout the research journey. Finally, the British Educational Research Association (BERA) publishes guidelines which emphasize an 'ethic of respect' (BERA, 2011, p5) for participants, including freely informed consent to participate, openness about the research aims and outcomes, as well as respect for the privacy of those involved. Additionally, the BERA guidelines specifically include a section stating 'researchers must accord due respect for all methodologies and methods', continuing that researchers '...must contribute to the community spirit of critical analysis and constructive criticism that generates improvement in practice and enhancement of knowledge' (BERA, 2011, p10). This broader ethical duty for practitioners to respect their discipline is easily forgotten, and the requirements of the researcher to the research community often go unarticulated.

It can be appreciated that all of these expert sources emphasize very similar principles and procedures to ensure an ethical approach to educational research.

Having drawn on some of the key texts in the field, I will next move on to how I dealt with some of the specific ethical challenges in my research project.

5.4 Ethical Challenges in this Thesis.

In this section I shall set out some of the specific approaches I used to deal with ethical challenges during my project, which I set out in **bold**. Ethical approval for the study was sought and obtained from the University of Exeter (Appendix 5).

The first ethical challenge that I faced in my research was that of **being an "insider"** in the community I was researching. Smyth and Holian (2009) consider the ethics of insider positionality in their writing, and note that one of the chief risks can be informants telling the researcher very personal information that they would be unlikely to divulge to an unknown, external researcher. At times, the pre-existing social connection with the researcher results in the participants feeling comfortable in disclosing very personal information that, given the chance to reflect, they might not genuinely have wished to disclose in a research interview. I was acutely aware of this potential pitfall during my research and, though I did not specifically warn participants they might "tell me things that they might not want to" (which seemed rather paradoxical in an interview where the expressed purpose was to gain a deep understanding of participants' lifeworlds), I tried to account for this potential problem several ways. In the interview setting, I was conscious of Kvale's (1996) criteria for quality in interviews and tried to avoid asking leading questions. When reviewing my transcripts I felt I had done this as well as possible with the balance of talk being mainly from the participant rather than researcher. I also tried to maintain an approach of open questions, following up on verbal and non-verbal cues and respect for the participants throughout the process. I accounted for the risk of excessive disclosure by sharing the transcripts with the participants after transcription and then seeking their consent to use the information again at this stage. One participant took this opportunity to remove some of the information they had given me about their

personal life. I considered it vital for me to offer this opportunity to participants to review the information from the interview in written form after a period for reflection about what they had said, and to be clear that the information on the transcript was theirs and not mine, and that I would respect their wishes to remove any information that they felt uncomfortable about me using in my research. This challenge of being an insider in research seemed to me to balance the relative ease with which I could access a hard to reach group of professionals such as GPs, who are well used to being "too busy" to see others seeking an hour of their time to participate in a research project.

Secondly, Golby and Parrott (1999) also warn against the insider researcher using their work to promote their career aspirations or for a personal crusade, and I tried to remain conscious of these risks throughout the study and to retain the ethic that the data was being co-constructed by researcher and participant as stated in my methodology chapter. My ongoing responsibility to the colleagues I interviewed was paramount in my mind throughout the process; the EdD project would last for two years, but they would remain my professional colleagues for many years to come and this relationship remained of the utmost importance to me. I believe that my decision not to obtain all the observational data I possibly could, as described in chapter 4, shows that I placed my relationship with participants above my aim to collect as much data as possible in this project.

A third challenge I faced was obtaining sufficiently **informed consent** from my participants. To try to deal with this challenge, I sampled those I interviewed purposively and approached them initially by email to explain what I was doing and how I would like them to participate. I chose email as an initial means of contact

deliberately as it is simple to either ignore or decline an email invitation, though none of my participants decided to do this. A week before I visited each participant, I sent another copy of the consent form by email, firstly to ensure the meeting would be remembered, but also to give the participant another opportunity to decline to be interviewed. In addition, during the interview itself, I gave a further explanation of the project including what I planned to do with the data and how it might be used in the future. During this explanation I also discussed the respect for confidentiality and the fact that all data would be anonymised in transcription. I was careful to remind participants of Golby and Parrott's (1999, p91) assertion that 'anonymity is not unrecognisability' and that I would do everything I could to respect the privacy of individuals throughout the life of the project and afterwards. Achieving appropriately informed consent constituted a continuing headache for me throughout the process and rarely left my thoughts. What "informed" actually means is a highly subjective issue; perhaps the realisation that I worried about it then, and continue to do so now, is some evidence that I tried my hardest to do this well and my intentions were genuinely in a spirit of ethical research practice.

Fourthly, one of my main concerns about using interview and observation was the position of **power** and authority that I occupied as Associate GP Dean and that I was interviewing and observing those GP trainers who I would usually inspect and quality assure as part of Deanery processes. I was also using recordings of the GP trainees who I was responsible for supporting which could lead to significant power inequality in the research process. I addressed these concerns in a variety of ways. I made it clear to all participants, either trainers or trainees, that the research process was separate from the Deanery quality assurance process and had no bearing on any assessment I made about trainer or trainee's competency (though I remained bound

by the 'Duties of a Doctor' (GMC 21012) throughout the process, meaning I would be obliged to act upon any risk to patients that I became aware of in the course of my research). I also gave assurances that I had asked them to participate because I felt they might be interested in my project, not because I had any concerns about the quality of training or clinical practice that was taking place. Additionally, I made it clear that the research was being supervised by the University of Exeter rather then Wessex Deanery and this was also reiterated by the logo used on the consent form (Appendix 1). Finally, I reflected on my own personal approach to power much in the way that Pring (2000) discusses personal virtues in the researcher, which I shall discuss in more detail now.

I have always been a person who dislikes hierarchy and never felt comfortable with being in a position of power over others. I believe that people with whom I have worked would observe this of me as well, and I have always viewed GP trainers and trainees as colleagues rather than being subordinate to me. As a clinician, educator and researcher I do not wish to be a distant autocrat; rather I seek to be a trusted advisor and colleague. In concert with these personal values, I have observed that the power difference between trainees and senior doctors has reduced dramatically over the last ten years, in parallel with the increasing equality between doctors and patients in healthcare decision making and the retreat of medical paternalism. I believe these changes are long overdue and to be welcomed. Sociologists such as Hofstede (2011) have developed constructs such as "power distance" to describe how inter-personal power is distributed in different societies and how power inequalities between individuals are tolerated. In the UK, Hofstede (2011) suggests that there is a relatively small power distance, meaning that hierarchy is tolerated less well than in many countries. This is congruent with my observation of reducing

paternalism in doctor-patient and trainer-trainee relationships, and fits with my own preferences for flat hierarchies of relationships within organisations. Despite this, I was always aware of my potential role conflict as Associate GP Dean and researcher. and sought to continually review if this was affecting the research process. I tried to make the interviews an open space for discussion and dialogue, so while I posed the initial guestions and set the overall direction for the interview. I was content to allow the participants considerable freedom in what they discussed and I picked up on areas of interest to them that were not always directly relevant to my research questions. By adopting this approach, I hoped that the chance to speak with an interested "other" would give participants the opportunity to reflect upon, and learn from, their practice. Indeed, several of the participants thanked me for interviewing them after I returned their transcript, saying how much they had enjoyed the chance to discuss matters in more depth than usual and that they would include the transcription in their annual appraisal documentation. In the final assessment, carrying out this research would have been impossible for someone without the immediate access to the group of participants that I enjoyed; the flip side was that throughout the process I tried to maintain a morally and intellectually honest approach to the use of any power and influence over the participants that I may have had.

Moving on from power issues, fifthly, I was careful to warn participants about **what might happen to any data** that I gathered in the research process. This included the

warning that my thesis would be available to view in a university library, though I

could request private housing if required to do so by participants. In addition, I was

clear that some of the findings could be made more widely available in the form of a

published paper, or as a conference poster or presentation. I was careful to remind

participants that as well as being anonymised, I would only include brief direct quotations and that I would specifically check with any participant if an entire transcript was included, as this could increase the chances of recognition. I specifically excluded two participants from including complete transcripts in the published thesis; one who had concerns about some personal information that was discussed in the interview after receiving the transcript; and another who divulged highly personal information which I felt might fall into the category of data that was revealed to me because I was a colleague rather than as a researcher. I included the sensitive data from this second participant in my findings as I felt they were significant and original to my study, but only after repeated checking with the participant that they did not wish for the data to be excluded from the study. Again, throughout this process the paramount concern for me was respect for the individuals involved and the ongoing responsibility I shared with them for our relationships as colleagues. If I felt the data would damage these relationships significantly, then I exercised great care about whether, and in what format, I included it in the study.

Gibson & Brown (2009) pay particular attention to the ethics of **data management** in research. I was aware of the need to reassure participants that I would store data carefully and use secure means for this. I also ensured that I explained that the data transcription was done by a professional organisation with whom I had a formal contract and a signed confidentiality agreement, and used encrypted systems for data transfer and secure email. I was careful to manipulate the data in ways that would retain the authenticity of the voices of those who participated and not distort data to make it more suitable or fitting to my own preconceived ends. Furthermore, I explained that the data would remain the property of the participants throughout its

lifespan (however long that might be) and when I had completed the study I would store it securely in one location, or destroy it if the participants preferred.

My final challenge rested around the use of teaching videos in my research. As I explained in section 4.6 these videos are made routinely by GP trainers, but they were not specifically produced for my study. I gained the consent of the GP trainers involved in much the same way as discussed above and many of the ethical issues about using observation were similar to those around interview situations which I have already discussed in detail. My main additional ethical concern here was about the position of the GP trainees on the videos, as they were also seen on the screen. My approach to this was to gain their fully informed consent, something which I considered important given their place as being assessed for independent practice by their trainers and, to some extent, me as Associate GP Dean at that time. I decided to explain the process to the GP trainees personally, after initial email contact, and to reiterate what I was studying, where and how the data would be used and the potential consequences for them. I was particularly clear that the performance of the trainees would not be assessed (this was done by the trainers contemporaneously, not me when watching the video) and that the main focus of my observation was the educational interaction that I saw. I explained that I would only use extracts from the observations and make notes upon this rather than produce a direct transcript and that this would be anonymised. I asked the trainee participants to sign a consent form which I sent by email, exactly as I had done with the trainer participants. I hoped that by adopting these procedures I could protect the interests of the GP trainees who I considered to be more vulnerable than the trainers in this particular setting. This concludes my consideration of the specific ethical challenges in my thesis.

5.5 Summary and Conclusions.

In this chapter I have considered some of the major ethical frameworks available to educational researchers and my how my personal orientation to these models has developed over time. In particular, I suggest that virtue ethics is highly significant in this thesis and closely aligned to my pragmatist methodological position. Taking these broad frameworks into account, and after considering some of the key literature regarding ethics in the field of educational research, I then reviewed some of the specific ethical challenges I faced during my EdD research project and how I ensured that the conduct of my thesis was ethically sound.

"Ethical thinking" is perhaps the key element that links the various disparate parts of a thesis together, from inception to design, execution, writing up and subsequent dissemination. As Pring (2000, p157) observes, ethical research requires 'the disposition to pursue the truth even when that pursuit reaches conclusions one does not want, the disposition to report frankly and fearlessly, the disposition to be open to new evidence and fresh criticism.' My conclusion to this chapter is that I have moved from being a researcher who was aware of some ethical frameworks and tried to apply them appropriately; to becoming a research practitioner who uses a variety of ethical "skills" and sees them as an integral part of the research process, which can only be developed by their application in, and through, practice.

CHAPTER 6: FINDINGS PART I

Stories...are the means by which human beings make sense of experience. It may be a big story, such as science, or a more personal one...The difficulty is that doctors have been taught to distrust their personal stories in the name of big science.

West, L (2001) 'Doctors on the Edge', p208

6.1 Introduction to the Chapter.

As I discussed in chapter 4, I used four different approaches to data analysis in my thesis. To clarify the presentation of my findings, I have divided my results between chapters 6 and 7. In chapter 6, I will present the findings of my global impressions, word cloud analysis and thematic analysis; in chapter 7 I will report my activity theory (AT) analysis, together with a consideration of the data I collected from video-recordings of teaching. At the start of this chapter, before I consider my global impressions, I will present some general information about the data I collected from the interview part of the study.

6.2 Interview Data - General Comments.

In total I carried out seven interviews. The mean duration of the interviews was 39.43 minutes (range 45.35 to 28.31 minutes) and the total amount of interview data collected was 4 hours 36.03 minutes. Further details about the gender, type of practice, career stage and length of training experience of the GP trainers I interviewed is shown in Table 6.1. For the purposes of this study, early career means up to 10 years experience working as a GP; middle indicates 10-25 years of GP work; and late career over 25 years as a GP. Interviews A, B, C, D and E were carried out in the respective GP's consulting rooms; interviews

F and G took place in the practice meeting room of the practice where the GP concerned worked.

Table 6.1 Interview Details.

Interview	Duration (minutes.seconds)	Gender	Practice Details ¹	Career Stage	Training Experience ²
Α	43.55	Male	Urban Large	Middle	Medium
В	45.35	Female	Suburban Large	Early	Short
С	43.04	Male	Urban Large	Late	Long
D	43.44	Male	Urban Large	Late	Long
E	38.03	Female	Urban Medium	Middle	Long
F	34.31	Male	Rural Medium	Middle	Short
G	28.31	Female	Suburban Large	Middle	Medium

¹Geography and list size: small <5000 patients; medium 5000-10000 patients; large >10000patients ²Short <5 years; medium 5-15 years; long >25 year

The information about the patient list size and number of GPs in each practice was taken from the most recently available national data, from September 2010 (NHS PPA 2010). The interview details in Table 6.1 illustrate that my sample included a varied group of GP trainers from different types of practice (location and size), at different stages in their career, and with a range of experience as GP trainers. In this respect, the variety of participants in this study compares well with the demographic make up of Waters and Wall's (2007) large scale questionnaire study of all GP trainers in one UK Postgraduate Medical Deanery, the largest investigation into GP trainers' personal development reported in the literature.

To some extent, different interviews provided opportunities to examine different aspects of my research project; for example, my approach to questioning

altered in the later interviews, where I partially focused on exploring my evolving ideas and theories about my research questions, as opposed to the earlier interviews where I was more exploratory and discursive in my questioning style. This change in emphasis is perhaps reflected in the reducing duration of the interviews as the study progressed, and is discussed in greater detail in section 6.3. Having set out these basic details about my interview data, I shall now move on to consider my findings in more depth, beginning with my global impressions, which I recorded immediately after the end of each interview.

During each section of the analysis, I shall maintain my research aim paramount in my mind, namely: what is nature of the relationship between GP trainers' clinical and educational practice?

6.3 Global Impressions.

Presenting this section of the findings coherently posed me a considerable challenge. My global impressions were written down immediately after each interview finished, often in my car, and were thus largely unstructured and potentially difficult to communicate clearly to an external reader. However, they formed an important part of my findings as they give a holistic view of each interview and comment on the process of my interviews as well as the experiences that my participants discussed and upon which I built my ethnography. After some consideration, I decided that the clearest way of presenting these findings was in a narrative style, so that what follows is essentially a "story" about my interviews which runs chronologically from the first to the last encounter. This narrative will focus on two principal "characters" in my research story: the interviewer, whose perspective illuminates the evolving

process of the research study; and the participants' perspective, which provides insights into what it is like to be a GP trainer. In this section I shall refer to the participants by their interview title (such as 'A' or 'Dr A' etc).

The first interview was somewhat anxiety-provoking for me. I was worried about the technical aspects of recording the conversation and aware how "highstakes" this situation was for me as a researcher, and how precious the time I had negotiated with my participant was. I had asked to interview A as we had worked closely while he had supervised a challenging trainee, and I had been impressed by his reflective and thoughtful approach to training. My precaution of using two recording machines paid off when my digital recorder ran out of memory about 5 minutes before the end of the interview; though coping successfully with this glitch boosted my confidence in the subsequent interviews. Dr A was keen to read through the interview questions before the interview itself and was helpful and generous with his time, expressing his thanks for the opportunity to talk in depth about his experiences as a doctor and teacher at the close of the encounter. Although this was a pilot interview, I was keen for it to be included in my final project if possible, though my questioning style was still developing in this encounter to some extent. At the close of the interview, I asked A some questions to evaluate my choice of topic and questioning style and was reassured that my interview did not miss any important points or areas that A had wished to discuss.

Unknown to me at the start of the interview, it transpired that participant A had been trained by participant D. At this point I had already arranged a date to interview Dr D and neither A nor D were aware of each other's involvement in the research project. Given that A's comments about D were universally

positive, and their ongoing relationship good, I saw no barrier to continuing to include D in my study. However, I was glad to avoid the research dilemma of interviewing a participant about whom I had previously been told negative information, so that my opinion of their practice might have been tarnished before they had a chance to speak to me. I also tried not to let the positive regard of participant A for participant D cloud my view of their opinions during their interviews, and to avoid seeing D through "rose tinted spectacles". In addition, given the nature of my study population, it was unsurprising that some of the participants knew each other, or had worked together in the past.

Moving on to consider my participant's perspective, my chief reflections upon A's views of the relationship between clinical and educational practice were that he valued the personal relationship between trainer and trainee, but was guarded about discussing his personal life with patients. For example, he had no photographs of his family in his consulting room which is unusual for most GPs in my experience, given the origin of the GP as a doctor who often worked from their own home and who tend to see themselves (and wish others to see them) in a "human" way; i.e. equally as a person and as a professional. I wondered if A was using teaching to express a different aspect of his professional persona, away from the clinical setting where he did not feel comfortable discussing his own personal life with patients? He also described himself as being methodical and risk-averse as a clinician, though very approachable as a teacher. Dr A drew several parallels between the professional skills he used as a GP and as a teacher; for example he considered that individual teaching and consulting skills were very similar. A also discussed the way he approached diagnosis (or problem solving) when considering a clinical or educational problem; sometimes the solution was

based on logical thinking, but often it was based on pattern recognition. To illustrate this, he gave the example of supervising a trainee who appeared uncomfortable who A immediately recognised might be facing significant personal difficulties. The speed of this recognition was a result of A's experiences as a clinician and trainer, working with patients and trainees displaying similar behaviours in similar circumstances. Finally, the importance of A's own experiences of learning were vital to his development as a teacher and clinician. Dr A described numerous examples of people he had worked with who were role models (including D), and his desire to teach seemed to be strongly influenced by skillful teachers he had met through his career. Dr A cited a book by the politician Michael Foot ('Debts of Honour') as being influential on his practice, and felt he was paying some of his personal "debts of honour" to his old teachers by becoming a trainer himself.

The second interview posed me fewer challenges in the process of recording and questioning. By this stage I had settled on a format of asking "how did you become a trainer?" as an initial opening question, followed by taking an educational "life history" from the participant and then focusing on my research question with more closed questions towards the end of the interview, if necessary. This formed a blueprint for most of the following interviews, though I did deviate from this format in some instances, which I shall discuss below. My choice of B as a participant again reflected shared experiences of working with a challenging trainee. B had given this individual skillful support and not been afraid to challenge both the person concerned and the system around them with thoughtful arguments about medical education that suggested a critical approach to her educational practice. Dr B gave a powerful description of how her schooling and upbringing had given her strong values of personal

responsibility as a teacher, trainee and clinician. As a part-time female GP trainer juggling career and family life, I was surprised to hear how B felt this was a positive advantage in her training role: she was forced to multitask and ensure clear boundaries in her life, and was not afraid of saying "no" when she had to. For B, this provided a clear example to trainees about how to manage their work-life balance. Reflecting on my surprise at this. I was reminded to avoid making assumptions about what conclusions others might draw from the challenges in their lives. In common with Dr A, B gave several examples of teachers who had been influential upon her development as a clinician and teacher. Interestingly, some of these were negative experiences, which led me to consider how "bad" learning experiences could have long-term outcomes as positive as "good" ones. Thus the term "role-modeling" might be applied equally to positive and negative learning experiences; perhaps it is the subsequent reaction to the experience that was the key element in the formative process of learning. After sharing the transcript with B, we had a brief email exchange about the topics we had covered; I included this in the transcript for my analysis with her consent.

Interview C was more complex than either of the two preceding meetings for a variety of reasons. I decided to interview C because he had a great deal of experience in different roles in GP education which included many years as a trainer. He was also a colleague my own practice and had completed a Masters degree in medical education, and was a person who had clearly thought a great deal about the role-duality of teaching and being a doctor. Additionally, while C nominally occupied a senior position to me in our practice hierarchy (and the role-reversal of this in the interview setting was potentially problematic) I would describe the culture of the practice as very non-hierarchical. He also preferred a

discursive style of speech and often joked about his inability to answer a question directly, thus making him a potentially challenging interview participant. Despite these reservations, the process of the interview was quite straightforward. Importantly for me, C seemed to genuinely enjoy the interview and thanked me for the experience afterwards. As a teacher and doctor, C brought his childhood values of nonconformism and non-judgementalism to his practice. C questioned the values and beliefs underlying practice in a critical way, and his enjoyment of teaching seemed to be based around helping trainees learn how question their practice as well. There was a profound integration of educational and clinical practice, indeed at one point C said 'they are the same'. This viewpoint had been arrived at over many years' practice, reflection and subsequent reconstruction of practice. I felt privileged to have the opportunity to be able to gain this type of insight into my field of research.

I had initially wished to speak to D in my pilot interview, as I had touched upon my ideas about clinical and educational practice with him during previous conversations. D was a widely respected and highly experienced GP and trainer with a particular interest in clinical reasoning; though I had relatively little professional contact with him in my various educational roles. In this interview, I decided to deviate from my interview tool significantly, fitting with my semi-structured interview structure and data-analysis approach I discussed in chapter 4. This decision was taken because I wanted D to be able to lead the interview more, as I felt he might illustrate areas of practice I had not considered up to this point. I was not disappointed; while we touched on some of the previous ground about the links between clinical and educational practice, we then moved into deeply personal territory. D's openness about developing trainer-trainee relationships, and the difficulties of maintaining professional boundaries

between trainers and trainees (mirroring the doctor-patient relationship) was both illuminating and unexpected. This discussion felt uncomfortable for me at times, making me wonder whether D was treating me a professional confidante rather than as a researcher, a situation Smyth and Holian (2009) warn can complicate the insider researcher's role. To ensure I used this data ethically, I repeatedly checked during and after the interview that D was giving informed consent for me to include this data in my thesis. To me, the nature of this disclosure reflected D's maturity and comfort with the holistic and personal nature of his practice both as a teacher and doctor; and perhaps illustrated my own inherent discomfort with this "softer" side of professional practice. D was clearly someone with a deep emotional attachment to his work and unafraid of showing this to others.

In contrast, interview E was much more "businesslike", and returned to my usual format which was somewhat disorientating after the previous two encounters. I felt that as an experienced female trainer, E was from a relatively underrepresented group amongst GP trainers locally, and might have had experiences which were significantly different from mine. E had a more guarded approach than any of the previous interviews, despite this, our rapport seemed good and some new themes emerged. These included E's values about fairness and opportunity based upon her Christian beliefs; this extended to having faith in troubled individuals, and giving doctors who had been suspended by professional bodies opportunities to retrain under her supervision.

Interestingly, Dr E contrasted this with the need for clear boundaries with patients and trainees. E again saw clinical and educational practice as being intimately linked and her motivation to train stemmed from a desire to avoid isolation and to encounter a broader range of influences in her professional

practice. E also used an approach in her clinical practice to reframe her thinking about patients who were "problems" into "challenges", which drew on educational principles of problem-solving and reflective practice.

I had met Dr F at his first trainer approval visit and sensed an immediate rapport between us. He was also somewhat unusual for my geographical area of work as he was based in a small rural practice, and I felt this was an important group of teachers to include in my study. We seemed to have shared values about clinical practice and education and while this feeling was based on relatively little information at the time, it later it emerged that our family and school backgrounds were very similar. Dr F was a new trainer, though he was an experienced GP, and I wondered what this differential of skills and knowledge between his teaching and clinical roles would make to his professional development as an educator. F described the importance of respect for both patients and trainees; and he shared his personal stories with those he worked with. It was apparent that F had used his clinical skills to develop rapidly as a teacher, but he also said that becoming a trainer had improved his consultation style as his listening and concentration skills had been developed through teaching and tutorials in particular. As part of his trainer course, F had undertaken a Postgraduate Certificate in Education which required him to undertake pieces of critical reflection about his teaching. Though initially F found it difficult to say what the benefits of this course were, he then went on to describe his improved understanding of the nature of professionalism. In particular F spoke about how understanding ideas like the tensions between Technical-Rationalism and Professional Artistry had given him "names" to describe discomfort he had long felt in his own practice, but not been able to articulate. Such philosophies are deeply embedded into the traditions of GP

education as discussed in chapter 1, but often at a level that means those who use them every day have not articulated or examined them before in detail. Both F and D had said that if they had not become doctors, they would have been teachers.

My final interview was with a trainer with whom I had done my own initial GP training course some eight years before. G worked in a large practice and at times her body language suggested to me that she was anxious about giving the "correct" answer in the interview. I spoke more during this interview than I had done in previous ones, and some of the interview was concerned with checking through the data I had collected to this point. I also explored G's thinking about what happened in tutorials and her views about the trainees' electronic portfolio of learning. In common with other participants, G had negative and positive learning experiences in her past but used both of these to develop her teaching practice. She also commented on using diagnostic problem-solving skills when trainees were having difficulties. Finally, G described how becoming a teacher had improved her IT skills.

My approach to interviewing developed throughout the process of data collection and the interviews could be seen as a continuous process with each interview informing the next, through subtle adjustments to style and format being made by me as the researcher. My decisions about these changes were guided by my transcripts, field notes and my clinical and educational skills as I drew on my experiences of interactions with people as a doctor and teacher to judge when to speak and when to listen; just as the trainers I spoke to did in their teaching, and in their consultations. Many of the participants described intimate links between their clinical and educational practice, for example:

- The use of "consultation" skills in teaching.
- The use of "diagnostic thinking" with trainees.
- Using "teaching" thinking skills to reframe clinical problems.
- The parallels of personal boundary issues with trainees and patients.
- The potential of becoming a teacher to enhance consultation, IT skills and understanding of professionalism.
- How teaching could allow GPs to express another side of their professional persona.
- The pervasive influence of participants' values and earlier experiences as trainees on their subsequent clinical and educational practice.

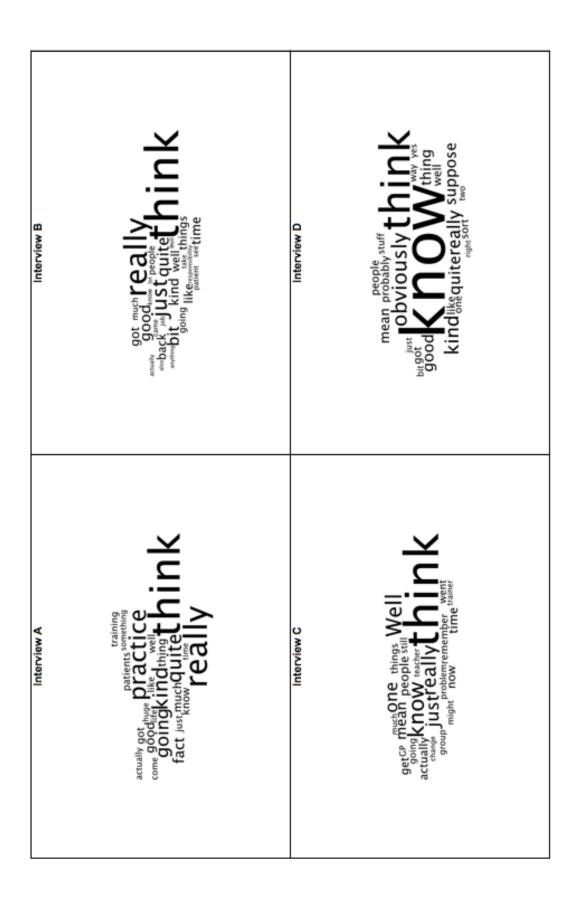
Considering these global impressions of my data gave me some significant insights into the interaction between GP trainers' clinical and educational practice, and the nature of the links between these professional roles. The next step in my analysis was to better understand the fine detail of my data by "drilling down" into my transcribed interviews in greater depth. I shall now describe this process in the remaining sections of this chapter.

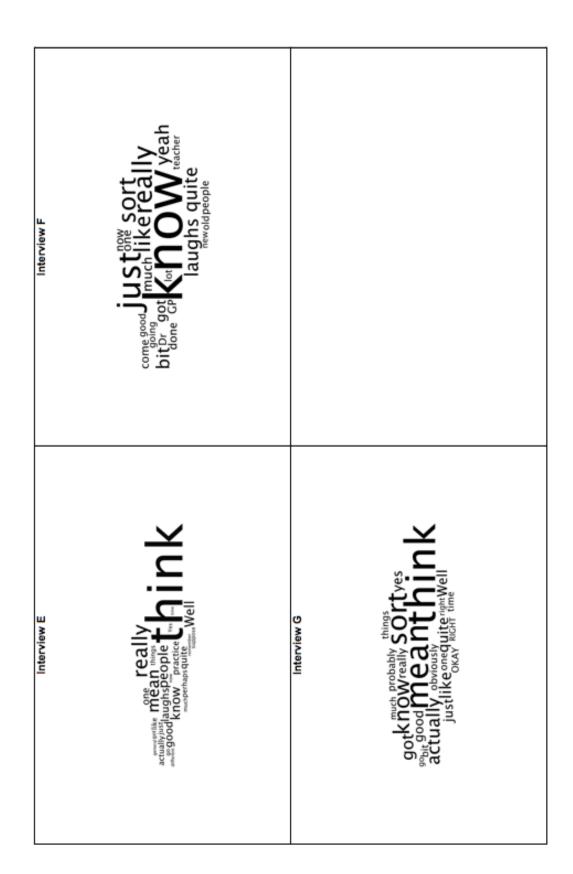
6.4 Word Cloud Analysis.

I generated a word cloud for each interview transcript through the process described in detail in section 4.7 and these word clouds I are shown in Figure 6.1 on the following two pages. The initial contrast between the global analysis and word clouds left me with the impression that all the meaning and value of the interviews had been removed by the process of transforming my interview transcripts into word clouds. The individual voices of each of the trainers I had spoken with seemed to have disappeared and the de-contextualised data appeared to lose its meaning. For example, the word 'think' appears frequently in many of the word clouds, but what does it signify? The word could appear in sentences such as 'I think this is vital' or alternatively 'I don't think this is important' - both uses of the word would count equally, which appeared to me to be deeply problematic. Additionally, if an external observer examined the word clouds, it is more than possible that they would be unable to even say what the general subject matter of the interviews had been. To illustrate this point, words associated with education such as 'teacher', 'training' and 'trainer' only appear in three of the word clouds; and medical terms like 'GP', 'Dr' and 'patient(s)' only appear in four word clouds. Three of the seven word clouds contained no words specific to medical or educational practice.

At this stage of the analysis, I wondered if word clouds were more appropriate for the analysis of extant texts, such as books or reports (as described by Gill and Griffin, 2010), rather than elicited texts such as interview transcripts where the non-verbal and contextual aspects of the encounter are often as important as the individual words that make up the interview. However, while I echo the views of McNaught and Lam (2010) that the limitations of word clouds mean

Figure 6.1 Word Clouds from Interview Transcripts.





they are not a sufficient means of data analysis without other complementary approaches, I began to see several other possibilities in this form of analysis which I shall now expand upon, putting my **key findings in bold**.

Firstly, it can be appreciated from looking at the word clouds in Figure 6.1 that they have similarities and differences; and the ability to generate a meaningful analysis from such a rapid impression is an important advantage of using words clouds for data analysis. World clouds for interviews A,B,C,E and to some extent G appear similar with the word 'think' in largest text, whereas interviews D and F look different to the others with the emphasis on the word 'know'. When I considered this, I returned to my global impressions and realised that the level of rapport with participants D and F seemed deeper that with the other participants, which was reflected in the personal nature of the material we shared in the interviews; and so word clouds helped to support my global impression that these interviews were somehow different to the others. This observation was important to recognise and explore further in my thematic analysis to see if interviews D and F gave alternative insights into clinical and educational practice, and I will consider this further in section 6.5. In addition, specific terms such as 'responsibility' were high count words in cloud B; this term correlated with my global impression of the deep personal values regarding responsibility that Dr B brought to her practice. Furthermore, the appearance of the word 'think' linked with themes that emerged from my global impressions, such as 'diagnostic thinking' and 'thinking skills'. Overall, these findings support McNaught and Lam's (2010) assertion that word clouds can be useful for both **preliminary analysis** of data, before the thematic analysis in my case; and validation of findings from other approaches to analysis, such as the global impressions in this study.

Secondly, the similarities between interviews A,B,C,E and G suggest that broadly the same words were used during the conversations in these interviews. This observation might be used as a crude **test of reliability** in the study; that similar topics were discussed with different trainers throughout the interview process. This could, of course, be viewed as a positive or negative finding; while consistency is helpful to ensure data collection remains relevant to the research question, excessive rigidity of the interview process could stifle the exploration of new avenues of knowledge though an excessively formulaic approach.

Thirdly, all the words in the clouds except two are in lower case, signifying that they were spoken by the participant. Both of these upper-case words ('OKAY' and 'RIGHT') were spoken by me as the interviewer in the final interview. As I wrote in section 6.3, this interview included some rechecking of my data collected to that point, though I did explore some other new topics as well. Kvale (1996) asserts that the balance of talk in an interview should be firmly biased towards the participant, and the ability of word clouds to demonstrate that the only occasion where the interviewer spoke some of the 30 most frequently occurring words in any interview during this study was during the final one, is a useful and rapid means of assessing data collection quality.

Fourthly, at the conclusion of interview G, I felt I had "saturated" the possibilities for data collection in the interview phase; my impression was I had not learnt a great deal more from my final interview and this is typically the stage at which qualitative researchers are encouraged to draw their data-collection to a close. This judgement is a difficult one to live with for a researcher brought up in the quantitative tradition, where the use of large numbers of samples is an important test of validity. Reflecting on this personal discomfort, I began to

analyse the word counts in more detail by transferring them on to an Excel spreadsheet which is shown in Appendix 6. There were a total of 71 different words that occurred in the seven different word clouds. Analysing in further detail, I counted the ten most commonly occurring words which are shown in Table 6.2 In addition, I then counted how many "new" words were added by each interview; and then how many "unique" words were in each interview that were not in any of the other interviews. Graphs showing the counts of "new" and "unique" words are shown in Figure 6.2.

Table 6.2 Ten Highest Frequency Words in Word Clouds.

Word	Number of times counted
Think	365
Know	269
Really	222
Just	158
Quite	139
Good	112
Like	109
Got	104
Kind	98
Well	95

Figure 6.2 Number of "New" and "Unique" Words in each Word Cloud.

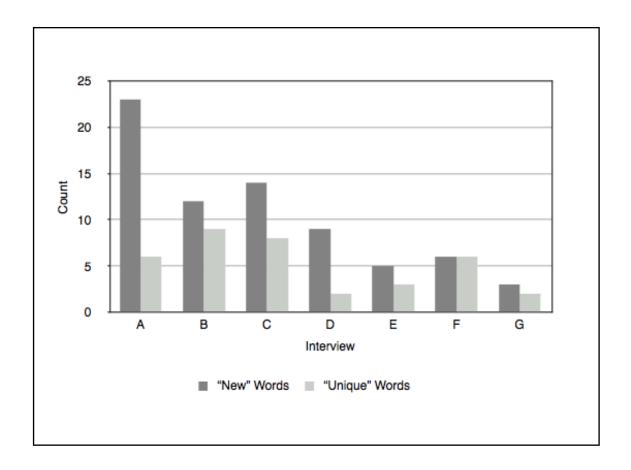


Figure 6.2 shows that the addition of "new" words to those found in previous interviews showed a decline through the interview process. This reduction in the number of new words added by each subsequent interview supports my impression that by the seventh interview, novel data was less commonly encountered. In addition, words which were unique to each interview were more common in the first three interviews and then became less frequent, except in interview F which, as I have stated above, appears to be somewhat different in its format to the other interviews. I believe that this method of using word clouds to support the researcher's impression that a qualitative data-collection approach has become "saturated" is a helpful, and possibly novel, one.

In summary, then, while word cloud analysis did not help me move towards a better understanding the relationship between GP trainers' clinical and educational practice *per se*, word clouds were useful as a tool for assessing methodological processes in this study. Word clouds were helpful as a means of rapidly assessing aspects of the quality of the data in my interviews, such as amount of interviewer talk and consistency of questioning between different interviews. In addition, word clouds validated some of my global impressions and gave preliminary indications of interesting variation in my data (such as interviews D and F), supporting other data analysis approaches. Finally, word clouds allowed me to gain purchase on the contested area of when to stop interviewing, supporting my impression that I had collected adequate data by my seventh interview through analysis of "new" and "unique" words. I believe that this use of word clouds to assess "saturation" of data-collection is a potentially novel methodological approach in qualitative data analysis.

6.5 Thematic Analysis.

When I developed the procedures for my thematic analysis, my guiding principles drew upon Gibson and Brown's (2009, p132) approach which they term 'empirical analysis' of data. As I stated in section 4.7, my aim was to draw themes out of my transcribed interview data in an attempt to understand the fine-grain detail of GP trainers' experiences of being teachers and clinicians, and to consider how these roles interacted with each other. In this section of the chapter, I will begin by addressing how I developed a coding system and then illustrate the themes that emerged from my data.

6.5.1 Developing a Coding System.

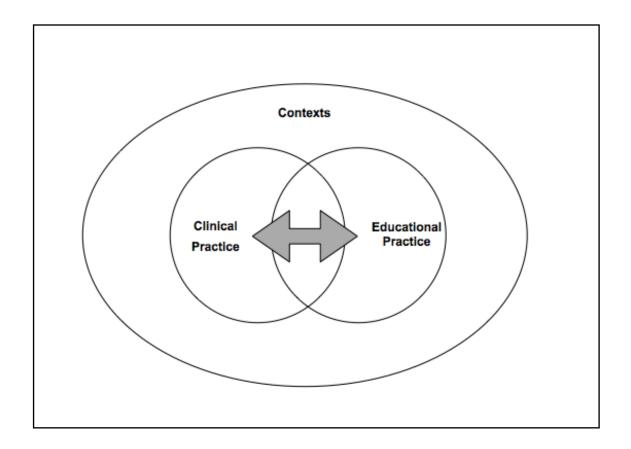
I kept a coding log while I carried out this stage of the analysis and I will draw on this log to offer a clear explanation of my coding procedures throughout this section of the chapter. My initial approach to coding was based around the themes that I had developed at the end of section 6.3 in my global impressions. This became a system of approximately 20 themes which I then applied to my first interview transcript. I quickly realised that I had made an error in this approach; I had developed a theoretical coding system, from my own global impressions, and then reapplied this to the fine detail of my data. Unsurprisingly, this approach was generating little new data and simply reinforcing my previous analysis. Despite this false start, this first attempt did provide me with some helpful ideas; I devised a way of recording my codes, and noting where I found data that supported them; I also developed a system for recording the location of helpful quotes to illustrate my coding system.

I left four days between this hesitant first attempt and returning to my data. In this time I realised that I needed to have a much more "open" conception of my themes to allow codes to develop empirically from the data. Returning to Gibson and Brown's (2009) advice to base codes upon repetitions, emphasis, agreement and disagreements, errors and omissions and to then allow broader themes to emerge from this stage of the analysis, I re-conceptualised my thematic analysis as having three broad areas, which were:

- I. Influence of clinical practice on educational role.
- II. Influence of educational practice on clinical role.
- III. Contexts of educational and clinical practice both personal and organisational.

This concept is illustrated in Figure 6.3 as a Venn diagram.

Figure 6.3 Initial Themes for Thematic Coding.



I repeated my coding of the first interview and found that many new sub-themes began to emerge from this process. I then adopted a systematic approach by coding each interview on two occasions with a break in-between to allow me to reflect on the process; this also helped to reduce any errors or omissions in my first coding attempt through a second reading of the transcript. When new sub-themes emerged, I transferred them to my coding spreadsheet with the details of the location for code in the transcript. This spreadsheet expanded rapidly and I found that I created, deleted, split and merged codes as the process continued. After I had coded Interview E, I identified three sub-themes that I had noticed in that interview that I had not identified in my previous transcripts, so I returned to the preceding four transcripts and went through these in detail again

to check these three specific sub-themes. At several points during the thematic analysis, I returned to individual sections of the interview data to check exactly what was said, or how it was spoken to ensure the validity of my analysis.

I shall now describe the **themes and sub-themes** that emerged in my analysis, illustrating them in bold text throughout this section. I will support these themes with quotes from my interview transcripts, and where quotations are <u>underlined</u> this demonstrates that they were strongly emphasised when originally spoken by the participants. Finally, my findings from this section of the data analysis, with all the themes and sub-themes I describe in this section, are summarised in Table 6.3 (p150) to give an overall picture of my thematic analysis.

6.5.2 Influence of Clinical Practice on Educational Role.

It was clear that there was a strong influence of clinical **communication skills** on GP trainers' educational work which emerged in five of the seven interviews, echoing Pitts' (1996) findings from his analysis of GP trainers' tutorials. Several participants commented on the skills they used in their teaching practice:

I've had a couple of Registrars who three or four months into their training they have a little bit of a wobble...teasing that out and working that out you very much use the skills that you'd use as a doctor. (Participant A)

I also monitor myself with any statement I make or if any statement that a learner makes, which is like picking up a cue with a patient, it's not different. (Participant C)

There's lots of crossovers in there where you talk... you're imparting knowledge or experience...the mechanics are very similar aren't they? How you start, how you finish, how you wrap it up, how you reflect, how you

check on understanding. You do that in tutorials, you do that in consultations. So it's almost the same thing. (Participant F)

Giving more detail, Participant B described her use of Socratic questioning with both patients and trainees:

the kind of stuff I do with patients about... I do a bit of Socratic kind of questioning and so "have you been in this situation before and then what have you learnt from that?" "Do you think this will happen this time", particularly with the depressed patients, the patients who've got themselves into a hole. So then using that back in the trainee trainer relationship. (Participant B)

Participant C described how he took risks with communications with both patients and trainees:

And as a teacher I <u>risk things</u>, I risk saying things knowing that I might say the wrong thing and I have said it because a risk means you get it wrong sometimes and I risk things with patients. (Participant C)

The next theme that was evident was that GP trainers used their experience of clinical **diagnostic thinking** to solve educational problems echoing Benjamin and Hossam (1993) and Pitts et al's (2001) findings. This thinking was often based upon pattern-recognition, rather than logical deduction, as illustrated in the following extract:

When we do consultations somebody walks in a room and you pretty well know straightaway where you're going... it's basically pattern recognition...I think that the same goes for Registrars really, that you get very good at having a look at them in the morning, or watching them consult, and having a pretty good idea of where they're coming from and how they're functioning. (Participant A)

The issue of **interpersonal boundaries** was also considered significant by several participants, and trainers seemed to draw upon their experience as

clinicians when setting boundaries with their trainees. Several participants noted how they had clear and firm boundaries between themselves and those with whom they worked, an approach very much in the traditions of the professional guidance from the medical establishment of detachment and objectivity as a doctor. However, it was clear that some participants felt that having more flexible boundaries with patients and trainees could also be tolerated, and indeed pose a positive attribute at times. For example, F gave an example of abandoning his usual insistence on the use of surnames when looking after a patient through a terminal illness. Participant D discussed this is greater depth, as mentioned in section 6.3:

I think it's a complete hypocrisy...I think if you give most GPs a couple of glasses of wine and get them on their own the thing...that they find most powerful is the relationship with their patients...of course there must be boundaries, they're essential but if you follow the GMC guidelines about it being a purely professional relationship then I think you will never do the job properly as a GP... by the nature of the work involved in the most important events in people's lives...you'd have to be an extraordinary kind of robot not to have some feeling you know. (Participant D)

This trainer went further, discussing sexual attraction between trainers and trainees in his early career as a teacher, though making clear that no improper behaviour had taken place. These tensions in his teaching role were analogous to the position of power that a doctor occupies over a patient, with potential risks to doctors and patients if the relationship became deeper. I felt that decisions about professional conduct as a physician influenced where boundaries were set for his role as a teacher, though for D these boundaries as an educator were somewhat different:

I'm kind of quite comfortable with letting my own emotions show as well...it has its risks if you get it wrong you can, you know, it can be inappropriate...I've had some very wonderful young women registrars...as I'm sure you know, the place where things can go...can become unprofessional...and that hasn't happened, but I don't need to say it could have done because they're intelligent, thoughtful, enthusiastic young women....I don't know how much this stuff is talked about in the higher echelons of training but I think it is a potential issue...(Participant D)

The final topic under this theme was the influence that clinical **organisational skills**, such as careful record keeping, were drawn upon in some trainers' educational practice with careful note keeping becoming even more important if the trainee was struggling.

6.5.3 Influence of Educational Practice on Clinical Role.

communication skills, particularly during patient consultations. This type of benefit to clinical practice from teaching has also been discussed in the literature by Walker (1988), Howe and Carter (2003) and Waters and Wall (2008).

The range of skills that becoming a trainer seemed to affect was wide, including: improved ability to run on-time; using more open questions in consultations; and use of consultation models such as Transactional Analysis (Berne 1968) after encountering them in an educational setting. Overall, becoming a trainer seemed to improve physicians' ability to listen, as the following extract illustrates well:

- JL DO YOU THINK IT'S CHANGED YOU AS A CLINICIAN AT ALL?
- F Yes and I think the <u>best</u> way it's changed me it makes me listen more.
- JL RIGHT, OKAY.
- F Yeah. I wrote about that in my essay ((laughs)). No I think one thing I've realised I've had to do is especially say during tutorial...it's important to really <u>listen hard</u> to what they're saying maybe you're going to miss things and I sometimes maybe in the past I haven't always been that real <u>deep</u> listener and so what I've tried to do is I've tried to do that in consultations as well.

Educational work also seemed to have an influence on GP trainers' organisational skills, in particular one trainer noting her trainee had updated her on information technology. In my study, only one trainer specifically stated that they learnt clinical information through teaching though keeping up to date with new clinical knowledge is a frequently cited reason that GPs give for wanting to teach (Spencer-Jones (1997), Howe and Carter (2003), Grant et al (2010)).

The most commonly stated influence of educational work upon clinical practice in this study was that teaching gave GPs the opportunity to **reconstruct their professional identities**. By this, I mean that teaching allowed GPs an opportunity to think more deeply about their professional role and practices and what that *means* to them. At one level this could involve thinking more carefully about their clinical decisions, for example one participant commented:

if you have to <u>teach</u> something you have to explain it don't you and you have to tease it out and look at it from different angles. So I think it makes a big difference really. (Participant E)

However, some trainers took this reconstruction to a deeper level:

there's a lot of doctors that come out of medical school...they're taught that this is how they must do it, and they've got NICE guidelines coming out from every blooming direction, telling them what they should use <u>and when</u>...politicians telling you to do this and that...and so it's really important to get a <u>grasp</u> of that professional artistry and that is, you know, I feel quite passionate about...and you can't measure it, by its definition it's an art, it's a...it's a feeling... (Participant F)

This reconstruction was often done in tutorials with trainees, but one trainer used the experience of undertaking a master's degree in education to deepen his thinking:

I've realised when I did my MA, I reached another level of understanding by writing it down, which is not a skill I'd...I can do it, I don't enjoy it and I avoid it, but I do know...it takes the reflection to a more <u>fixing</u> level. (Participant C)

The outcome of this enhanced understanding of their professional practice seemed to be twofold. Firstly, three participants spoke about the enhanced value that they had in their own roles, in particular Participant A said that:

I think that training...made me realise that in fact I <u>do</u> know something, that general practice <u>is</u> an entity...what else did I think about...and so I value what I do higher than I did before. (Participant A)

Secondly, participant C used educational interactions to enhance his own, and his trainee's wellbeing:

I don't really want her to be a better doctor, I want her to be a happy doctor who can survive the NHS and I think the only way to do that is to listen to patients...and I don't help doctors be better teachers for the...in many ways for the student, the learner, I do it for their own...it's so they survive (Participant C)

Grant et al (2010) and van Der Wiel et al (2010) also suggest that physicians can enhance their clinical skills through teaching, with this development occurring though teaching conversations with trainees. Stenfors-Hayes et al (2010) describe how being in a mentoring role can provide opportunities for physicians to reflect about their roles as teachers and, to a lesser extent, as clinicians. In my findings there was a sense that the participants' understandings of who they were and the work they did as professionals changed profoundly as a result of their educational role. This change had similarities to Walker's (1988) description of GP trainers' identity reconstruction during an GP trainer course (see section 2.4), though in my study the development was described longitudinally and as part of an ethnographic picture of everyday GP trainer practice. I shall return to this finding in chapter 9.

6.5.4 Personal Contexts of Practice.

Three key themes emerged under this heading, specifically: **experiences of teaching and learning**; **personal values**; and **career choice**. I shall consider each of these in turn.

Experiences of teaching and learning which were influential on clinical and educational practice ranged from schooling through to teaching other qualified GPs to be trainers. School experiences were mentioned by five participants and were all positive, except for one participant who struggled at school - possibly because of dyslexia that he recognised in himself later in life. Teachers were seen as inspirational figures by three participants, and one trainer felt a teacher had "championed" her cause by opening doors to get her into medical school

after speaking to an influential medical school tutor in support of her application to university.

Experiences of undergraduate learning varied, and were mentioned by two participants. As stated in chapter 1, postgraduate training for general practice involves time spent working in hospitals and then in a GP training practice. The time working in hospitals was viewed negatively by the one participant who mentioned it, citing dislike of large organisations and the feeling of being exploited as a junior doctor. However, this participant also mentioned that in one overseas hospital post she undertook, she was taught to develop holistically and had also enjoyed some of the outpatient work in secondary care in the UK.

By far the most influential phase of training for the participants was their own GP trainee year, which was mentioned by six of the seven participants as being a formative experience for their clinical and educational practice. This year often involves a close relationship with a GP trainer and regular formal teaching sessions on a day-release course (DRC). The sessions on the DRC were noted as a positive experience by three trainers, but the relationship with their trainer was seen as the most important part of their training in general practice. This relationship is well illustrated by the following quotes where participants speak about their relationship with their own GP trainers:

from D I got...a glimpse into his very complicated deep, kind of view, of not just training but being a doctor, but also what it's like to be..you know...working hard, the stresses and all that kind of stuff. So he was a real inspiration. And...he was somebody I always thought that if I ever was to train then he would be somebody who...I would if not try to emulate I would take onboard his influences. So I think it was through inspirational trainers really that I thought I'd go for the training. (Participant A)

I liked his laid-back manner and giving me responsibility, and his very level approach to things which I think very much matched my approach to people and medicine anyway, so we were a good meeting of minds I think... He's quite dynamic, he's quite interesting, he's quite... He's a much broader person than just being a GP and I think that's quite important, and... I think that was important for me, and he's a really good mentor and we kept in touch for quite a long time. (Participant B)

At the core of this relationship seemed to be the sharing of trust and the experience of the participants being given responsibility with support as a trainee, and example of the journey from peripherality to centrality in the clinical community of practice (Lave and Wenger 1991). The influence of both positive and negative learning experiences in medicine providing a spur to teach has been commented upon in the literature by Spencer-Jones (1997), MacDougall and Drummond (2005), and King and Jenkins (2009). However, not all the participants had positive experiences in their GP registrar year. One participant was ambivalent about the year and did not form a close bond with his trainer. Two other participants had mixed experiences; one of these concerned a lack of personal confidence and dislike of being observed consulting; for the other, there was an unhealthy combination of an excessive clinical workload with minimal educational support.

Moving on to the **personal values** of the participants, I identified seven groups of sub-themes. Firstly, participants used their own personal life in their professional work in a variety of different ways. One was very guarded about sharing his personal life with patients, yet quite happy to divulge more personal information with trainees. This trainer felt strongly that the patient's difficulties should be the focus of the consultation, not the personal experiences of the doctor:

There have been quite a lot of instances where I feel GPs have offered personal information...but I think there should be enough space in the consultation room for them [the patient] to open up rather than this huge personality [of the GP] and our life and our pictures of our kids on the wall and all that kind of stuff. (Participant A)

In contrast, many of the other participants drew on their personal life to enhance their role as doctors and teachers. This was sometimes as sharing of life experience as a parent with the mothers of young children; or at other times through adopting a psychological "role" as a surrogate parent to a young trainee, or surrogate child to an elderly patient:

I think there is <u>some</u> point in sharing. I think you've got to be careful you're not either <u>competing</u> with a patient or using yourself as an example. I think what we're sharing is <u>empathising</u>, actually we're empathising with them and perhaps sharing with them (Participant E)

This sharing involved discussions about avoiding obsessional behaviours, to which some physicians become prone, and at other times there was an acknowledgment of the ability of a doctor's consultation skills to be therapeutic in themselves and how this might be learnt and then applied in practice.

Participant D was particularly comfortable in sharing his emotions with trainees and patients, though as stated before he accepted the risks to personal boundaries inherent in this approach.

The second sub-theme was about fostering independence in both patients and the trainee. Two participants mentioned how short a time each consultation lasts compared to the amount of time patients spend in other activities in their lives, considering it vital to hand problems back to patients to solve themselves with the doctor's support. Giving trainees responsibility was not seen as being without risks, and B spoke about two situations with trainees which had gone

badly, though neither ended in disaster. Participant C summarised this fostering of independence thus:

it's...uncomfortable when [trainee's name] writes down my wise words...[]... actually if you bring it down to a <u>question</u> and let's put it down, let's start from there. The fact is she's realised that that's the key. Now she...I want her to develop her own key, but as long as she realises that's the key then I can continue to say, "That's <u>my</u> key [trainee's name]. You can borrow it, but I'd rather you make your <u>own</u>." (Participant C)

Thirdly, three trainers discussed the need for mutual respect between physicians and patients as well as trainees. The participants seemed to be seeing equality with trainees and patients, and these values related to these doctors' learning experiences at school, university and in postgraduate education. Fourthly, three participants drew upon spiritual values in their practice, two from their childhood and its subsequent influence on their thinking, one as a person who continued to observe a religious faith.

Fifthly, two trainers had a strong internal drive to become teachers and they saw this a way of avoiding isolation or conflict in their practice and a means of fostering external support and benchmarking themselves against colleagues. This was not described in a competitive way, but more as a means of enhancing their personal development outside their immediate working environment, perhaps as an attempt to develop an educational community of practice. In his work, Spencer-Jones (1997, p37) termed this a 'professionally-centered' motivation to train.

Sixthly, five of the participants described sharing personal errors and examples of their fallibility with patients and trainees in a spirit of openness and honesty to develop their relationships with their colleagues. These were usually in the form

of discussions about instances when they had made diagnostic errors or learnt from their own mistakes.

Finally, there was a strong sense of holism in the participants' practice. This came through in a need to get to know their trainees well:

I'm very much into trying to learn quite a lot about them, maybe I'm nosey but that's probably why I'm a GP because I quite like people. (Participant F)

There was also a sense of holism regarding participants' clinical and educational practice being part a single professional entity, as illustrated in the following exchanges from interview C:

- JL DO YOU SEE ANY OTHERS [parallels] IN THE RELATIONSHIP?
- C What between being a doctor and a teacher?
- JL MMM.
- C No I don't see any difference. I <u>really</u>, <u>really</u> don't see any difference. You're teaching people new...they're coming in to learn something aren't they?

and in a similar vein, from interview E:

- JL WHAT YOU'VE LEARNT AS BEING A CLINICIAN, DO YOU BRING
 THOSE SORT OF THINGS TO BEAR IN YOUR LIFE AS A TEACHER
 AND A TRAINER DO YOU THINK?
- E Well, I think they are all woven up together, I don't see how you <u>can't</u> be really because it's not a job that you can separate is it?

The final theme in this section was around the participants' **career choices**. The decision to become a GP was based around flexibility for family life by one participant and the influence of their own family doctor when another participant was a child. A recurring theme was the desire of participants to practice as

physicians that centered on people, rather than focusing on the technical aspects of clinical care:

medicine is not an exact science at all, in fact I don't think it's a science at all. It makes me laugh you still need to get biology and chemistry and physics for ((laughingly)) medical school, for a lot of medical schools and I think you should just get away from that (Participant F)

Interestingly, two of the participants, C and F, had considered teaching as an alternative career to medicine at various stages of their lives.

6.5.5 Organisational Contexts of Practice.

Within this theme I identified three specific groups of codes which were: hostorganisation contexts; trainee diversity; and use of educational tools.

Under host-organisation contexts, several trainers were asked to train by
their colleagues, often at an early stage of their careers and with varying
success, as one participant felt this was too soon in his career for him to be a
good educational resource for his trainee. Generally, colleagues were
supportive of training, but in one case the level of opposition to teaching was so
significant that training had to be delayed until the partners who were resistant
had left the practice. In another practice, the partners were ambivalent to
training but did not obstruct the participant. Participant F felt that training had a
larger impact upon a small practice, and one participant used training status to
lever organisational changes in the practice, such as computerisation.

Participant G described how she had to "defend" a trainee when colleagues
were unhappy about the challenges that supporting a struggling trainee brought

to the practice. Both Waters and Wall (2008) and King and Jenkins (2009) highlight the importance of the support of the trainer's colleagues in GP training.

The participants noted that dealing with **trainee diversity** could be a challenge. This included three trainers who had taken trainees from different cultural backgrounds. Two trainers also commented on the difficulties of having trainees with very different levels of clinical experience and skill; in particular they described how they had sometimes felt unprepared for supervising recently qualified doctors, as opposed to the more experienced GP trainees they were used to working with. Having a newly qualified doctor to support could be challenging for the trainer and the entire practice due to their requirement for closer supervision throughout the working day.

The participants used a variety of **educational tools** in their practice. Principal among these were the GP curriculum document, its associated electronic portfolio (eportfolio) and assessment tools. Overall, the trainers had a positive view of these tools, citing the eportfolio as a potential stimulus to thinking critically about practice and as an aid to building and maintaining a relationship with a trainee who they supervised remotely during the hospital part of their training. One participant was frustrated at the slow-roll out of the eportfolio in its early stages and found this demotivating. Formal tutorials offered the opportunity for discussion of clinical practice which was seen as important to foster reflective skills in the trainee, often by taking the trainee to a position of uncertainty or 'cognitive disequilibrium' in Participant C's terms. Finally, the Deanery structures around training were discussed by three participants, who touched on 'the [recruitment] system' letting poor quality trainees though; the modular training course helping women to become trainers by reducing the

length of time spent away from home on training courses; and the way that GP appraisal had become a means of policing GPs rather than a supportive process. Before I summarise and finish this section, I will consider the status of interviews D and F, which I earlier suggested may have varied from the other interviews in the global impression and word cloud analysis.

6.5.6 Consideration of Interviews D and F.

In sections 6.3 and 6.4 I suggested that interviews D and F were somehow different from the others interviews, both in the level of rapport that I felt had been achieved during the interview meeting and in their word cloud structures. As part of my thematic analysis, I reviewed the contents of these interviews again in detail, as well as their word clouds. Interview D contained sections about the participant's family history and personal background, a discussion of the participant's emotional openness, and a diversion into this participant's particular interest in clinical decision making. Interview F started uniquely with the participant speaking, which was a continuation from earlier conversation suggesting a ready sense of rapport. This interview also contained considerable detail about the participant's schooling and family background.

I then looked in detail at the use of the word 'know' in these interview transcripts, as this was the prominent term from the word clouds for D and F. The majority of the instances of 'know' were in the phrase 'you know' in both interviews, though transcripts D and F also contained more instances of the word 'knowledge' than most of the other interviews. The word cloud software had counted the word 'knowledge' as the word 'know' (due to its stem) and this

increased the emphasis on the word 'know' in these clouds. On reviewing the other transcripts 'knowledge' did not appear in transcripts A, B and E; when used in transcripts C and G 'knowledge' was used to describe factual knowledge; whereas in D and F 'knowledge' was often used to describe a different form of professional growth and development:

it was great to meet some of the older GPs maybe, pick up a few gems, experiential gems really, I mean it wasn't really knowledge learning but it was just being able to sit down and chat with some of the ones who were coming up to retirement and reflect on their careers and stuff (Participant F)

I feel that this quote supports my impression that the use of the word 'knowledge' in interviews D and F framed professional development as gaining wisdom, or *phronesis*, an important part of the philosophy of GP education which I elucidated in section 1.3. In contrast, the word 'knowledge' in the other interviews was used as a description of factual exchange, or *techne* in Aristotelian terms. I shall return to this variation in GP trainers' views of professional development in my conclusions in chapter 9.

Overall, further analysis of my data support the impression that interviews D and F appear to be somewhat different from the other five encounters. Firstly, in the level of rapport reached between me and D and F, as evidenced by the personal nature of the subjects we discussed; and secondly, in the ways in which D and F overtly framed development as professional artistry, rather than technical mastery.

To summarise my thematic analysis, I have collated the themes and sub-themes that I developed through the coding process, and which I describe above, into Table 6.3, which concludes this first chapter of my findings.

Table 6.3 Summary of Thematic Analysis.

Area	Themes	Sub-themes	Sub-sub-themes
Influence of clinical practice on educational role	Communication skills		•
on educational fole	Diagnostic thinking		
	Interpersonal boundaries		
	Organisational skills	Record keeping	
Influence of educational practice on clinical role	Communication skills		
	Organisational skills		
	Reconstruct professional identity	Valuing own practice	
		Enhancing professional wellbeing	
Personal contexts of practice	Experiences of teaching and learning	Schooling	
	.cag	Undergraduate	Positive
			Negative
		Postgraduate	In hospitals
			In GP
	Personal values Use of personal life		
		Fostering independence	
		Mutual respect	
		Spiritual values	
		Internal drivers	Benchmarking against peers
			Avoiding conflict
			Avoiding isolation
		Openness and honesty	
		Holism	Of professional practice
			Of relationships with trainees
	Career choice		
Organisational contexts of practice	Host-organisation Support/resistance from colleagues		eagues
		Lever for change	
	Trainee diversity	Cultural diversity	
		Prior experience level of trainee	
	Educational tools Curriculum tools		
		Teaching conversations	
		Training structures	
		Training structures	

7.1 Constructing the Activity Systems.

In this chapter, I will present the Activity Theory (AT) analysis of my data from interviews and video-recordings of teaching. One of the principal assets of AT is the ability to expand understanding of an activity within its' social contexts, in this case the structures and processes behind GP training (which I described in section 1.3). I constructed activity systems for two participants using the transcribed interview data and video recorded teaching; for the remaining five participants I constructed the activity systems from the interview data alone. As a reminder of the structure of second generation activity systems I refer the reader to the discussion of Activity Theory in section 4.8, and I reproduce the generic diagram of an activity system from chapter 4 in Figure 7.1 below.

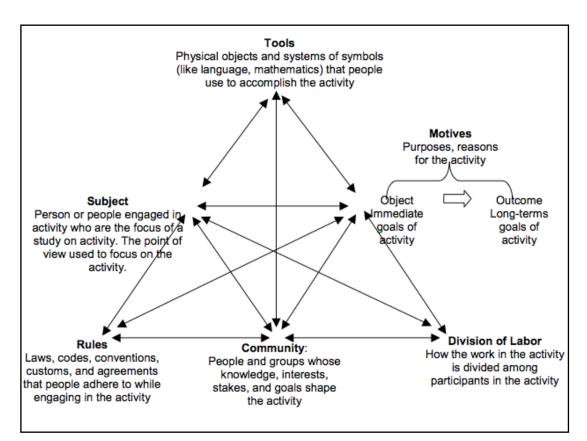


Figure 7.1 The Structure of an Activity System (Kain and Wardle 2011).

My activity systems focused on the educational interaction, primarily in tutorials, between GP trainers and their trainees. My approach to analysis drew on the work of Page and Clark (2010) in their description of teachers' activity systems, as well as that of Waters and Wall (2008), who sought to describe an activity system for a community of GP trainers. To construct the activity system for each participant. I read each interview through twice, coding sections of it against Kain and Wardle's (2011) Activity System Worksheet which I have included in Appendix 7. This process was done on two separate sheets which were then condensed into one summary sheet, the aim of this approach being to try to analyse the data thoroughly and then condense the activity system into a single diagram. I repeated this procedure of coding against the Activity System Worksheet while watching the video recording (where available), again coding twice and then summarising. I then used the summary sheets from the interview and video-recording analysis to form a single activity system for each participant, finally condensing the findings for all participants into a summary activity system for the all the data I collected, which is shown in Figure 7.2, page 166.

While this approach potentially diluted the unique contribution of each individual participant, the resulting summary sheet gives a further level of abstraction of the data and the ability to appreciate what is common across the different activity systems I examined. I have included my summary interview and video coding sheets for Participant C in Appendix 8 with some explanatory notes, so that the links between my analysis and the findings I present in this chapter can be appreciated more fully by the reader. In the following sections, I will describe the activity systems for each participant, highlighting important facets of their practice, as well as some of the tensions that emerged in the analysis in **bold**

throughout the descriptions. Overall, it became clear that while the interview data gave the participants' perceptions of their activity systems, the video data allowed the activity to be examined with greater clarity by me as the researcher.

7.2 Participants' Activity Systems.

7.2.1 Participant A Activity System.

Participant A used a variety of tools in his teaching, including verbal communication skills (which he likened to consultation skills) and discussing his own clinical experiences, particularly where there was learning from errors in his clinical practice. The rules of the system included the importance of building a **close relationship** with the trainee (a relationship which I also felt was a tool in teaching) and establishing clear boundaries with patients and trainees. The most important members of the community of practice were the partners in A's practice, but A also drew on his learning from his own trainer illustrating the historicity of this activity system. The division of labour was clearly that participant A was **delegated the role of training** by colleagues. There were tensions in this system between the way the community was organised around clinical work and A's role as a trainer, with the suggestion at times that finding the time for training could be challenging suggesting a rule that clinical work took priority over training. The object motive of A's activity system seemed to be encouraging trainees to become self-aware; the long term outcome was that A valued his own role as a GP more highly as a result of his educational work, linking to the reconstruction of professional identity through teaching that I discussed in chapter 6.

In B's system, the main tool that was evident was the **early devolution of clinical responsibility** to the trainee, also an example of division of labour. This
is a potentially risky educational strategy, but could encourage the rapid
development of clinical confidence in the appropriate context with a supportive
trainer. An appropriate context might be an example of what Hodkinson and
Hodkinson (2005, p123) refer to as an 'expansive learning environment' which
is 'one that presents wide-ranging and diverse opportunities to learn, in a culture
that values and supports learning'. In contrast, a 'restrictive' learning
environment might be one where workload is too great to allow time for
appropriate supervision, such as the situation which participant G experienced
in her own trainee year. For B, the **electronic training portfolio** was also used
as a tool to improve communication between trainer and trainee, particularly
when supervision was being done "remotely" and the trainee was not working in
the training practice, as is usual in the first 2 years of GP training.

Rules of the system included an **attitude of mutual respect** between B and others, and **clear interpersonal boundaries** with colleagues and patients. The community of practice (COP) again included the **participant's own trainer** and her current **partners** in the practice. There was also a broad range of influences on the participant's educational development from school through university and into family life. There was evidence of division of labour between the participant and her **co-trainer** in the practice. This was initially illustrated by tensions between them when supervising a challenging trainee, about whom they had some differences of opinion and approach; though these were later resolved through good communication and a sprit of mutual respect. I felt that B's object

motive was to help the **trainee to accept responsibility for their own learning**, reflecting important personal values that B brought to her professional work and sought to encourage in her trainees.

7.2.3 Participant C Activity System.

As well as the 43 minute interview, I used a video recording of 46 minutes and 30 seconds to construct participant C's activity system. The video was a recording of a tutorial where C was carrying out an assessment of his trainee's consultation and clinical management skills after watching a recorded consultation of the trainee seeing a patient with a gynaecological problem. The case was relatively straightforward from a clinical perspective, but required some careful negotiation with the patient.

The first tool that was used in the observed teaching was the **computer record of the trainee's consultation**, and the patient's **case history** that this encounter
concerned. For participant C, the **use of language** was an important tool in his
teaching; C described his background in the interview and the video recording as
having a high level of English language usage at school, home and in his
recreational reading. Language was discussed in terms of details of pronunciation,
intonation and selection of words and phrases; as well as how language may be
used to "manipulate" people and to allow the practitioner to take risks in clinical and
educational settings. Participant C used other teaching skills such as **role-play**, **analogy and feedback** throughout the video, as well as using the **assessment tools** from the curriculum as a means to shape and direct teaching and learning in
the tutorial.

The rules that C worked with included the formal curriculum assessment tools he used to assess his trainee's competence, as well as other professional codes of practice. These codes could be relatively formal, such as the principles of patient autonomy when discussing how to obtain consent to examine a patient; or more informal and seen as accepted "good practice", such as the duty for the doctor to exclude serious illness (or "red flags" as these are sometimes termed); and the careful use of resources for investigation and treatment. The need for the trainer's practice to be assessed by regulators was also touched upon and accepted in the interview and the teaching video. Finally, the teaching took place in an uninterrupted environment, something that had clearly required negotiation and organisation on C's part to achieve, but was not explicitly mentioned in the tutorial itself. As if to reinforce this, during our interview C was interrupted by a personal telephone call for which he apologised, saying this 'should not happen'.

The community of practice (COP) involved in the teaching included the **trainer** and their partners, the trainee, and the patient. This community was dynamic, as illustrated by the changing cultural contexts of practice of the trainee, who qualified outside the EU and was now working in the UK. In the video it became evident that in the trainee's country of origin a more "paternalistic" view of the doctor-patient relationship prevailed (patients would expect to be told what to do by a doctor in many developing nations); whereas in the UK, the ability to achieve partnership with patients is a vital skill for a GPs to demonstrate if they are to pass their final qualifying examinations. This reflects the societal change in power differential between professionals and clients which I discussed in chapter 5.

The division of labour involved C's partners who were closely involved in the decision to become a training practice. However, the workload for training in terms of supervision and tutorials was done almost exclusively by the trainers in this study and C was no an exception. There was a shared desire for the trainee to take responsibility for planning and assessing her own learning in the tutorial, echoing the advice of the GMC, RCGP and Deanery for trainees to lead their own learning. I felt the trainee's object motive was to complete the assessment tool during the teaching encounter; in contrast C wished to develop the trainee's language skills. The C's outcome motive was to help the trainee to deal with complexity more comfortably; the trainee appeared more focussed on passing their qualification examinations, illustrating a tension which I shall return to in chapter 9.

Several other tensions were evident in this activity system. Firstly, as an example of a primary contradiction in the activity system, there was a **tension** in the use of assessment tools: the trainee seeing them as a checklist for assessing competence; but the trainer viewing them a springboard for teaching and learning. Foulkes et al (2011) echo this tension between assessment of and for learning in GP training in the literature. C dealt with this by explicitly pointing out this conflict to the trainee, stating that he would first do an assessment followed by some teaching. In fact, watching the video shows that the teaching, learning and assessment occurred seamlessly throughout the 45 minute "assessment". Secondly, for the trainee in particular, there was a tension between the **skillful use of language in the consultation and the need to run on time and exclude serious illness**; an example of a secondary contradiction in the system between tools and outcome motives. This was addressed by C's suggestion that asking open questions and involving patients

in decision-making saved time in the long-run, echoing the opinions of the course leaders from Walkers' (1988) study; though in the video the trainees verbal and body language suggested ambivalence about this. Thirdly, the trainer's and trainee's view of the assessment of the consultation skills displayed in the patient consultation differed. The trainee felt they had been asking open questions and had made progress in becoming more "patientcentered" in the consultation; the trainer felt that the trainee still had to develop better use of open questions and ascribed some of this challenge to the trainee's non-UK background, which the trainee did not appear to fully accept. No resolution to this tension was observed, partially because it happened at the very end of the recording. Finally, as stated above, there seemed to be a tension between the trainee and trainer's object and outcome motives. The trainee was focused on passing their assessment, so they could qualify as a GP and enter independent practice; the trainer wished the trainee to develop their communication skills, for them to become more reflective and learn to manage the challenges of joining the community of fully qualified general practitioners. This was partially resolved by the trainer's use of formal assessment tools as an aid to reflective practice and of "what if?" questions to encourage trainee reflection and development throughout the tutorial.

7.2.4 Participant D Activity System.

The tools that D used in his teaching included encouraging the trainee to use **critical thinking skills** and using 'errors' and 'triumphs' (or significant events where things had gone badly and well) as a means to help trainees develop their diagnostic thinking. D's rules of the activity system included a **close**

relationship with both trainees and patients, more flexible interpersonal boundaries than would be tolerated by many trainers together with emotional openness with his colleagues and patients. Getting the correct diagnosis was also a key rule of D's clinical and educational practice. Positive learning experiences from D's past were an important part of his development as a teacher and community of practice (COP), as were his partners who asked him to be a trainer, though again the division of labour appeared that training was clearly his role within the practice.

Through encouraging trainees to re-examine their clinical practice, I felt that the D's object motive was to help trainees challenge implicit assumptions about their practice; the subsequent outcome was to develop trainees' clinical thinking skills by helping them understand their own thinking biases (or metacognition). For me these object and outcome motives seemed to be in a state of feedback with each other. Tensions in this system were most evident in the conflict between the boundaries set out by the medical profession as a corporate entity; and the realities of working with patients and trainees at the "coal-face" of practice, which were illustrated by D's discussion of developing close personal relationships with his trainees in chapter 6. Overall, D seemed to be focussed on helping his trainees develop as individuals, as opposed to simply qualifying to be GPs.

7.2.5 Participant E Activity System.

E used educational tools such as **reframing problems as challenges** as well as giving **clear feedback** to trainees in her teaching role. One of E's rules of

practice was to accept others as they were, which was informed by her own spiritual values including her Christian faith; E also emphasised the importance of clear boundaries with colleagues and patients. E's own trainer and colleagues from her training were important influences in the COP, again showing the importance of historical context for current practice. There were some tensions evident in the COP during this interview, in particular the route into training was felt to be difficult for women with young families due to the residential courses the Deanery had required prospective trainers to attend in the past. In addition, E's partners were not always supportive of her training ambitions, and at times held the power to block the path to training occurring in the practice.

E's object motive appeared to be to **experience practice in more depth**, she trained to expand her learning from everyday clinical work, terming this 'general practice plus'; for me, this was another example of identity reconstruction though educational work. E's outcome motive was to **broaden her COP** thus avoiding the potential for professional isolation, which she perceived as a risk in GP work. Again, the division of labour in this system was that **training was seen as being almost exclusively the trainer's responsibility**, with significant tensions illustrated by partnership conflicts about the place of teaching within the practice.

7.2.6 Participant F Activity System.

In F's system the main tools used by the trainer were **verbal communication skills** and the **application of theoretical frameworks** to better articulate his

understanding of professional practice. For example, models of practice as technical-rationalism or professional artistry, which were discussed on F's GP trainer course, which helped F "name" aspects of his discomfort about some aspects of his professional work. The rules in F's system included close relationships with trainees, and personal values about treating others with respect, which stemmed from childhood and school experiences. F was also protective of his personal family time, making a clear rule to be home to see his family at the end of the working day. Uniquely amongst my participants, F's own family GP as a child was also an important influence on his career choice.

The role of F's **partners** in the COP was vital: F had to wait for a decade and change of partnership to be in a situation where his colleagues supported training in the practice, another demonstration of the importance of colleagues and the COP in the social contexts of GP training. The division of labour was also clearly that training was the main responsibility of the trainer in this practice.

I felt that F understood his professional practice as being unique; and that this influenced the object motives of F's activity system, which was to **help the trainee to think for themselves,** in order to appreciate the uniqueness of their own practice. Similarly to other participants in this study, the outcome of training was an **enhanced understanding of the trainer's own professional practice** through their teaching and training work, which for F included exposure to theories of professional development in an educational setting (the GP trainer course).

7.2.7 Participant G Activity System.

To construct participant G's activity system, I used the interview transcription and a 17 minute 30 second piece of recorded teaching. This teaching session was a discussion about a clinical case which contained a significant degree of uncertainty. The video started with the trainee describing the case in some detail, followed by G asking some open questions about the clinical encounter with concurrent examination of the computer records of the consultation. There was no summative assessment of the trainee's practice going on during the tutorial and no assessment tool was being used.

The main tools that G used in her teaching were the **case history** that the trainee presented to her, together with the **written medical records** which were held on the computer and used in the teaching session. There was also use of **role-play and analogy** in her teaching; for example at one point G asked the trainee what they would do if they were the patient in question. **Extending questions** (such as "what if...?") were used frequently throughout the observed teaching, and G also noted this was part of her usual practice during our interview conversation.

As before, the rules of practice included an uninterrupted environment, exclusion of serious illness, patient autonomy and careful use of resources. The COP included the GP partners in the practice, patients and secondary care services. In the division of labour, the trainee took responsibility for their learning and revisiting problems in subsequent meetings was used as a technique to divide up complex problems. I felt the joint object motive of G and her trainee in the tutorial recording was to help the trainee learn how to deal with uncertainty, by examining a complex problem.

G's outcome motive, expressed in her interview and linked to her object motive, was to allow the trainee to qualify for independent practice.

Several tensions were evident from the interview and teaching video. Firstly, the trainee had an internal tension about how much of his uncertainty to share with patients, against the principles of full-disclosure and patient autonomy. This revolved around the discussion of likelihood of different causes of the patient's symptoms, some of which had a possibility (though small) of representing serious illness. The trainer helped the trainee to examine their thinking about this in detail by gently challenging assumptions and asking extending questions. From the interview data there also seemed to be tensions in the community of practice when the trainee was struggling, with the trainer being put in a position of having to "defend" the trainee to her colleagues. This suggests that the division of labour became even more polarised when trainees were seen as being "difficult", rather that the trainers being given more support by their colleagues.

7.3 Summary of Activity Systems.

Russell (2001, p71) describes an activity system as a 'functional system of social/cultural interactions that <u>constitutes</u> behavior and produces that kind of change called learning' (original emphasis). The integrity of the system is an important aspect of AT analysis and the illustration of behaviours and tensions between different parts of the system are a powerful demonstration of the capacity of AT for understanding human actions. In my systems, two particular areas of tension are worth exploring further.

Firstly, there was often conflict between **subjects-community-object** in the need for the GP practice to be both a clinical and educational workplace. This was clearest when participants worked with colleagues who were ambivalent or even hostile towards training (E and F); and could be a longstanding conflict, or flare up when the learner in question was perceived as being "difficult" by the partners in the practice (as shown in G's case). Some participants (E and F) were required to delay becoming trainers, to move practice to start training, or to "defend" their learners to colleagues in their dual role as clinicians and educators. They negotiated a space for teaching, but this was fragile could be threatened by the primary role of the practice as a place for giving clinical care rather than an educational establishment. These tensions echo Waters and Wall's (2008) view that GP trainers were reliant upon the support of their colleagues and saw their training role as secondary to their clinical one.

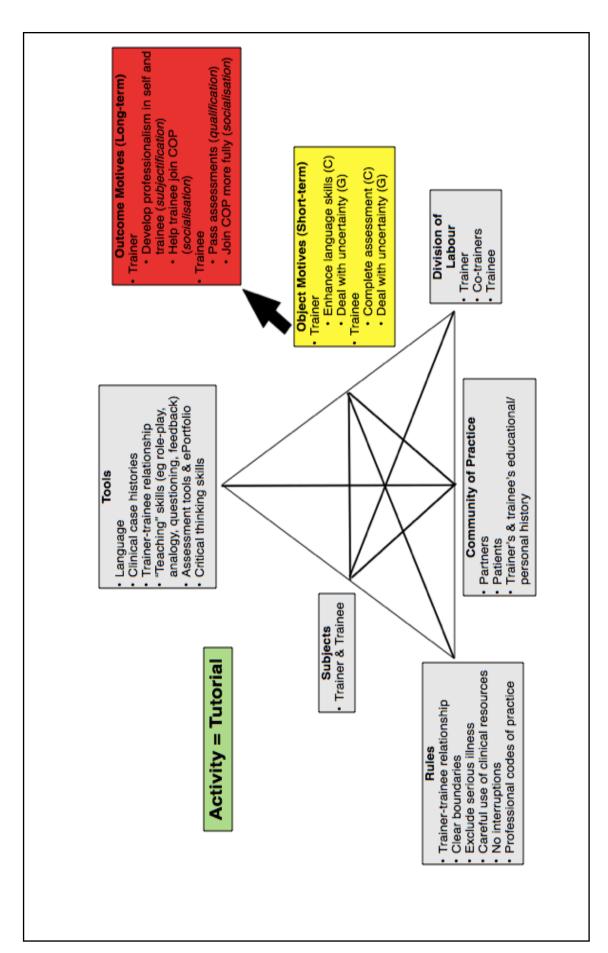
The second area of conflict was in the **subjects-tools-object** axis, around the use of the curriculum assessment tools. Foulkes et al (2011) suggest GP trainers lack confidence when asking trainees to develop their use of assessment tools from summative, to becoming formative and thus more expansive. This conflict was well illustrated by C's video recording where a summative assessment was used with a formative approach to develop the trainee's grasp of language and to improve her communication skills; while the conflicted object motive of the learner was to complete the assessment and move towards qualification. C's experience as a trainer, high level of confidence with the assessment tool, and personal values about education helped him to use the assessment simultaneously as both a formative and summative tool. This met both C's and his trainee's object motives, changing a potentially restrictive learning opportunity into an expansive one.

Overall, there was a significant degree of similarity between the trainers' activity systems. These similarities were most pronounced in the parts of the activity systems that "underlie" the trainers' educational practice: namely the rules, community of practice, and division of labour, and were best illustrated through the interview data. The rules included adherence to professional codes of practice, the use of curriculum/assessment tools and building a close relationship with the trainee; the community of practice included the trainer (including their educational history), the partners, patients (and their narratives), and the trainee and their previous educational experiences. The division of labour was principally that training was largely delegated to the trainer by their colleagues (potentially leaving them isolated in their practice); trainers then often delegated clinical and educational responsibility to their trainees. These similarities illustrate the social milieu of general practice education and the shared values, traditions and practices that GP trainers have.

The **object motives** were focused around the short-term trainees' needs, such as passing an assessment; whereas **outcome motives** were often broader, such as developing professional wisdom, and were often directed by the trainer. For both trainer and trainee, there was a shared **outcome motive** for the learner to enter the community of practice as a qualified GP. In addition, several trainers enhanced their understanding of their own clinical practice through teaching, often through having tutorial conversations about their practice to a depth with a trainee that they would not usually enter into with their colleagues.

In Figure 7.2 I include a summary activity system for all the data collected in this study, which I shall return to in the following two chapters.

Figure 7.2 Summary of Activity Systems.



7.4 The Value of Observational Data in Constructing Activity Systems.

Before concluding this chapter, I will consider the particular value of adding video recorded data to my AT analysis. I found video data was particularly helpful when elucidating the tools that trainers used: both tutorials were based upon clinical case histories, and there were many similarities in the teaching methods between the tutorials. For example, the use of role-play as a tool was seamless and did not divert the ongoing educational process. Both C and G used language with great skill, highlighting aspects of the trainee's practice and developing this through observation, demonstration, analogy and feedback. Discerning subtle skills such as these would be very difficult through interview alone, though they were quickly evident in both videos. In addition, the use of case histories as a source of learning only emerged through watching trainers teach; perhaps an example of the videos making the "familiar strange" to me as an insider ethnographer. The use of video data also helped to define the communities of practice more clearly. In contrast, the interview data revealed more about the social-cultural contexts underlying the activity system, such as the rules, COP and division of labour. Tensions and contradictions within the systems were drawn out more clearly through analysis of the videos and interview data together, and where video-data was available the tensions were illustrated in far greater depth and subtlety; for example the large number of contradictions between the use of assessment for and of learning observed in C's teaching session.

In summary, the addition of the video-recordings to the interviews transformed my potential understanding of how GP trainers engage in teaching. I saw the participants' activities through an entirely new perspective, and this lens helped

me build up my understanding and description of the lifeworlds of my participants to a new level. My hope is that this degree of detail approaches the "thick description" that Geertz (1973) calls for in ethnography, where actions are understood more fully through appreciating the sociomaterial contexts in which they occur.

7.5 Summary of Chapter.

The application of activity theory to my data helped me to notice things in my interviews and video-recordings that I had not identified through the other methods of analysis. Applying an empirical theory to my data made it clear to me how easy it is to miss the obvious in settings in which the researcher is familiar, a risk in insider research which Smyth and Holian (2008, p39) term 'pre-understanding'. For example, it was only after watching a teaching video for a *fourth* time that I realised that not being interrupted during teaching was a significant, and carefully negotiated, rule in the participants' activity systems.

My AT based description of GP trainers' lifeworlds contrasts with other models of professional development, such as the work of Eraut who has written about the importance of informal learning in professional development, emphasising the importance of practitioners' use of tacit knowledge for the development of professional expertise (Eraut 1994, 2000, 2005). Rather than providing a "general" theory of professional development, as Eraut does, AT gives a more contextualised and specific illustration of what constitutes a *particular* professional activity system, where learning is happening in an expansive, complex and inherently conflicted environment. Importantly, AT asks the

researcher to consider the *social contexts* in which practice occurs; an aspect of practice which medical educational research has been criticised for failing to address adequately (Ajjawi and Bearman, 2012).

This chapter has described the activity theory analysis of my interview and video data in detail. I have considered the contrasting and complimentary contributions of interview and observational data to my findings and the ambitions I had for my research to build up a "thick" description in my ethnography of GP trainers. I have concluded by producing an activity system for the teaching process from my data which I shall return to in chapters 8 and 9.

CHAPTER 8: DISCUSSION.

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And to know the place for the first time.
T. S. Eliot – Little Gidding from Four Quartets

8.1 Introduction to the Chapter.

The aims of this chapter are to synthesise my research findings with the ideas I have developed in the preceding chapters of this thesis, and to reflect upon my research journey in coming to this point in my doctoral studies. Presenting this discussion posed a challenge to me, and I considered for some time how best to structure this chapter. After reflection, the "methodology" of writing this chapter became clear. I had collected notes and ideas for the discussion chapter as I undertook my research and kept my jottings under the chapter title at the end of my evolving thesis document, as well as in my research journal. On reviewing these notes, it became clear that they were describing many of the different ideas and influences on me during the process of writing this thesis. When the time came to write my discussion and I read my notes through, three themes emerged clearly. These were: methodological issues; my research findings; and my personal journey through the process. Consequently, I divide my writing between these three topics in this chapter.

8.2 Methodological Issues.

The heading 'Methodological Issues' in itself could lead to a discussion over 50,000 words, and thus it is imperative that I focus this section on the key methodological issues that I feel merit further consideration in *this* thesis. There are four areas that I will consider in more detail in this section: the validity of the study; questions about generalisability; whether this study was an ethnography or not; and the use of theory to assist analysis in educational research. The choice of these topics reflects both the volume of notes I had made about these areas in my research journal, and the importance I attach to these topics in the context of my thesis. This approach acknowledges a debt to Gibson and Brown (2009) for their advice about analysing qualitative data, in this case my research field notes.

8.2.1 Validity of this Study.

Whitehead et al (2012, p46) write 'the medical education community, perhaps unthinkingly, adopts clinical language and standards in its educational work', and I have no doubt that my biomedical background significantly influences my approach to the assessment of my own work. To illustrate this point further, in my medical training, quantitative research was portrayed as being about numbers, while qualitative research was described as being about whether something was present or not. Though I did not realise it during my undergraduate education, this was an essentially positivistic view of what qualitative research is and ignored the implication within the term "qualitative" which should consider the *qualities* that something possesses; a far more subtle and complex undertaking than simply examining their existence or not.

In an effort to move away from this biomedical approach, I am going to evaluate the validity of my study in a manner that draws upon the ideas of Moss (1994) in her discussion of the assessment of validity as a hermeneutic, meaning-seeking exercise; as opposed to assessing validity as a measure of reaching some predetermined standard. Moss (1994, p7) writes 'as assessment becomes less standardised, distinctions between reliability and validity blur', and in this complex world (removed from positivistic notions of objectivity and certainty) issues of validity become deeply problematic for the researcher to address. In a complimentary conception of validity, Guba and Lincoln offer the standard of *trustworthiness*, asking the reader to question themselves whether they would 'feel sufficiently secure about these findings to construct social policy or legislation based on them?' (2005, p205). If I am to adopt this measure of validity as trustworthiness in my research, it is important for me to consider what I did, why I did it and how I interpreted my findings, consequently in this section I will review my methodology and then move on to my methods. I will consider my findings separately in section 8.3.

My methodology chapter was the first section of the thesis that I wrote as I felt I needed to set firm foundations before I could do anything else. In retrospect, this decision worked well for me and provided a solid grounding for my thesis. At subsequent times during the research journey, when I became confused I returned to my methodology and this inevitably helped me re-orientate my thinking. Making comments about the validity of a study's methodology will always be a highly personal affair and there are no absolutes. The choice of working in a non-positivistic framework continued to pose challenges for me, but over time I became more conformable with the ambiguities inherent in this approach and appreciated that it put me as a researcher in a position of possibility and creativity in the face of uncertainty. On the other hand, accepting the inherent complexity of a non-positivistic worldview

can lead to neuroticism and anxiety if context and perspective are lost; though conversely I came to see that the appealing certainties of positivism can lead to hubris and unfounded certainty.

There is no easy way through this tangle, but a path must be found. For me, external voices began to guide my way, in particular the thinking tools provided by Dewey, Foucault and Biesta which were all helpful at different stages of this thesis. I appreciated that gaining a better understanding of methodology itself is also a vital research skill. My view of methodology has changed from one of haziness, to an understanding of it as a scaffolding constructed around the research question, used to build upon previous knowledge and to make more intelligent decisions about the future. This is a much more personal and contextual view of methodology than I started my study with, and is an area of thinking that I will undoubtedly develop in the future. The ideas of McIntyre (2009) echo my evolving view of methodology as something situated chiefly around the researcher and research problem, rather than a construct which occupies a particular paradigm or tradition of research.

Discussing the validity of data collection methods initially seems a simpler affair than considering methodology. When I review the technical procedures I used in my interview and video recordings I am satisfied that this was done to the best of my abilities and as well as the context permitted. In particular, I think that the interview transcripts stand up well to the criteria that Kvale (1996) set for his assessment of quality in a research interview and I have included a transcript in Appendix 4 for readers to make their own decisions about this. As Kvale (1996) suggests, a clear explanation of procedures is also a marker of quality in interpretive research and I hope that I have described my research processes transparently in chapter 4. Unfortunately, the ability to have another individual closely involved in the data

collection or analysis is not possible in the doctoral setting, but this is something that I will try to do when undertaking a research study in the future to prompt critical discussion about ethics, methodology, and methods. However, I have not been without external support during this process: I have benefitted from the advice of experienced supervisors who have guided me; my EdD peer group has been a source of encouragement though our regular meetings and on-line discussions; and other tutors have guided my deliberations during intensive EdD weekends. This has illuminated possibilities in my own work that I might never have seen for myself.

A more vexed question surrounds the issue of how much data is "enough". I worried about this intermittently through my study and had the inevitable ensuing conversations with my supervisors. Perhaps this anxiety is a reflection of my grounding in research based in numbers, where validity is directly related to collecting large data-sets. The literature did not particularly relieve my concerns, even the review of this topic by Baker and Edwards (2012) who examine the question of how much qualitative data is enough through the lens of fourteen experts and five early career researchers did not seem to help: their answer to "how many interviews is enough?" is, predictably, "it depends". On reflection, though, I came to realise that perhaps this was the key point; a study undertaken in this type of research approach can never be reduced down to a simple number. Decisions about data quantity must be holistic and consider my research approach, the trustworthiness of my work, the technical quality of my data collection and analysis, and then the uses to which I put my data.

Given all of these points, I remain of the view that the efforts to which I went in my thesis were appropriate and I tried to maintain the highest research standards I could throughout the process. My word cloud analysis (see section 6.4) adds strength to

my decision to stop interviewing when I did, by demonstrating that the number of new words was reducing in the final interviews; though as I stated in chapter 6 this sort of assertion needs to be made with clear warnings about other possible causes for these phenomena, including interviewer behaviour. Perhaps my chief regret is not being able to obtain more video data as this illuminated my findings in novel ways. However, the data I did obtain was of high quality and I believe that the challenges I faced when collecting observational data reflect the realities of working in the field. Moreover it provides concrete evidence of my ethical commitment to my participants rather than to my own research ends, which Guba and Lincoln (2005, p207) might regard as 'fairness', another hallmark of trustworthy qualitative research.

8.2.2 Questions about generalisability.

As I stated in the previous section, Whitehead et al (2012) remind us that the medical education community is prone to adopting clinical (or biomedical) standards when assessing educational research. In biomedical studies, the size of a data-set is important as it reduces the probability of an experimental finding being due to chance, providing an estimate of the likelihood of a measured effect being causally due to a particular intervention. An important consequence of this premise is that the results are then used to inform other clinicians' practice, a property known as generalisability. This is given great value when judging the importance of research in clinical settings and the area of generalisability is a frequent source of criticism by individuals from a positivistic stance when evaluating pieces of qualitative research with small sample sizes; perhaps due to a failure to appreciate the methodological assumptions inherent in qualitative studies by those from a biomedical science background.

Consequently, it is appropriate to examine what alternative views of generalisability might be helpful in studies with small sample sizes, which is where my thesis is positioned. Kvale (1996) suggests generalisation can be about what *is*, what *may be*, and what *could be* in research; while Perayalka (2004, p297) considers generalisability as 'what any...professional, with his or her clients, can do', a conception which is reminiscent of Biesta's view of research as something that informs, but cannot predict, future actions. This compliments my reading of the sort of tentative generalisation that Pring (2000) suggests can be made from high quality qualitative enquiry, when he calls for a more balanced view of the differences between the quantitative and qualitative paradigms. As Pring reminds us, while professionals do work in subtly different settings with different individuals and practical challenges, they also share many problems and can often learn from each others' practice and research findings.

Returning to my thesis, addressing what might be called internal validity, I remained conscious of the small number of participants and thus gathered my sample carefully, trying to include GPs at different stages in their career, of different ages, gender and from different types of practice. I aspired to be consistent in my interview questioning, while also leaving the opportunity for new data or leads to emerge. In one interview (with participant D) I deliberately asked some different interview questions as I had prior knowledge about this participant's particular educational interests. In addition, as I previously stated, questions about generalisability must be located in the methodology of the research study. A researcher from a positivistic stance might ask me if this study provides the "definitive answer" about the links between clinical and educational practice? The answer to this is clearly "no", but this is not what I set out to do, and given my methodology my research could never achieve this aim. A

different question about generalisablity might come from a more Deweyian perspective, for example - how does this study advance what we already know about the links between clinical and educational practice? The reply here would be more encouraging and there are certainly findings in this research project that could be relevant to others working in similar fields of practice, which I discuss in section 8.3. If this is generalisabilty, then I am confident that my thesis includes an element of this within it.

8.2.3 Is this study ethnography?

In my methodology chapter, I describe my research as having an "ethnographic approach" to better understand my participants' lifeworlds. The archetypal data collection method in ethnography is observation and, as stated in my methods chapter, Robson (2003) considers observation as an essential characteristic of ethnographic studies. Given that my data collection was largely based upon interview rather than observation, was this study truly an ethnography? In addition, does this issue matter or not?

I will answer the second question first - does this matter? For two reasons I believe the answer to this question is yes. Firstly, in simple terms, I have set out this study as an ethnography and thus for reasons of academic consistency I should be able to support this claim. Secondly, methods of data collection impact profoundly upon a study's findings and the perspective which it presents. Writers such as Atkinson et al (2003) have made important criticisms of ethnography based solely upon interview rather than observation, asserting that there are important differences between what people *do* and what they *say* they do, writing that high quality ethnography does

demand some inclination towards observational data for a deep understanding of participants' lifeworlds.

At this point, I could simply state that in the final assessment my dataset included observational material, therefore I have written an ethnography; but this would be disingenuous. To achieve an ethnographic understanding of study participants depends on more than simply how the data has been collected; issues such as the means of data analysis as well as the researcher's background are also important. My adoption of four interlinked methods of data analysis gave me a rich understanding of the data I collected, in particular the application of a priori theories (such as activity theory) helped me think about my data in ways that I would not have done without being prompted. Additionally, my position as an insider researcher gave me a deep understanding of the nature of my participants' practice and their professional contexts. This can be a double-edged sword as the insider researcher can get lost in their own preoccupations and miss the obvious - an example being my failure to spot the use of case histories as a teaching aid until prompted by using Activity Theory, as discussed in chapter 7. While there was no long-term or sustained use of observation in this study, my interview approach gave me a rich understanding of my participants' backgrounds and life experiences in relation to their educational and clinical practice.

In conclusion, I believe that my claims to make this study a genuine ethnography are more firmly based upon my insider positionality and multiple approaches to data analysis, than simply upon my data collection tools. I am confident that through the use of these techniques, I was able to build up the "thick description" that Geertz (1973) calls for in high quality ethnography. In short, I conclude that deciding if a study is an ethnography or not is more complicated than simply requiring

observational data-collection methods; it is about a holistic view of what a study seeks to represent and how it achieves these ends. In particular, though AT, I have illustrated a detailed picture of how the participants made sense of their histories, the artifacts they used and the processes they employed in their cultural setting.

8.2.4 Using theory to aid analysis in educational research.

The application of *a priori* theories to qualitative data was a novel experience for me in this thesis as I had relied upon thematic or narrative analysis in my previous research projects. This new approach was commended to me by my supervisors as well as by others in the literature (Gibson and Brown 2009, Ajjawi and Bearman 2012) and resulted in my use of Activity Theory (AT), as well as using world clouds to analyse my data.

The use of theory in data analysis has several potential advantages for the researcher. Firstly, as stated previously, using theory to aid analysis helps the researcher to avoid missing the obvious in their data, thus avoiding the pitfall of over-familiarity, or 'pre-understanding' (Smyth and Holian 2009, p39). Secondly, a variety of different data analysis approaches provide the researcher with different perspectives on their data collection methods. For example, it became clear during the activity theory analysis that the observational data were excellent for giving insights into the tools that trainers used in their practice, whereas the underlying rules and communities of practice were more clearly revealed through the interview data. Thirdly, the use of theory opens possibilities for data outside their usual field of practice, providing researchers with novel ways of thinking about their work and connecting with new literature.

Through theory-based analysis, I found parallels with the worlds of teacher education and with sociological theories in my research. This sort of external referencing remains a relative rarity in medical education, though more recently examples can be found in the application of activity theory (Walters and Wall 2008), Bourdieu's theories (Brosnan 2010) and complexity science (Mennin 2009, Jones 2011 and Innes et al 2005) in research studies.

The use of word clouds provided another theory-led approach to my data. Initially, I considered that the word clouds produced from my interviews had almost completely lost any meaning, due to decontextualisation of my interview transcripts. I felt unsure about the value of this approach for analysis of extant rather than elicited texts, due to the loss of non-verbal communication and contextual details which are such important data in the interview setting. However, after further consideration, I became aware of the potential of word clouds to demonstrate something new to me in my data. Firstly, a difference in the words that made up the clouds could be significant in showing variation in content between interviews, and this was indeed the case in two of my interviews (D and F). Secondly, similarities between the clouds suggested that the interview conversation was remaining broadly upon the same lines in the different encounters, and that the researcher and participants were discussing similar topics - an approximate guide to reliability in the interview process. Thirdly, the balance of talk was relatively simple to assess with my world clouds as the participant and interviewer were transcribed into different typographical cases; in my study most talk was by the participant which gave some reassurances about the quality of interview technique. Finally, the ability to rapidly produce counts of high frequency and new words in the interview led to a realisation that as the interviews progressed, fewer new words were being

found in the word clouds and thus an *impression* that the data set was "saturated" was supported by numerical data, as shown in Figure 6.2.

As a consequence, during this study I moved from a position where I was unsure of the value of word clouds when applied to elicited texts, to a view that word cloud analysis can be helpful in interview studies to give a "lead" as to where interesting variation might lie in their data; and to help in the vexed question of when to stop interviewing. For these reasons, I believe that this study supports the view of McNaught and Lam (2010) that word clouds can be a helpful addition tool in qualitative data analysis, their value lying in the scrutiny of methods and study design rather than understanding the fine detail of data.

In summary, the use of theory in analysis has been an enlightening experience for me as a researcher. I am encouraged, and will encourage others, to use this approach to analysis this in the future, and will continue to explore different theories that can deepen my understanding of what happens in professional practice.

8.3 Research Findings - The Relationship Between Clinical and Educational Practice.

In this section of this chapter I will return to my research questions to consider how far I have progressed with my aims of better understanding the links between clinical and educational practice, as well as including a section about the insights I gained from using Activity Theory. I will draw out key findings in **bold** again to assist the reader.

8.3.1 How does clinical practice impact upon educational practice?

Throughout the study it was clear that there were strong influences from the communication skills that doctors had learnt in their clinical practice upon their educational work. This learnt mastery of communication seemed to give the GP trainers rapid access to many high-level educational skills, such as subtle linguistic techniques and the skillful use of role-play and analogy in their teaching that early career teachers from other backgrounds might not be able to achieve in so short a time after formally "qualifying" as educators. The participants had been teaching and using educational skills all their professional lives in their clinical work and these were readily transferable to a new professional context, as Stone et al (2002) also describe in their study of medical teachers.

Another area where the influence of clinical practice was evident was the application of **diagnostic thinking skills** in educational decision making. GPs often simply "knew" when something was wrong in an educational setting, and this insight was reached in the same rapid, holistic and intuitive way that they saw clinical problems. Dreyfus and Dreyfus' (1980) model of the development of intuitive expertise suggests that the ability to develop this type of mastery takes considerable time and

experience, and their work has been influential in the fields of nursing (Benner 1984); teacher education (Berliner 2001); and medical practice (Eraut 1994, Atkinson et al. 2011). Norman (2005, p425) suggests physicians develop diagnostic skills through 'the opportunity for deliberate practice with multiple examples and feedback', though evidence suggests that clinical skills can be equally effectively transferred through either high or low-fidelity simulation (Norman et al 2012). My finding that the participants were using intuitive thinking strategies in educational settings suggests trainers might be using their problem-solving skills learnt from their clinical experience and applying these in another field of their practice. This was particularly interesting as some trainers had relatively little experience as medical educators, but still employed intuitive problem solving approaches to educational problems. This implies a high level of tacit knowledge about teaching among these medical educators, a conclusion which was also reached by McLeod et al (2004) in their study of medical school faculty members who had received no formal training in teaching. Brawn (2003) asserts that intuitive skills are highly developed in GPs and perhaps it is the strategic meta-cognitive decision of when to use intuitive thinking and when to apply stepwise logical reasoning that GP trainers transferred successfully here.

GP trainers used their skills in **building close relationships** with patients and applied this to their pastoral role with trainees. The participants were experts at understanding clinical narratives and they brought that expertise to bear in their educational roles, appreciating the importance of understanding their trainee's personal backgrounds and prior educational experiences. Finally, the challenges of setting appropriate **interpersonal boundaries** in clinical practice were drawn upon for supervising their trainees. One participant pushed against the rigid objective stance about firm interpersonal boundaries encouraged in medical practice to

develop a more personal approach to clinical and training relationships in medicine. This is a little explored aspect of the training relationship and the only relevant study in the literature that I could find was by Recupero et al (2005) who discuss the potential conflicts of supervisor-trainee relationships, finding that 7% of trainees had been asked on a date by a supervisor in their questionnaire study. The unequal power relationships between trainer and trainee mirror the power inequalities between doctors and patients in an area fraught with difficulty for the practitioner and insider researcher. This area warrants further careful investigation with appropriate consideration of the sensitive ethical issues that permeate this element of professional practice.

8.3.2 How does educational practice influence clinical practice?

In this area, links in the use of **communication skills** were again evident, with the structure of the tutorial often mirroring the doctor-patient consultation. Trainers said they had developed their consulting skills, in particular listening more effectively, because of their educational practice and the need to concentrate intensively for long periods of time during tutorials. Trainers also used **thinking skills** that they had learnt from educational settings to reframe clinical problems as challenges, including trying to build relationships with difficult or "heart sink" patients.

The potential of becoming a teacher in enhancing trainers' understanding of professionalism was an important finding of this study. This was on a deeper level than simply whether teaching helped GPs teach to keep up to date with factual knowledge (as suggested by Spencer-Jones (1997), King and Jenkins (2009) and Grant (2010)) which was not a notable effect of teaching for my participants. The GP

trainers in this study benefitted from teaching by being given the opportunity to deliberate upon and **reconstruct their professional identity.** Coles (2000) suggests that reconstructing practice is a vital process for teachers to engage in if they are to teach effectively, but the level of reconstruction in my study was deeper and more personal; trainers not only changed their professional practice, but also who they felt they were as professionals. Walker (1988) describes how becoming a GP trainer is an opportunity for physicians to reconsider the nature and value of their professional role, a change which is mediated through renewing narratives about themselves in the manner of identity reconstruction that Sfard and Prusak (2005) describe (outlined in chapter 2). My findings suggest that educational work is an accessible space for allowing this identity reconstruction to occur on a regular basis.

8.3.3 What are the shared contexts of clinical and educational practice?

A key finding here was the pervasive influence of **trainers' personal values and prior educational experiences** upon both their clinical and educational practice. In common with other studies (MacDougall and Drummond 2005, King and Jenkins 2009), the trainers in this study frequently drew on role-models from their past to inform their practice, and these descriptions were divided between positive and negative experiences. Negative experiences did not always results in bad long-term outcomes - sometimes the effect was for the trainer to try to avoid repeating the unpleasant experience when they became a teacher themselves.

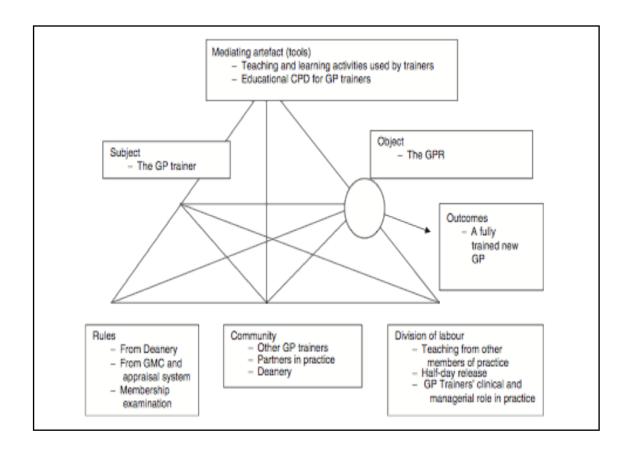
The most important organisational context for clinical and educational practice was the attitude of the trainers' **colleagues**, in particular their partners, to training. In some instances there was clear support, at other times ambivalence, and some

experienced hostility to training. This variation of responses seemed to be influenced by the individual partners involved as well as the perceived qualities of the trainee, with "difficult" trainees resulting in more opposition from colleagues and an increased tension between the clinical and training demands put upon the participants. The nature of these shared social contexts of practice is explored in the following section.

8.3.4 Insights from Activity Theory.

I have specifically included a section about AT in this part of the discussion as I felt that it had given me a very different perspective upon the relationship between clinical and educational practice from the one that I had achieved in the thematic analysis. After completing the thematic analysis, I was concerned that my data had been atomised, seemed disparate and was at risk of losing its meaning. As an antidote, the AT analysis I undertook was more holistic and moved me back into a practice-centered view of my research questions. resulting in my focusing upon the participants as the key element in my study. The starting point for AT was the practice (or activity) of teaching itself and the nature of this activity meant that teaching and clinical practice became reunified. This ability to give an overview of my data resulted in new insights into my findings. In this section, I will offer some comparison between my AT analysis and the work of Waters and Wall (2008), which I will consider in some depth as theirs is the only study with a similar methodological approach to mine in the literature, though they used a focus group approach with GP trainers rather than individual interviews and observation. To aid this comparison, I have included their summary AT diagram in Figure 8.1, which can be compared with Figure 7.2 (p166).

Figure 8.1 Engeström's activity system applied to GP training (Waters and Wall (2008).



In my activity system I identified the subjects as the trainer *and* trainee, differing from Waters and Wall's (2008) AT system which viewed the trainer as the subject and the trainee as the object in their AT analysis; perhaps reflecting a degree of externality in their work while I adopted an insider stance, as well as the importance of the trainees who participated in my video recordings. The **tools** used in my study were most clearly illustrated through the observational data and included a variety of mediating artifacts which included **language**, **clinical resources**, **teaching skills**, **assessment tools and thinking skills**. In this respect, my AT analysis resulted in a more detailed view than Waters and Wall (2008) who gave a broader overview of trainer professional development. Additionally, in my findings, the use of assessment tools was not done in a way

that separated teaching and learning from assessment, but rather resulted in a seamless mix of teaching, learning and assessment

The rules of my AT system included the formal professional codes of practice that Waters and Wall identified (such as GMC regulations), but I was also able to elucidate some tacit rules of practice that trainers and trainees adhered to, including the importance of the trainer-trainee relationship, rules about "good" clinical practice (such as careful use of resources and not missing "red flags") and protected time for learning. There were closer similarities between my activity system and Waters and Wall's community of practice and division of labour with perhaps one notable exception. This was the educational and personal history that the trainer and trainee brought to the activity, and the influence of these experiences upon the object of the system, leading to the impression of a dense network of connections between trainers and trainees in a geographical area in a profession where changing practices and localities is still relatively unusual. This contrasts somewhat with Stone et al's (2002) view that for many medical teachers their educational community of practice (COP) was less well developed than their clinical COP; perhaps the educational COPs that the trainers participate in are more distributed, contingent and fragile than their clinical COPs, but my findings clearly support their existence. Indeed, alternative data-collection methods such as long-term observation group-interview might illustrate these COPs more clearly, as demonstrated by Waters and Wall's (2008) findings of strong educational COPs in a focus group study.

Defining the **object** and **outcomes** of the system also gave interesting insights into the value of different data-collection methods for constructing an activity

system. In my study, observational data was powerful for examining object motives, as the short-term outcomes of the observed teaching were relatively straightforward to identify. Trainer and trainee objects could be in conflict or agreement; this was evident from the sense of completion that I experienced at the end of watching one teaching video; whereas the tutorial where the objects were in conflict ended in unresolved disagreement between trainer and trainee. Finally, the outcomes were better illustrated by the interviews which gave a more long-term picture of trainer objectives, and will be discussed in more detail in my final chapter.

Overall, my AT analysis gave a more fine-detail and trainer-centric view of teaching practice; whereas Waters and Wall (2008) gave a broader sweep with a more Deanery-centric focus. I would suggest this is partially due to our contrasting data-collection methods (interview and observation in my study compared with focus groups) and due to differing researcher motivations. I saw myself as a trainer researching from the inside, whereas Waters and Wall gave the impression of being more removed from their participants and reflecting their more external position as researchers.

8.4 The Researcher's Journey - A Search for Authenticity.

Throughout this discussion, and in the wider thesis, I have often thought of the familiar metaphor of the EdD as a journey and in this section I am going to analyse what I mean by this familiar idea in greater depth. I began this chapter with a quotation from T.S.Eliot's Four Quartets, which resonates strongly with my EdD experiences: I both begin and end this journey as a GP in Portsmouth who has an

interest in education. In reality, the research I have done will have a limited impact, few people will read it and fewer still engage with it in a meaningful way. However, something is different because of what I have achieved in my research, and this change is primarily reflected in my own thinking and my writing in this thesis.

In a narrow sense, I can easily appreciate many things that the EdD has given me. I have been exposed to many new and fascinating ideas and thinkers; I've had a training in how to think critically; my professional network has expanded in unexpected and diverse ways by meeting people from completely new disciplines; I have moved from a post in workforce management to an academic role; I have improved my technical research skills; and my research has strengthened my community of practice with my participants and colleagues. In short, I am a better researcher and teacher because of what I have done, and probably a better clinician.

Despite the value of these things, this is not what I will cherish most from my studies. Doing the EdD has given me a fresh perspective about how I have come to the point I currently inhabit in my professional life. Living and practising medicine in Portsmouth represents an unlikely return to my family roots for me in a globalised world; though doctors often remain in the area in which they train so perhaps the seeds of my decision to return to my "home" city were sown when I accepted a place at Southampton to study medicine. My father was born and lived locally, and the place where my grandfather was born and my great-grandparents lived is only a few minutes walk from my place of work. I often drive down these streets on my lunchtime house calls and think about what they must have been like a century ago when my relatives lived there. I have an intense connection with my geography.

I have come to see my professional journey as a search for authenticity as a doctor, teacher and researcher. By authenticity, I mean "finding my place" in multiple different

axes which include philosophical, social, professional, geographical, and spiritual dimensions. What are the benefits of this long and often uncomfortable search? I believe that authenticity allows the practitioner to develop agency though enhanced self-confidence, to move from critical reflection into the realm of action, for them to become a fulcrum around which others move rather than being continually buffeted by professional and personal tides. Guba and Lincoln (2005, p207) consider this personal agency to be another measure of validity in qualitative research, terming it 'catalytic or tactical authenticity' when an enquiry prompts action in its participants and researchers. I feel I have achieved this agency in, and through, this thesis.

To integrate this personal journey with the lifeworlds of my participants, I return to Edwards' concept of 'relational agency' which I discussed in section 4.8. Quoting Edwards (2007, p4) again, she defines relational agency as:

a capacity to align one's thoughts and actions with those of others to interpret aspects of one's world and to act on and respond to those interpretations... it is a capacity to work with others to expand the object that one is working on by bringing to bear the sense-making of others and to draw on the resources they offer when responding to that sense-making. (Edwards 2007, p4)

I would argue that professionals need to examine, understand and articulate their *own* values and beliefs to generate authentic relational agency in their practice.

Doing an EdD has given me the opportunity to examine and better understand my personal narrative and identity (Sfard and Prusak 2005) as well as coming to appreciate my colleagues' professional practice in greater depth. I believe that this learning will help me better negotiate the constant changes in my professional life, seeing each one from a position of possibility rather than threat; an approach drawing

on AT's philosophy of viewing tensions in activity systems as opportunites for change and development, rather than barriers to realizing objectives. Adopting this mindset has the potential to allow me to journey confidently into genuinely expansive learning when I face the inevitable challenges the future will place in my path.

8.5 Next Steps.

As participant A describes in section 6.3, I find myself left with 'debts of honour' to my participants and a duty to share the findings of this study with them. How and when I do this presents me with a dilemma: I am sure that for many of them the time required to read a 50,000 word thesis would be an unrealistic demand, and that much of what I have written about would not necessarily be of interest to them. However, I am equally certain that they would wish to know what I have done with their interview transcripts, their ideas and the personal stories they shared with me. Edwards (2007) might also argue that this is the next step on the journey to relational agency.

I discussed potential approaches to this next part of my project with participant E informally, and we agreed that meeting as a group was problematic as I would have to divulge the identities of my participants to each other to gain fully informed consent to achieve this. Indeed, this is an inherent problem with individual interview-based studies that I had not appreciated until this issue arose. E's suggestion was for me to send a short summary of my findings to each participant individually, and then to offer one-to-one feedback by telephone if required. I will endeavour to do this once my project is complete and has been accepted in its final form.

CHAPTER 9: CONCLUSIONS.

...the only thing I'm tied to is whatever you're doing have a think about it. It's a hair shirt, which I think a lot of people find very uncomfortable and very irritating, but I think it...otherwise life becomes...for me, it becomes very samey. I think that's...maybe that's what it is about teaching, it is so difficult that it's...I think it's what adds an extra dimension to just being a doctor.

Study Participant C

My point is not that everything is bad, but that everything is dangerous.

Michel Foucault

The purpose of this final chapter is to reconsider my research questions in light of the new knowledge and insights which I have detailed in this thesis.

1. What is the impact of GP trainers' clinical practice upon their educational work?

An important finding of this thesis is the close relationship between physicians' clinical and educational practice. The participants in this study drew upon their clinical abilities, such as communication skills and problem solving strategies, when teaching. This was done in an intuitive, instinctive manner suggesting a level of professional educational expertise in the participants which was, at times, out of keeping with their relative inexperience as teachers.

In retrospect, when framing this research question, I used the word 'impact' without sufficient consideration of the assumptions that lie behind this word.

Terms such as 'impact' imply a direct, measurable and predictable influence of one entity upon another; in other words, the terminology of technical-rationalism rather than professional artistry (Schön, 1983; Golby and Parrott, 1999). Given the complex and intuitive nature of the interaction between my participants' clinical and educational domains of practice, I do not feel that what I described

in my findings can be simply described as an "impact" or "transfer of skills" from one domain of practice to another. Instead, in this study, I believe that the participants used familiar cognitive strategies in their usual professional context to achieve a **translation of practice** from a clinical setting to an educational one; a description more in keeping with participants' development of professional wisdom or Aristotelian *phronesis* in their educational work (Coles, 2006). As an educational researcher I have also learnt to be careful when phrasing my research questions, so that there is congruence between my choice of words and the theoretical framework of my investigation.

2. How does GP trainers' educational practice influence their clinical work?

During this study, it was evident that the most important influence of GP trainers' educational practice upon their clinical work was that the participants re-explored narratives from their backgrounds to **reconstruct their professional identities**, in a manner to that described by Sfard and Prusak (2005) and Walker (1988). In my study this reconstruction was longitudinal, and was captured as a description of the participants' changing lifeworlds. Most of this reconstruction occurred subtly during the process of everyday teaching. In addition, two participants completed postgraduate qualifications in education, one of the participants noting that the writing took their thinking to a more 'fixing' level (Participant C), and the other recognising that through writing he had become better able to 'name' his uncertainties about professional practice (Participant F). All participants came to see their practice as more complex and nuanced through teaching, giving them a route to deepen their understanding of their own professional epistemology. This suggests the use of the term

'influence' was appropriate when framing this research question, as it implies a more uncertain and problematic relationship between the two domains of practice.

Understanding their practice better moved trainers from being simply reflective to increasing their self-worth as GPs and helping them comprehend what was unique about their professional roles. Becoming a trainer offered the participants an opportunity to develop their sense of agency though critical reflection upon their practice, a skill which many of them had not had the opportunity to develop until this point. It would be interesting to examine this process in more detail through evaluating the experiences of GP trainers who have completed GP trainer courses and associated Postgraduate Certificates in Education and the effect this might have had upon their professional practice.

3. What are the social contexts for GP trainers' clinical and educational practice?

An important contribution of this study was the consideration of GP trainers' work in a socially situated context, a perspective that medical education has been criticised for failing to address adequately in the past (Ajjawi and Bearman, 2012). This social perspective was largely developed by using second generation Activity Theory (AT) as an analytical tool, which explicitly requires the researcher to consider the contexts which underlie practice (Engenström, 2001).

When considering my data, the use of Activity Theory (AT) allowed me see what was going on in the tutorials I observed more clearly. In addition, when applying

AT to my interview data I was encouraged to look at the underlying social milieu of the trainers' clinical and educational work, giving me a different viewpoint from which to consider my transcripts. Combining these two perspectives helped me to appreciate that there may be links between the outcome motives in my study and Biesta's (2010) ideas about what "good" education is, which I discussed in section 1.3. In my AT system, GP trainees focussed upon socialisation into their community of practice and qualification to become independent practitioners. In contrast GP trainers, whilst concerned with socialisation into the COP, were also motivated by broad professional and personal development. I view this as what Biesta terms subjectification, which he defines as 'becoming more autonomous and independent in their [learners] thinking and acting' (2010, p21).

As well as these tensions between what trainers and trainees want from GP training, my AT analysis indicated other conflicts that participants experienced in their work. The role of training was often delegated to trainers by their colleagues, with an understanding that clinical work takes precedence over teaching duties thus creating tensions within the workplace between participants and their colleagues. Tensions were also demonstrated between the expectations of regulators, in their drive to professionalise medical education, and the desire of trainers to engage in less formal modes of professional educational development. This sense of division between those who do the training and their learners, professional partners and regulators is an important consideration for the future of medical education and suggests a gap in culture between GP trainers and their professional colleagues.

As an educational researcher, using AT allowed me to "step back" from the environment I was researching and to provide me with a different perspective to see my data from. I consider that this was particularly helpful to me in this study as I was explicitly in the role of an "insider" researcher and thus prone to the pitfalls of overfamiliarity with my field that Smyth and Holian (2009) warn of in insider research.

In summary, this ethnography of GP trainers' professional culture and practices illustrates the experiences that my participants and I have in our daily practice: answerable to both regulators' and colleagues' demands; negotiating between our aspirations for what education can be, and what our trainees want from their trainers; and simultaneously being physicians and teachers. My conclusion is that, in concert with their colleagues, GP trainers reconstruct their professional practice and identity so they can approach these complex challenges with agency and optimism.

APPENDIX 1 - INTERVIEW CONSENT AND INFORMATION FORM



GRADUATE SCHOOL OF EDUCATION

CONSENT FORM

I have been fully informed about the aims and purposes of the project.

there is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation

I have the right to refuse permission for the publication of any information about me

any information which I give will be used solely for the purposes of this research project, which may include publications

If applicable, the information, which I give, may be shared between any of the other researcher(s) participating in this project in an anonymised form

all information I give will be treated as confidential

the researcher(s) will make every effort to preserve my anonymity

(Signature of participant)	(Date)
(Printed name of participant)	

One copy of this form will be kept by the participant; a second copy will be kept by the researcher(s)

Contact phone number of researcher(s): 07718 595730.

If you have any concerns about the project that you would like to discuss, please contact one of the project

Professor Keith Postlethwaite (01392 724840)

GRADUATE SCHOOL OF EDUCATION

My EdD thesis is centered on investigating the effects that being a teacher (or trainer) has upon the clinical work of doctors, and vice-versa. To this end, I intend to undertake in-depth individual interviews with GP trainers and may then seek to observe some tutorials and other teaching that goes on in GP surgeries

I will record the interviews and then use a professional company to transcribe them. This company has signed a confidentiality and code of good practice agreement, and is widely used by academic researchers and used to handling confidential and personal information. I will check back the validity of the transcriptions with the participants and also may make notes during the interview to help me record important points. I will store all data upon a specific hard-drive and password protect any confidential information.

I am very grateful to you for agreeing to help me with my studies.

APPENDIX 2 - INTERVIEW DATA COLLECTION INSTRUMENT

Interview Schedule v2 (15th October 2011 post pilot interview)

- · How did you decide to become a GP trainer?
 - · Can you tell me about a memorable experience you had as a GP trainer?
 - · Has your teaching changed over time?
 - What educational tools do you find helpful as a teacher? Do they impact on your clinical practice?
 - Have you had any particularly challenging trainees? What skills did you use to deal with them? How long had you been a trainer when this happened?
 - · What sort of working relationship do you seek to develop with your learners?
 - · What educational theory do your draw on in your teaching?
- · What makes a good teacher/trainer in your view?
- · What makes a good doctor?
 - · How has your clinical practice changed over time?
 - · What sort of doctor would your patients/colleagues say you are?
- · Can you tell me about a memorable teacher you've had?
- · What were your early experiences of education like?
- · How does your work as a teacher affect your work as a clinician?
- In your experience, how does teaching consulting in a tutorial differ from a real consultation?
- What do you enjoy doing outside your work as a GP? How does your personal life and experience affect you as a teacher and clinician?
- · How do you help a trainee become a 'real' GP?

APPENDIX 3 - TRANSCRIPTION COMPANY CONFIDENTIALITY AGREEMENT

CONFIDENTIALITY AGREEMENT

This confidentiality agreement has been prepared and is being distributed on behalf of Audiosec Limited ("The Service Provider") by Carole Evans (Project Management Officer), who acknowledges and accepts the terms and conditions of this Confidentiality Agreement.

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Carole Evans (Mrs Carole J Evans, Project Management Officer for Audiosec Limited)

Dated 8th September 2011

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APPENDIX 4 - SAMPLE INTERVIEW TRANSCRIPT

Where explanatory notes have been added, they are in [square brackets]. Original emphasis is shown in **bold**. In this transcript, A refers to C's trainee, not participant A.

- JL RIGHT SO C, WHAT I WANTED TO ASK YOU FIRST OF ALL WAS HOW DID YOU BECOME A TRAINER?
- C I had a yen. I remember saying to K [spouse]...I probably wasn't even a trainer...even finished my training.
- JL RIGHT.
- I said...I thought, "You know what I'll do? When I'm 50 I'll become a teacher." So obviously I had...I don't know what...so why...? Your next question might be why...so I clearly had some sort of yen to be a teacher and there were...when I became 50 it would've been too expensive to change anyway, but...so therefore...and in the practice at the time there was...the senior partner was one of the first course organisers in Portsmouth. So he'd been a trainer for four or five years and so he dropped the training and like in all old fashioned systems, it had simply been passed down to the next GP in the line who was hopeless. Well he upset one and the other one I think refused and so there was a lot of movement and I think they were pleased with me and so there was a lot of movement. So my path towards becoming a trainer was made very much easy, "Do you want to do it C?" So...and we'd followed the rules because I think you could become a trainer, you still can, in three years if you're in a training practice.

JL YES THAT'S RIGHT.

So it happened and I arrogantly went to the...my interview with a friend of MM's [ex-colleague] who's recently died and he was a wonderful...he was a course organiser from Southampton and I just floated the idea, I think he got a bit cross with me, that **actually** there is a huge advantage in a young man being a trainer ((mobile phone ringing))...that should not happen should it? Can I...? Hello? Yes. Oh right. Can I come...? Can I come in tomorrow? I'll see you then. Bye bye, thanks. Right, sorry.

- JL THAT'S ALRIGHT.
- C So I arrogantly said that I thought that...and it is actually...there is some truth in it, is that a young man who's made lots of mistakes would actually make a **good** teacher because he was so fresh to it.
- JL AND WHAT ABOUT YOU...WHEN YOU SAID, "WHEN I'M 50 I WANT TO BE A TEACHER"...?
- C Yep. That would've been a school teacher.
- JL YEAH. WHAT...? I MEAN, IN JEST PARTIALLY?
- C Well yes. Yes it wasn't very serious, but it was serious enough to think about, "Well I could do this for a bit and then I could do something else for a bit."
- JL DID YOU SERIOUSLY CONSIDER CHANGING CAREERS?
- C Not that seriously. I think when I...well when I had six children and on a teacher's salary I don't think I'd have survived. So I didn't...so I was...so it just fitted a role really. Yeah.

- JL AND WHEN YOU WERE DECIDING WHAT TO DO IN YOUR CAREER, HOW DID YOU END UP BECOMING A DOCTOR?
- Well my Dad was a GP and I...it was...it appealed to me really. I thought...I never...it's amazing is that clearly I was above average intelligence, but nobody ever let me know that. So I had **huge** problems with confidence about whether I could it and I think now that J's [C's son]...his dyslexia is known I think I know...we know pretty much where he gets it from, he gets it from my side of the family. So clearly I did have the intelligence, but I didn't...I certainly was not a book reader and I had no confidence so yeah I would often tell...and I did, at the age of 12 I remember I wanted to be a steam engine driver when trains were proper trains and then suddenly I decided I wanted to become a doctor and I don't really know what made that happen.
- JL OKAY. WHAT ABOUT **YOUR** EXPERIENCES OF TRAINING AS A GP? HOW DO YOU REMEMBER THOSE?
- C Well, again, I...well I'd...well because of my difficulty reading stuff I failed BS [qualification examination] first time around, fortunately I passed a thing called conjoint first time around so I was able to practice and then I...that's interesting because I then passed BS, the surgical bit, simply because I was doing it. I can...so that...so looking back...I mean it's easy to look back after all these years, but quite clearly C does not learn from the book. I learn very practically which is...makes a difficulty for teaching because if somebody learns from a book, I'm not...it's taken me a long time to be sympathetic to that idea. So that's...so the process of learning to be a GP, I can still remember sitting with my trainer who was a lovely man and he was very good at talking, and discussing, and I can remember doing shared surgeries with him and I was completely...I just didn't know what I was doing and I know I had a real sense of I didn't know what...because I did...my knowledge background was very poor so I really did fluff it and I remember I used to say to myself, "I know what I'll do is I'll be a..." and this is my planning was...is when I went, "I'll be a GP trainee somewhere were I don't...then I'll make all my mistakes and then I'll move and my mistakes won't follow me." Sadly I continued to make mistakes, but...so I clearly had a very...I didn't have a very confident feel about myself and yet I had enough confidence to sit in front of a patient and blag it and so I think the... and I remember going into my MRCGP...I didn't do MRCGP in the year, I did it in the year after I'd started here, again, because of my lack of confidence and I did...I certainly did very much enjoy...in fact I enjoyed all my training jobs...
- JL RIGHT, IN HOSPITAL?
- C ...and K [C's spouse] used to say that about me, "He just enjoys everything" which is what...so it was...and she says, "Well that's why he picked general practice because he didn't know which one to do."
- JL ARE THERE ANY PARTICULAR EVENTS FROM YOUR TRAINING THAT STICK OUT AS...?
- C Well there was the bad...shared surgeries were dreadful for me...[tails off]
- JL OKAY BUT...
- C So that's a bad thing.
- JL THEY WERE DREADFUL BECAUSE IT ...?
- C Because I was so...I just was so nervous.
- JL RIGHT, YOU FELT EXPOSED?

- C And I just didn't...I just...yeah and yet I wasn't...I didn't have any complaints, which is not very good...not a great measure of success.
- JL NO.
- I didn't kill anybody...no and I didn't...and people like me. So on those...at that level and what was really...I think I enjoyed...I've never thought of this before, but what I did enjoy was the day release course. It was a half day in Bristol run by R who became...I can't remember his surname, he became a professor in Bristol and another guy and there was...I think it was just they were thoughtful guys and it was a real...it was the first opportunity to sit with your peers, we had lectures, but it was just...I suppose it was the first time I'd ever experienced that really. I'm trying to think whether we ever did that in...and one of the guys who I really, really got on with was my very first job in surgery in Southend and he was...I mean he was coming near retirement so he would've been trained a long time ago. He was just a very thoughtful man and he wasn't without his prejudices, but he...so he was very supportive and I think...yes he was non-judgemental. He probably was judgemental, but he didn't let it affect his junior staff.
- JL GOING FURTHER BACK TO MAYBE EVEN UNIVERSITY OR SCHOOL OR EVEN HOME INFLUENCES, AGAIN, ANY OTHER EDUCATIONAL EXPERIENCES...?
- C Not really, I had two...I had a number of Great Aunts who I never knew who were teachers, but I mean a lot of people of that...a lot of women of that ilk...so that would've been my father's...so they would've been born at the turn of the century and so a lot of women would've gone into teaching. So I don't think that was particularly exceptional... and I don't really...I mean there are lots of teachers now and there were some teachers, but...
- JL ANY EVENTS AT SCHOOL OR IN YOUR...?
- C Not particularly, no. Not really and clearly...and I did enjoy school, but I didn't enjoy...I think I enjoyed school. I didn't enjoy exams, but I passed them really.
- JL WHAT SORT OF SCHOOL DID YOU GO TO?
- It was a...it was private from the age of five. So I went to a school which was a mixed school, mostly girls, from five until... seven and then what they used to call, they probably still do, a prep school from seven until 13 and then we did this common entrance thing, that's right, and then I went to public school from then until 18.
- JL RIGHT. HAPPY TIMES?
- C Yeah, yes I would...but they can't have been that happy because I didn't send any of my children through the private system. So yes, I mean there were some idiocies, yeah, but I think...yeah and whether I'd have been better elsewhere I don't know. I don't think I measured happiness. As far as I was concerned, I went to school and happiness wasn't part of the equation...
- JL I DON'T GET THE...
- C ...and it wasn't that bad.
- JL YEAH. I DON'T GET THE IMPRESSION, TALKING TO YOU, THAT IT WAS STRONGLY FORMATIVE ON YOUR VALUES FOR LATER. IS THAT WRONG OR IS THAT CORRECT?

- C No. No, no, no. Well no, not really.
- JL NO, OKAY.
- C No.
- JL THAT'S INTERESTING AND HOW ABOUT...? I MEAN GOING COMPLETELY BACK THE OPPOSITE WAY, HOW ABOUT AFTER YOU BECAME A GP TRAINER? WHERE YOU DO THINK YOUR VALUES FOR THAT CAME FROM C? WHERE DO YOU...? WHAT DO YOU DRAW ON FOR HOW YOU TEACH?
- Well nobody really...nobody taught me how to teach, I mean I went off on...I went off to Urchfont [location of GP trainer courses at that time] and a lot of people are very rude about Urchfont, but if they want to be rude about Urchfont they want to go on the course I went on because when I...I hope to think that the one I looked after was far more effective...it was a very, very bullying time.
- JL RIGHT, A BULLYING TIME?
- Yes. I mean it was...we were told how to do it and in fact we had a guy who was the...who was in the army who was in the...who became the head of the whole of the...a guy called P who...and he just skewed the group terribly and the group leader didn't really have the skills to...and I can remember some very...it's interesting, **fascinating** is I can remember a very dark room now and it was a very dark time and I picked up nothing. So what I learned, I think I learned from trying. I must have had some sort of inherent skill, flair, ability because I remember... JP [tutor at GP trainer course] who was **introducing** me to the idea of listen to the patient. So that was quite...and I was not abnormal in not...in fact I was abnormal in taking it back and working on it.
- JL RIGHT SO YOU WERE, AT THAT STAGE, A FULLY QUALIFIED, INDEPENDENTLY PRACTISING GP...?
- C Four or five years.
- JL ...FOUR OR FIVE YEARS DOWN THE ROAD.
- C And I was a trainer and I was a Wessex tutor. So it must have been 10 years and I don't think...and I do strongly believe that I was...to take on these new ideas about using open questions and we actually taught people how to use open questions. So that was very new...
- JL ON THE TRAINER COURSE?
- C On the trainer course and...but the whole lot of teaching by...and I remember I had an A4 sheet of paper, I wish I'd kept it [picks up piece of paper], and I put down the whole of the curriculum on this...all the things...because it used to worry me and I do see it still in young doctors wanting...they have to write it down and I even... I typed it out on an old fashioned type writer and then I got a red pen and I added all sorts of things and this was the...which was...I didn't realise what it was, it was the curriculum and I had a real sense of that had to be got through. It is still a problem, it's still a difficulty and the e-portfolio tries to deal with it. So why...? How did I get to be so reflective? I don't know. I mean clearly it worked and I am not fearful...not only am I not fearful, being...my Dad's...well my grandfather was a Baptist missionary in India in the first war so an amazing...to do that. I don't either approve or disapprove of it, but if you're going to do that crazy thing...my Dad was a...my family's a very nonconformist family in a religious sort of way, but I think that non-conformism is part of being...because you got used to, at school, being different and then you

almost...then I almost enjoyed being different and if I was the same then I suddenly thought to myself, "This is the same, is that right?" So that self-reflection is very useful because you try this method and you try that method.

- JL BUT YOU'RE NOT TIED TO ANY PARTICULAR STRONG SENSE ...?
- No, no, no, no. Well the only thing I'm tied to is whatever you're doing have a think about it. It's a hair shirt, which I think a lot of people find very uncomfortable and very irritating, but I think it...otherwise life becomes...for me, it becomes very samey. I think that's...maybe that's what it is about teaching, it is **so difficult** that it's...I think it's what adds an extra dimension to just being a doctor.
- JL HOW DO YOU THINK YOUR PRACTICE AS A TEACHER HAS CHANGED OVER...?
- C Well it used to be very teachey.
- JL SO WHEN YOU SAY THAT YOU'RE LOOKING AT THE CURRICULUM?
- C Yeah well we do a tutorial...I remember doing a tutorial on migraine from which I learnt a great deal...((laughing))
- JL ((LAUGHING)).
- C I did! I did...I learnt...or we do a tutorial on women's health and we might...now many people would say I'd cheat and fluff it, I mean I did a tutorial on breast cancer with A [current trainee] and she presented me with a Power Point presentation, which A, as you know, would do very well and then you could say, "Well, you know, what the hell are you doing being a teacher?" Well...but I could just...my skill was, "Well what if she was...? What if ...?" And just to upset her. So she would come out with a NICE guideline and I would say, not in a whingey, cynical way, but in a positive way, "Well what if...? What are the...? How do you...?" So I would turn the theory into practice, but I would only do it... only, I hope, I would do it as much as possible by asking her questions and actually...and now have a very good...a very strong way of monitoring myself pretty well all the time, whenever I ask a question I will always ask myself, "Was that open?" So if I'm doing that all the time, now I do...and because I'm doing it, one of my strengths I think is when I can spot a closed question at a hundred yards and then I can just challenge...I don't...and I have a real sense, one driving sense is that anything that's in my head is not going to get into your head by my telling you. It might for a bit. Shallow learning and deep learning. I mean it's...and I think that's what came out of school is that I could...I got brilliant A-level grades, but I didn't understand physics...I didn't really understand physics or chemistry.
- JL AND HOW DO YOU THINK YOU REACH UNDERSTANDING?
- Well I reach understanding by talking about it and thinking about it. Thinking is one level and talking about it's another level. And also I've realised when I did my MA [degree in education], I reached another level of understanding by writing it down, which is not a skill I'd...I can do it, I don't enjoy it and I avoid it, but I do know...it takes the reflection to a more **fixing** level.
- JL AND HOW ABOUT WITH YOUR LEARNERS? DO YOU SEEK TO...?
- I do encourage them to write down things, but again I don't...there is a balance between encouraging, the word encouraging, forcing them and hoping...and what I do is I cross my fingers and I say, "Well if only they can get it down..." because I had to do it, but by reflection I realise that...what benefits I got from it.

I'm not very good at doing it, but I do know it's valuable. So all I...so I get... when I've got a group of trainers, future trainers, I just say, "I'm going out the room, but just write three things down you've learned. They don't have to be difficult."

- JL IN YOUR DIALOGUE WITH A LEARNER WHEN YOU'RE TRYING TO HELP THEM ACHIEVE, YOU USED THE WORD UNDERSTANDING. HOW DO YOU TRY AND PROMOTE THAT IN YOUR...IN A DIALOGUE WITH SOMEONE?
- C Well, again, well it's a challenge. So, again, if I'm monitoring myself with open questions and closed questions, I also monitor myself with any statement I make or if any statement that a learner makes, which is like picking up a cue with a patient, it's not different. So if they make a statement, so they've made... I log that in as a statement and if I've got time I gently... I try and avoid the word justify, but sometimes it works. So what I do is I'll rock...I think I rock them so I take them to a place of a little bit of discomfort and that...and then help them understand it a bit so it's...you're **chewing** on it. I don't think things will fix and the other thing is, I suppose one other tenet I have is that 'things will change'. There was a wonderful...there's that book by that Australian, I can't remember...it's so old now and we all had to read it...there you are, had to read it and I'd read it and it had two things in it, it was the cognitive disequilibrium. the 'what if' question, which I'd realised fortuitously worked. I told you the story about my young registrar who...and the other piece, before I forget it, the other piece was the learning...no teaching and learning...learning is changing understanding and I have constantly challenged that statement and I still...it's a wonderful way of looking at what learning is.

JL OKAY. SO IT'S CHANGING UNDERSTANDING THINGS?

С Yeah. So therefore one has learned something. If you can...if you'd...and your understanding may have changed backwards, it may have changed...but by that process you have learned something and that's the other thing I've learned, now this is sort of guessing and working out that it was...if I go round a group or if I go with a...if I'm doing a one to one or putting to my group, "What have you learned today?" Everybody, the patients...learners and very expert learners because they're doctors, reach for their gun until...as soon as they hear that word, but if I deviously, and that's one other thing is be devious when you're a teacher, if I deviously change the words with, "Anything you'll do differently?" You'll notice how I drop my voice, "Anything you'll do differently from today?"(lowers voice tone) People will suddenly come up with something and I think, "That's what you've learned." So the words are terrifically important. I was talking to A the other day about the difference between concerned and worried, how patients...if you say your patient's worried about something they immediately think I'm being cross, but if you say, "What concerns you?" They melt and they don't find that judgemental and so the words carry so much...and yet if you looked it up in a dictionary I bet they're synonyms for each other.

JL YOU TALKED ABOUT A REGISTRAR FIRST WHEN YOU WERE TALKING ABOUT THE...YOUR AUSTRALIAN...?

C Oh yes, yeah right okay. So I had this registrar and it was about the time of Gillick [legal case to establish age of competence for decision making] and so it was still called Gillick competence in those days and it was actually...she was in the news at the time and I was...and I'm the middle of three boys and I went to a...from the age of seven I went to all male schools. So I was never very confident with girls ((laughs))... I knew that and I was very...and therefore the business about consent for the pill was a challenge to me. I knew that, that wasn't a...and I think I did alright and so I had this bright, young, female registrar who was giving me trouble and we...and she was...I, not she was, I was beginning to feel a bit embarrassed about my inability to get my head

around it. So I...and because I did this naturally and it was only when I'd reflected on it and I realised how powerful it was. So I said, "What if she's 15?" And the registrar felt that was not a problem. She would...if she was...if this...if she checked out, had Gillick competence. We didn't actually check out how you'd do that, if she felt she was Gillick competent she'd give her the pill, but when I got down to the age of 14, 13 and 12 she was beginning to get very uncomfortable and I realised what the power of 'what if'. If you don't upset people too much you're just challenging...so yeah, okay you're okay at 15. So it's the 'what if' question and it's taking the learner **safely** to a place of discomfort.

JL THAT'S YOUR COGNITIVE DISEQUILIBRIUM ISN'T IT?

- C That's right and that was CC. She was nothing but trouble [jokingly], but...so you know her, she's very intelligent and therefore there was nothing I could do to tell her, it's not **telling** her, but it's taking her to a clinical place, which your article's all about, clinical thinking, being a GP, taking her to a clinical place that she hadn't even thought of and that's what the skill of a teacher does is...
- JL ANY OTHER REGISTRARS OR EXPERIENCES AS A TEACHER THAT ARE PARTICULARLY MEMORABLE, STAND OUT FOR YOU?
- C Well a couple were... very early on and I'm completely wrong because he's local and I'm not going to tell you who he is. I was very worried about him and I used to not give very good...people would ring up and say...they would say, "Would you employ...?" And yet I was badly wrong, he's an okay GP, he's been an okay GP locally and a GP, he's not a...he's an okay GP locally, he's our senior partner so he's been around for 23 years. So that was...and what I didn't do and I still find uncomfortable is if you're giving a bad reference to somebody, you know, how you share that with them, you're giving them a bad reference, I still...I haven't had to do that for a long time. The other difficult thing I had as a trainer, but not with trainees, was my very first F2 I didn't realise, because she was so nice, and I was new to it and I wasn't sure what level they were working at and I think in hindsight we were lucky not to get...she was...I think she was quite dangerous and I didn't spot that and I think the problem was is that T [D's current partner] had two extraordinary good ones and I'd never had one and I didn't know what level they were working at and I realise now and I've had one who's **okay**. I think I've only had two or three and they are a very difficult...I think we weren't...we were asked to look after them without actually extra training, you know, "You're a trainer. Look after this F2." Well actually in hindsight that probably wasn't correct.
- JL DID ANYTHING IN PARTICULAR GO WRONG WITH HER, C, OR...?
- C No, no nothing so I don't know how that happened, I really don't and actually she made a stunning...she made a couple of stunning diagnoses, but...
- JL WHAT MADE YOU THINK THAT SHE WAS DANGEROUS OR COULD BE DANGEROUS?
- Well afterwards I was looking at some of the things she did. So I don't...it may...I may be over reacting, but...and she didn't...and as you know she didn't go on to becoming...to getting on the ladder so other people spotted that she wasn't up to it. So there was...so she was a new post and she was an IMG, all the...and so it's a **difficult** area and I'm not going to beat myself up, but it's... maybe the system...we tend to think of ourselves, we're trainers and therefore we're okay with F2's and actually that's not true...
- JL THEY'RE A DIFFERENT THING?

- C ...they're a different animal and the other problem is, is that because I think on the whole, and we've got a disparity I know in the practice at the moment, but on the whole ST3's, registrars, are kind of, on the whole, kind of able. You've got some high flyers, but they're kind of able at a certain level so you don't have to worry about the bottomness, but with F2's the disparity is huge.
- JL YEAH THERE'S A MUCH BROADER RANGE OF ABILITY.
- C Yep.
- JL ANY PARTICULAR SUCCESSES AS A TRAINER THAT STICK IN YOUR MIND?
- C Well when I look at...well not particularly. I mean I've enjoyed lots and when I look at...I'm very proud at one of...well I'm proud at how many...well I suppose...yes I suppose I have one...yeah I mean I'd...I think not at the time, I think when I...it's a sort of outcome really and if you look at my...I suppose I had 10 or 12 registrars and when you look, I've had course organisers and one guy...someone skilled who wrote a book on evidence based medicine. I tell you what, one of the real, real and what I... I wanted it on my grave stone and I still go on. I still guote it, he wasn't the most...he was a teaching teachers so he's not a training...so he's teaching trainers. So he's a young man and he was quite feisty and I felt uncomfortable with him and I would've said I didn't enjoy...there you are, I didn't enjoy the week I spent in the room with him because he was constantly challenging, but not always in a very positive way. I don't mind people challenging and making me think, but...and I thought, "Oh God he's just...he's here, he'll pass, he'll carry on and he'll be a...and he won't be a terribly successful trainer." And it was very much in the early days. I know they have to do...they do the paper...they do the degree now, but it was very much in the early days of that and we were doing it as tutors without any help from any university at all, but we were with CRC [educationalist in Wessex Deanery] and CRC was...we were getting them to write an essay of 1,000 words and I think we thought we were pretty brave to get them to do that because it was...we weren't cutting edge, but we weren't...we were doing it because other people were doing it, but...so they had to write a précis of 1,000 words to show to the AD when the AD came around to inspect and say, "Yes." So they had to do that because they wouldn't get a licence and they were really, really interesting to read those because they weren't well structured and some weren't up to much at all, but they were done, but this guy said, "I was taught nothing, but I learnt much." I thought, "Shit you've done it. You can go and retire now." ((smiles))
- JL AND THAT WAS A REAL MOMENT FOR YOU THINKING ...?
- That was a...yes because he had...and the fact that he'd learnt...he'd been in a room with me and he'd realised that and he'd...and I couldn't have put it better and that's what I would always put on...is that that's what I would always like is that I get cross when I tell people things and I get cross...not cross, it's the wrong word, uncomfortable when A writes down my wise words. You should... why don't you feel proud? Well I do feel proud that she understands the tortuousness of the process because that's what my...it's not the tortuousness of my mind it's the tortuousness of the process, but actually if you bring it down to a question and let's put it down, let's start from there. The fact is she's realised that that's the key. Now she...I want her to develop her own key, but as long as she realises that's the key then I can continue to say, "That's my key A. You can borrow it, but I'd rather you make your own."
- JL HOW DO YOU HELP HER MAKE HER OWN KEY, C?
- C Well I haven't...we haven't got onto that. I think that's my next move.

JL AND HOW ...?

C I think I've taken her to a place that she now realises that she...there are defects...not defects, that's wrong isn't it? That she's not going to...I mean at the basic level she's not going to pass CSA unless she changes her...now I think the CSA is good in this in the sense that it forces them to find out what the patient thinks. Now we've taken A there, she's got an awful lot of training that says, "I can survive without that" which she can. Her recent success, she can be a good doctor without all this reflective crap, without all this finding out what the patient wants. She can do it, but we want her to be...and I don't really want her to be a better doctor, I want her to be a happy doctor who can survive the NHS and I think the only way to do that is to listen to patients and so I don't get...and I don't help doctors be better teachers for the...in many ways for the student, the learner, I do it for their own...it's so they survive and I think that's why I was...why I love training is I mean I teach in a group, I'll help doctors be better doctors. Not because I'm...I'm not worried about them diagnosing the cancer earlier because they all do that and we all miss it. It's being a happy doctor because I have a real sense that we...statistically even our spouses suffer more depression. So clearly we take...we don't process that stuff very well.

JL AND HOW DO YOU...? WHAT DO YOU THINK HELPS DOCTORS BE HAPPIER DOCTORS?

Well it's their...it's a confidence in what they're doing and they're...blimey they have enough buffets not to keep being told that...so they have to have a real sense of they're doing..."I'm okay" and...

JL AND HOW DO THEY DEVELOP THAT SENSE?

C Well I mean the only way I would do it is self-reflection. Is **constantly** thinking about what you're doing and...it's all just not what you're doing, it's what underpins what you're doing because you will be challenged to change it and what is the essence of ...? What are you as a general practitioner? And that's continually changing and it will continually change and there will be challenges outside and I think the...and there's some interesting...and I'll talk to you later about this, some interesting stuff that K listened to on Radio 4, it was an epidemiologist called Marmat about stress and how people handle stress and micro-management and how people...and how...and micro-management is... we're not the only ones, it happens in IBM, it happens in schools and the more you keep...and my father interesting enough, it almost comes out of his education. So he was educated in the '30's...the '20's and '30's and he never, ever let us know we'd done something right. That would be far too dangerous because we might become smug and then not try hard and so that's very...and I'm a...and anybody who has a go at what went well and what not so well, again I've changed the words, "What were you pleased with? And what might you do differently?" So you get rid of the words...

JL SO YOUR APPROACH AS A TEACHER TO NURTURE AND GROW THEIR SELF-CONFIDENCE?

You can't...it doesn't...my MA dissertation was all about under five year olds and...and I don't...and the people make a difference between pedagogy and andragogy. Well actually I'm not sure we change that much, I'm not sure. I think you nurture a child and you don't...if a child does something wrong you don't... well you're not going to change them and blimey we see plenty of badly brought up children, you're not going to change them by yelling at them. You might lose it...I might lose it every now and again, but you know, "You did that well. But how might we change it?" It doesn't change.

- JL HOW ABOUT THE PARALLELS BETWEEN YOUR ROLE AS A CLINICIAN AND AS A TEACHER?
- C Well I mean that...well right, okay. I mean that, again, when I was learning to be a...I think the very first time I took on a group of old trainers at Urchfont I fell flat on my face. So everybody knew that it was easier to look after new trainers. So I'd done a couple of years of that and then they decided let's stick him in a group and I...so here you are and I knew what I'd done wrong, I asked them... so at this time I'd been...presumably I'd been about 10 years, eight years and I was beginning to understand...and we were talking about it, is what went on in the consultation was what goes on in the tutorial. So we were beginning to talk about that and trying to get people...other trainers to understand that. Now I don't...see what amazes me is that new trainers understand it straight away now. So what we've been doing has been working and I...closed question coming up, this was a terrible group, I mean I know I can talk about the group and I had a really bad experience with them, "Do you think...?" Starting with 'do' so it's a closed question, "Do you think...?" I can remember the room I asked it in, "Do you think that the...that there's any similarity between what goes on in the consultation and what goes on in the tutorial?" "No." And this was a group in which some guy was doing a crossword in it and I didn't have the power to say, "Well if it's not..." I don't have no problem...and we were coming back from the pub at Urchfont one night and they were...it's interesting, bad groups often stick together or dysfunctional groups and they stuck together even in the pub and didn't mix with any other group and they came down the stairs and I thought, "Oh I'll go back with them back to the house" and I walked down the steps behind them in the dark and somebody I heard say, "Oh look out it's the enemy." So if you want a bad experience as a teacher...
- JL THAT MUST HAVE BEEN PRETTY DIFFICULT.
- C So why...? ((Laughing)) You think to yourself, why did C carry on? I don't know really, but...
- JL AND HOW ABOUT THOSE...YOU'RE TRYING TO DRAW ON THOSE PARALLELS THAT WERE APPARENT TO YOU, DO YOU SEE ANY OTHERS IN THE RELATIONSHIP?
- C What between being a doctor and a teacher?
- JL MMM.
- No I don't see any difference. I **really**, **really** don't see any difference. You're teaching people new...they're coming in to learn something aren't they? Now what they may be...
- JL PATIENTS?
- C ...patients are, they've come with a problem, which is what the learner does, "I can't do this. I can't stop coughing or I can't deal with difficult elderly men" it's 'I can't', it's a problem, complaining of, it's the same thing and I'm there to think about it and help them. Now clearly the parallel misses when I have got to diagnose a cancer or something, but it's still a matter of listening, finding out what they thought was going on and being...and that's what...and I think that's what I want A to do, is not only to do it, but to be fascinated by it and I think... and that's what fascinates me about the learner and the...is me being nosey and wanting to know what's going on in your head. What is the grief? What is the problem? I'm using the term wrong, what is the problem? And that's one of my other things is about tone of voice. The words aren't always...so you might say...you could say to a patient or to a learner, "What's the problem?" Or you could say, "What IS the problem?" And I've used exactly the same words and

you, I hope, have taken away a completely different meaning. So I think...and that's what I...and all those little communication skills that I've developed. I try and I can't convey them, but I share them and I always say that and the other day...no you weren't at that, but I was sitting with the tutors and we were talking about what we called ourselves; facilitator or teacher and I think the other word I use is accelerator. It's taken me 30 years to learn some of these things and what I'm trying to do is saying, "Well actually let's get..." and that's where I've come from and so I'm trying to accelerate that learning in my present learners and I'll take some on and I'll take some on, I'm not fussed, they'll take some on, which is exciting and I think, "Oh look you've..." and if your excitement you've talked about what's excitement. It's the difference between one year end...one year to the next.

JL AND ARE THERE PARALLELS IN THAT ACCELERATOR TO YOU AS A CLINICIAN AS WELL?

C Yeah well yes because I mean a lot of the work that I like and a bit I had a problem with the article, the article that I've just read was talking about the difference between hospital medicine and that we only...we don't see disease very often. That's a kind of negative way of saving what I do do. It's almost as if, "Oh what a shame I don't see disease" well I don't see disease and that's not my business really. My business is looking at the patient with his heart disease or with...or he's just come out of hospital or my patient with her cancer and helping her through that and she's learning something new everyday, she's learned recently that her disease is totally incurable and I went to visit a lady the other day...so this is another parallel, who denied the hospital had told her she had...her cerebral secondaries were from her lung cancer and I sat there in her house and I thought, "What do I do now?" And as a teacher I risk things, I risk saying things knowing that I might say the wrong thing and I have said it because a risk means you get it wrong sometimes and I risk things with patients. So I looked her in the eye and I said...and I used the word I've developed recently is, "This disease is incurable" because she said to me. "Aren't there tablets for this disease?" So I risked...I mean she might have collapsed, she might...and actually the week after she died and maybe she died well because I'd told her the truth or maybe she died miserably because I told her the truth.

JL HOW DID SHE RESPOND TO IT WHEN YOU SAID THAT?

She took it on...she didn't really respond actually. She just...she didn't say anything. She just said, "Oh yes" and the conversation went elsewhere and I wasn't...and I think I judged it was not right to bring it back and that's what I do in a tutorial. If A, just take her as an example, is **struggling** with the process of finding out what the patient wants, I'm not going to rub her nose in it, it's softly, softly catchy monkey. So what goes on in the tutorial and what goes on in **anything.** [Tape ends at 43:04]

APPENDIX 5 - ETHICAL APPROVAL FORM

STUDENT HIGHER-LEVEL RESEARCH DISSERTATION/THESIS



Certificate of ethical research approval

DISSERTATION/THESIS

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School's Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: http://www.bera.ac.uk/publications/guidelines/ and view the School's statement on the GSE student access on-line documents.

READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER (the form will expand to contain the text you enter). DO NOT COMPLETE BY HAND

Your name:	Jonathan Lake			
Your student	t no:	590054732		

Return address for this certificate: 27 Taswell Road, Southsea, Hants, PO5 2RG

Degree/Programme of Study: EdD (Generic)

Project Supervisor(s): Professor Keith Postlethwaite and Dr Nigel Skinner

Your email address: jl373@exeter.ac.uk

Tel: 07718 595730 /023 92340638

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

	11 //		
Signed:	JU	date: 21/9/2011	

NB For Masters dissertations, which are marked blind, this first page must **not be included** in your work. It can be kept for your records.

Chair of the School's Ethics Committee updated: April 2011

Certificate of ethical research approval

Your student no: 590054732

Title of your project: The Professional Development of GP Trainers

Brief description of your research project: I wish to investigate how GPs who train other GPs (known as GP Trainers) develop into professional educators, as well as clinicians. I wish to understand how they construct themselves as teachers, the challenges this poses in their professional and personal lives and the conflicts and resonances that exist between the dual role of doctor and teacher.

Give details of the participants in this research (giving ages of any children and/or young people involved): I intent of interview a minimum of 6 GP trainers and then follow up with further interviews or non-participant observation of GP trainers who are teaching GP trainees. In addition I may use written work produced by prospective GP trainers to inform my research.

Give details (with special reference to any children or those with special needs) regarding the ethical issues of:

 a) informed consent: Where children in schools are involved this includes both headteachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document. a blank consent form can be downloaded from the GSE student access online documents:

I will use the form attached to ensure participants give informed consent. I will approach participants by email giving a brief outline of my project, giving the reasons why I have asked them to participate. I will ensure that they are aware that consent can be withdrawn at any stage of the process and send them a copy of their interview transcription for their comments.

b) anonymity and confidentiality

Data will be stored on a specific hard-drive which will be password protected. After transcription, I will anonymise my data and if there is particularly sensitive information I will consider carefully having the written thesis shelved privately.

Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:

I will use interviews and non-participant observation to collect my data. I will be careful to be aware of power imbalances in the interview situation and attempt to make the interviews a positive experience for participants by giving them the opportunity to reflect on their work as educators and learn from this. I will ensure participants feel comfortable to stop the interview at any given time and respect their wishes to maintain confidentiality and anonymity at all stages of the research process.

Give details of any other ethical issues which may arise from this project (e.g. secure storage of videos/recorded interviews/photos/completed questionnaires or special arrangements made for participants with special needs etc.):

None other than those discussed above

Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

Chair of the School's Ethics Committee

updated: April 201

Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

None specific to this project

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor

This project has been approved for the period: Se fewker 2011 until: March 2013
By (above mentioned supervisor's signature): date: 21 9 11
N.B. To Supervisor: Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.
GSE unique approval reference:
Signed: date: 22/09/2011 Chair of the School's Ethics Committee

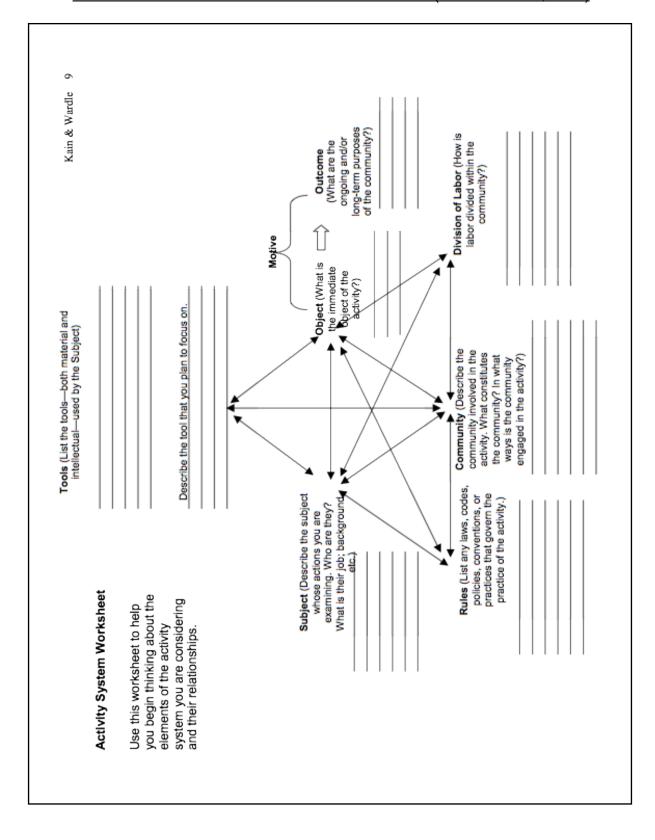
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Chair of the School's Ethics Committee updated: April 2011

APPENDIX 6 - WORD COUNT ANALYSIS SHEET

	Interview A	Interview B	Interview C	Interview D	Interview E	Interview F	Interview G	TOTAL
Think	63	99	64	82	110		57	365
Practice	36				20			36
Training	14							14
Quite	30	36		32	21	21	20	139
Kind	31	29		38			20	98
	47		27	35	46	30	16	
Really	13	67 13	27 16	30	46 18	30	16 25	222
Actually		13	16		18		25	67
Something	12							12
Patients	15							15
Good	19	33		31	24	11	18	112
Got	16	27		22	12	16	23	104
Huge	12							12
Just	14	47	25	17	16	37	18	158
Going	27	21	13			11		72
Life	13							13
Fact	22							22
		4.4	20	400	00		20	
Know	16	14	30	120	29	59	30	269
Much	17	19	11		12	15	12	74
Like	14	26		22	16	25	22	109
Time	12	29	17		9		13	71
Well	15	25	21	23	26		11	95
Thing	17			29				46
Come	13					13		26
Things	10	25	14		15	10	13	52
People	1	20	17	22	30	12	. 13	71
			17	22	30	12		
Take		15	<u> </u>				<u> </u>	15
Responsibility		13						13
See	1	16						16
Patient		16						16
Job		14						14
Came		15						15
Bit		35					14	49
Back		26						26
Also		12						12
Anything		12	1					12
Get			16					16
Change			10					10
GP			12			13		25
Group			12					12
Mean			20	27	37		45	92
Might			12					12
One			24	20	22	14	14	72
Problem			12	20				12
			16		10	13		
Now						13		29
Remember			14		10			14
Still			13					13
Teacher			11			11		22
Trainer			11					11
Went			14					14
Bit				18		20		38
Obviously				41			14	55
Probably				22			14	36
Right		 		15			11	26
Sort				21		28	39	88
Suppose				31	12			43
Two				17				17
Way				19				19
Yes				18	8		19	45
Laughs					24	21		45
Perhaps					16			16
Go					13		11	24
Different					10			10
General					10			10
					10			
Dr						12		12
Done						13		13
Lot						11		11
New						10		10
Old						11		11
Yeah						21		21
OKAY							13	
RIGHT							11	
"New" terms	23	12	14	9	5	6	3 (2 interviewer	terms)
"Unique" terms	6			2	3	6		
Capitalised text	denotes interviewe	er spoken words						

APPENDIX 7 - ACTIVITY SYSTEM WORKSHEET (Kain & Wardle, 2011)

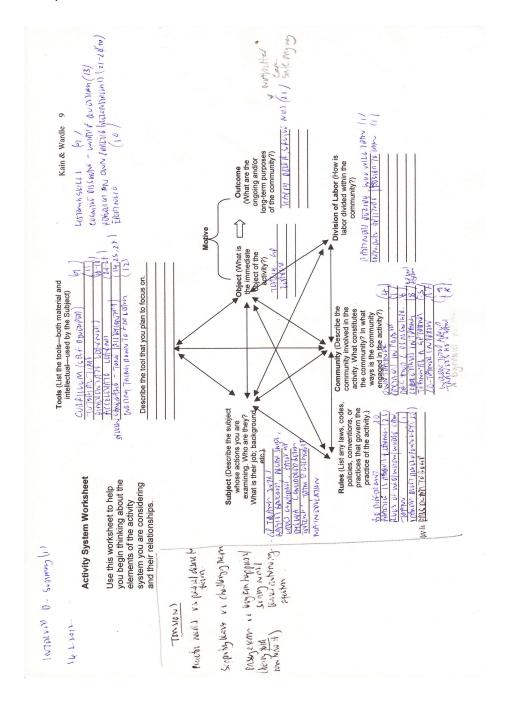


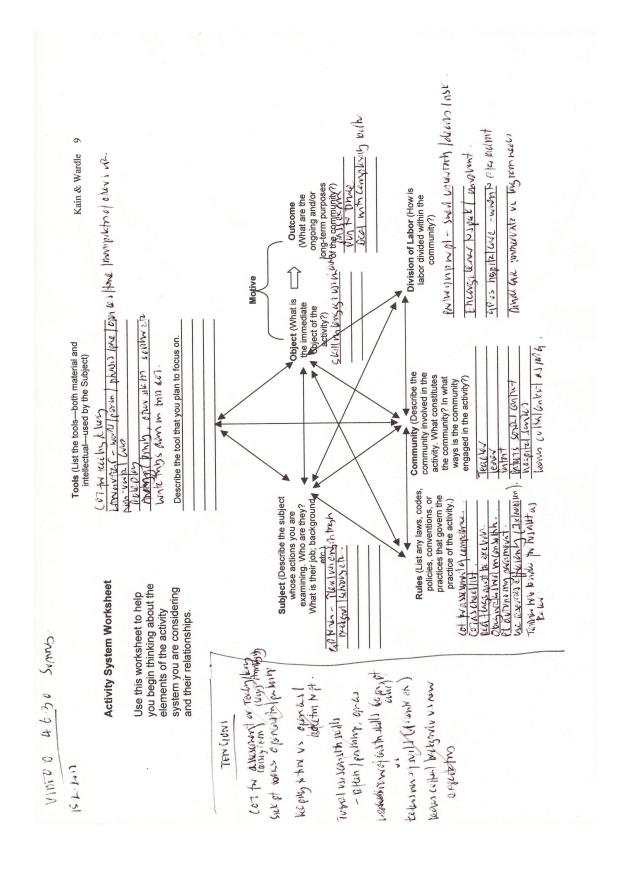
APPENDIX 8 - ACTIVITY THEORY CODING SHEET EXAMPLE

Explanatory Notes:

On the following two pages the activity theory coding sheets are included for interview and video recording C. While the participant at the top of the sheets is D, this was written in error and the actual participant was C.

The video recording was watched twice using this sheet for coding and then the two iterations were condensed onto this video recording summary sheet. A similar process was carried out with the coding from the interview transcript. Codes were collected under the headings and references for the location of the codes in the interview are put in brackets next to the entries.





BIBLIOGRAPHY.

Ajjawi R and Bearman M, (2012) 'Sociomateriality matters to family practitioners as supervisors' *Medical Education* 46 1141-1151.

Anon, (1975) 'Teacher training in medical schools' *Medical Education* 9 2-3.

Anon, (1987) 'Teaching medical teachers to teach' *Medical Education* 21 457.

Atkinson K, Ajjawi R and Cooling N, (2011) 'Promoting clinical reasoning in general practice trainees: role of the clinical teacher' *The Clinical Teacher* 8 176-180.

Atkinson P, Coffey A and Delamont S, (2003) *Key Themes in Qualitative Research: Continuities and Change* Walnut Creek: AltaMira.

Atkinson T and Claxton G (eds) (2003). The Intuitive Practitioner: on the value of not always knowing what one is doing Maidenhead: Open University Press.

Albert M, (2004) 'Understanding the debate on medical education research: a sociological perspective' *Academic Medicine* 79 948-54.

Annas J, (2005) 'Virtue Ethics' in Copp D (ed) *The Oxford Handbook of Ethical Theory* Oxford: Oxford University Press.

Baker E M and Edwards R (2012) How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research National Centre for Research Methods. ESRC.

Balint M, (1957) *The Doctor, His Patient, and their Illness* Oxford: Churchill Livingstone

Benjamin S and Hossam M, (1993) 'Physicians know how to be good educators too: a comparison of the patient problem solving process and the instructional design process' *Medical Teacher* 15 175-178.

Benner P, (1984) From novice to expert: Excellence and power in clinical nursing practice Menlo Park: Addison-Wesle.

BERA, (2011) Guidelines for Educational Research BERA: London.

Berliner D C, (2001) 'Learning about and learning from expert teachers' International *Journal of Educational Research* 35 463-482.

Berne E, (1968) Games People Play London: Penguin

Bernstein J, (1992) 'The Resurgence of Pragmatism' Social Research 59 813-840.

Biesta G, (2007) 'Why "What Works" Won't Work": Evidence-based practice and the democratic deficit in educational research' *Educational Theory* 57 1-22.

Biesta G, (2010) Good Education in an Age of Measurement: ethics, politics, democracy London: Paradigm.

Biesta G and Burbules N, C, (2003) *Pragmatism and Educational Research* Oxford: Rowman & Littlefield.

Bleakley A, (2010) 'Blunting Occam's razor: aligning medical education with studies of complexity' *Journal of Evaluation in Clinical Practice* 16 849-855.

Bligh J, (2005) 'Faculty Development' Medical Education 39 120-121.

Bloom S, (1988) 'Structure and ideology in medical education: an analysis of resistance to change' *Journal of Health and Social Behaviour* 29 294-306.

BMA 2005. GP Educator Survey. London: British Medical Association.

Boendermaker P, Conradi M, Schuling J, Meyboom-De Jong B, Zwierstra R and Mertz J, (2000) 'Core Characteristics of the Competent General Practice Trainer, a Delphi Study' *Advances in Health Sciences Education* 8 111-116.

Bradley G, (2003) 'The Crisis in Educational Research: a pragmatic approach' *European Educational Research Journal* 2 296-308.

Brawn R, (2003) 'The formal and the intuitive in science and medicine' in Atkinson T & Claxton G (eds) *The Intuitive Practitioner* Maidenhead: Open University Press.

Brookfield S, (1995) *Becoming a Critically Reflective Teacher* San Francisco: Jossey-Bass.

Brosnan C, (2010) 'Making sense of differences between medical schools through Bourdieu's concept of 'field' *Medical Education* 644 645-662.

Brosnan C, (2011) 'The Sociology of Medical Education'. *ASME Researching Medical Education Conference*. RIBA, London.

Bunniss S and Kelly D, (2010) 'Research paradigms in medical education research' *Medical Education* 44 358-366.

Byrne P, (1968) 'Postgraduate Training for General Practice' *Medical Education* 2 101-103.

Byrne P and Freeman J, (1970) 'Vocational training for general practice: some problems of implementation' *Medical Education* 4 268-273.

Carr W and Kemmis S, (1986) *Becoming Critical: Education, Knowledge and Action Research* London: Falmer Press.

Carr W, (1995) For Education Buckingham: Open University Press.

Charmaz K, (2006) Constructing Grounded Theory Thousand Oaks: Sage.

Cilliers P, (1998) Complexity & Postmodernism Oxford: Routledge.

Cohen L, Manion L and Morrison K, (2007) *Research Methods in Education* London: Routledge.

Coles C, (2000) 'Teaching the teachers' Medical Education 34 84-85.

Coles C, (2006) 'Uncertainty in a world of regualtion?' *Advances in Psychiatric Treatment* 12 397-403.

Cribb A and Bignold S, (1999) 'Towards the reflexive medical school: the hidden curriculum and medical education research' *Studies in Higher Education* 24 195-209.

Cornford C and Carrington B, (2005) 'A qualitative study of the experiences of training in general practice: a community of practice?' *Journal of Education for Teaching* 32 269-282.

Crotty M, (1998) The Foundations of Social Research London: Sage.

Denzin N K, (1978) *The Research Act: A Theoretical Introduction to Sociological Methods* New York: McGraw Hill

Dewey J, (1929) *The Quest for Certainty* In *The Later Works (1923-1953)*. Volume 4, ed Boydston J, A, Carbondale: Southern Illinois University Press.

Dimitroff A and Davis W, (1996) 'Content analysis of research in undergraduate medical education' *Academic Medicine* 71 60-7.

Drake P and Heath L, (2008) 'Insider research in schools and universities' in Sikes P and Potts A, (eds) (2008). *Researching Education from the Inside: Investigations from within*. Oxford: Routledge.

Dreyfus S and Dreyfus H 1980. A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition. Berkeley: University of California.

Edwards A, Gilroy P and Hartley D, (2002) *Rethinking Teacher Education: Collaborative responses to uncertainty* London: Routledge Falmer.

Edwards A, (2007) 'Relational Agency in Professional Practice: A CHAT Analysis' *Actio: An International Journal of Human Activity Theory* 1 1-17.

Eitel F, Kanz K-G and Tesche A, (2000) 'Training and certification of teachers and trainers: the professionalization of medical education' *Medical Teacher* 22 517-526.

Ellis J, (1969) 'The Future Teaching of General Practice' Medical Education 3 23-27.

Engenström Y, (2001) 'Expansive Learning at Work: toward an activity theoretical reconceputlisation' *Journal of Education and Work* 14 133-156.

Eraut M, (1994) *Developing Professional Knowledge and Competence* London: Falmer.

Eraut M, (2000) 'Non-formal Learning and tacit knowledge in professional work' *British Journal of Educational Psychology* 70 113-136.

Eraut M 2005. Professional Knowledge in Medical Practice. *Monographias Humanitanes - La Profesion Medica: Los Retos del Milenio*. Barcelona: Fundacion Medicina y Humanidades Medicas.

Field S, (2003) 'The story of general practice postgraduate training and education' in Lakhani M (ed) *A Celebration of General Practice* Abingdon: Radcliffe Medical Press.

Foulkes J, Scallan S, Coles C and Elmer R, (2011) 'Observations on the case for reclaiming portfolio log entries as assessments for learning' *Education for Primary Care* 22 14-19.

Freeman R, Smith F and Hornung R, (2002) 'Courses for new GP trainers: a literature review and survey for the UKCRA' *Education for Primary Care* 13 1-12.

Garcia-Horta J B and Guerra-Ramos T M, (2009) 'The use of CAQDAS in educational research: some advantages, limitations and potential risks' *International Journal of Research & Method in Education* 32 151-165.

Geertz C, (1973) The Interpretation of Cultures New York: Basic Books.

General Medical Council, (2003) Tomorrow's Doctors London: GMC

General Medical Council (2012) Duties of a Doctor London: GMC

Gibson W J and Brown A, (2009) Working with Qualitative Data London: Sage.

Gill D and Griffin A, (2010) 'Good Medical Practice: what are we trying to say? Textual analysis using tag clouds' *Medical Education* 44 316-322.

Golby M and Parrott A, (1999) *Educational Research and Educational Practice* Exeter: Fair Way Publications.

Grant A, Prout H, Hawthorne K, Jones KT and Houston H, (2010) 'Some effects of teaching undergraduate medical students on general practitioner thinking and learning' *Education for Primary Care* 21 97-104.

Griffin A, (2008) 'Designer doctors: professional identity and a portfolio career as a general practice educator' *Education for Primary Care* 19 355-9.

Guba E and Lincoln Y, (2005) 'Paradigmatic Controversies, Contradictions and Emerging Confluences' in Denzin N & Lincoln Y (eds) *The Sage Handbook of Qualitative Research* 3rd ed Thousand Oaks: Sage.

Hall A, Pitts J and Smith F, (2005) 'A 'Mutually Agreed Statement of Learning' as a system of general practice trainer appraisal: a pilot study of acceptability' *Education for Primary Care* 16 663-71.

Higgs J and Mcallister L, (2007) 'Educating clinical educators: using a model of the experience of being a clinical educator' *Medical Teacher* 29 e51-57.

Hilton S, (2008) 'Education and changing face of medical professionalism' *British Journal of General Practice* May 353-361.

Hodkinson, H. and P. Hodkinson (2005) 'Improving schoolteachers' workplace learning.' *Research Papers in Education* 20(2): 109-131.

Hofstede G, (2011) <u>www.geert-hofstede.com</u> [Online] [Accessed 28th December 2011]

Howe A and Carter Y, (2003) 'The general practitioner as a teacher' in Lakhani M (ed) *A Celebration of General Practice* Abingdon: Radcliffe Medical Publishing.

Illich I, (1976) Medical Nemesis: The Expropriation of Health London: Marion Boyars.

Innes A, Campion P and Griffiths F, (2005) 'Complex consultations and the 'edge of chaos" *British Journal of General Practice* 55 47-52.

Jenkins R, (2002) Pierre Bordieu in Essential Sociologists Oxford: Routledge.

Jones P, (2011) 'Education at the edge of chaos' *British Journal of General Practice* 61 686-687.

Jones T, (2011) 'TUNs and TENs: trainees' unmet needs and trainers' educational needs: identifying and addressing the training needs of GP trainers' *Education for Primary Care* 22 118-123.

Kain D and Wardle E, (2011) 'Activity Theory: An Introduction for the Writing Classroom' [Online]. Available: http://ecu.academia.edu/DonnaKain/Papers/485796/Activity_Theory_An_Introduction_for_the_Writing_Classroom [Accessed 2nd November 2011].

Kaptelinin V and Nardi B A, (2006) *Acting with Technology: Activity Theory and Interaction Design* London: MIT Press.

Kenway J, (1990) 'The Right's discursive politics' in Ball SJ (ed) *Foucault and Education: Disciplines and Knowledge* London: Routledge.

Kilminster S and Jolly B, (2000) 'Effective supervision in clinical practice settings: a literature review' *Medical Education* 34 827-840.

King A and Jenkins L 2009. *GP training capacity in East Kent – a research study.* Centre for Health Services Studies, University of Kent.

Kneebone R, (2002) 'Total internal reflection: an essay on paradigms' *Medical Education* 36 514-518.

Knorr Cetina K, (1999) *Epistemic Cultures: how the sciences make knowledge* Cambridge, Mass: Harvard University Press.

Kuhn T, (1962) *The Structure of Scientific Revolutions* Chicago: University of Chicago Press.

Kvale S, (1996) *InterViews: An introduction to qualitative research interviewing* Thousand Oaks: Sage.

Langemeyer I, (2006) 'Contradictions in Expansive Learning: Towards a Critical Analysis of Self-dependent Forms of Learning in Relation to Contemporary Sociotechnological Change' *Forum: Qualitative Social Research* 7 1.

Lake J, (2010) 'The Nature of Educational Research' EdD Assignment

Lave J and Wenger E, (1991) *Situated Learning: Legitimate Peripheral Participation* Cambridge: Cambridge University Press.

Laxley A and Seery A (2009) 'Some philosophical and other related issues of insider research' in Sikes P and Potts A (eds) (2008). *Researching Education from the Inside: Investigations from within.* Oxford: Routledge.

MacDougall J and Drummond M, (2005) 'The development of medical teachers: an enquiry into the learning histories of 10 experienced medical teachers' *Medical Education* 39 1213-1220.

McIntyre J, (2009) 'Arguing for an interpretive method' in Higgs J, Horsfall D & Grace S (eds) *Writing Qualitative Research on Practice* Sydney: Hampden Press.

McLeod P, Meagher T, Steinert Y, Schuwirth L and Mcleod A, (2004) 'Clinical teachers' tacit knowledge of basic pedagogic principles' *Medical Teacher* 26 23-27.

McNaught C and Lam P, (2010) 'Using Wordle as a Supplementary Research Tool' *The Qualitative Report* 15 630-643.

Mackenzie N and Knipe S, (2006) 'Research dilemmas: Paradigms, methods and methodology' *Issues in Educational Research* 16.

Mennin S, (2009) 'Self-organisation, integration and curriculum in the complex world of medical education' *Medical Education* 44 20-30.

Monrouxe L and Rees C, (2009) 'Picking up the gauntlet: constructing medical education as a social science' *Medical Education* 43 196-198.

Morrison A and Cameron-Jones M, (1972) 'A proceedure for training for general practice' *Medical Education* 6 125-132.

Moss P, (1994) 'Can There Be Validity Without Reliability?' *Educational Researcher* 25 5-12.

National Health Service Prescription Pricing Authority (2010) 'England Practice List Size as at quarter end September 2010' [Online] Available: http://www.ppa.org.uk/foidocs/responses/FOl_Request_(512955).pdf [Accessed 21st January 2012].

Neighbour R (1996) The Inner Consultation (2nd Ed) Plymouth: Petroc Press

Nicol F, Shaw R and Creber C, (2008) 'RUNS and TENS: registrars' unmet needs and trainers' educational needs' *Education for Primary Care* 19 80-93.

Norman G, (2005) 'Research in clinical reasoning: past history and current trends' *Medical Education* 39 418–427.

Norman G, Dore, K, Grierson, L (2012) 'The minimal relationship between simulation fidelity and transfer of learning' *Medical Education* 46 636-647

Norman G, (2011) 'Chaos, complexity and complicatedness: lessons from rocket science' *Medical Education* 45 549-559.

Page S and Clark J, (2010) 'Experiences of Learning and Teaching Mathematics: Using Activity Theory to Understand Tensions in Practice.' *In:* Sparrow L, Kissane B & Hurst C (eds.) *33rd annual conference of the Mathematics Education Research Group of Australasia.* Freemantle, WA: MERGA.

Palmer P J, (1998) The Courage to Teach San Francisco: Josey-Bass

Parboosingh J, (2002) 'Physician Communities of Practice: Where Learning and Practice And Practice are Inseparable' *The Journal of Continuing Education in the Health Professions* 22 230-235.

Parry K, (1987) 'The doctor as a teacher' *Medical Education* 21 512-520.

Peile E, (2004) 'Reflections from medical practice: balancing evidence-based practice with practice-based evidence' in Thomas G & Pring R (eds) *Evidence-Based Practice in Education* Maidenhead: Open University Press.

Peile E, (2013) 'Evidence-based medicine and values-based medicine: partners in clinical education as well as in clinical practice' *BMC Medicine* in press.

Pereira Gray D, (1984) 'Minimum Standards for Training: Selecting general practitoner trainers' *British Medical Journal* 288 195-198.

Pitts J, (1996) 'Pathologies of one-to-one teaching' *Education for General Practice* 7 118-122.

Pitts J, Smith F and Hall A, (2001) 'The underperforming registrar: a diagnostic approach' *Education for Primary Care* 12 437-45.

Pitts J and Curtis A, (2008) 'Reflections of general practice trainers on educational appraisal and professional development' *Education for Primary Care* 29 32-42.

Popper K, (1963) Conjectures and Refutations London: Routledge

Pring R, (2000) Philosophy of Educational Research London: Continuum.

Rabinow P (ed) (1984). The Foucault Reader London: Penguin.

Rashid A and Siriwardena A, (2005) 'The professionalisation of education and educators in postgraduate medicine' *Education for Primary Care* 16 235-45.

Recupero P, Cooney M, Rayner C, Heru A and Price M, (2005) 'Supervisor-trainee relationship boundaries in medical education' *Medical Teacher* 27 484-488.

Rees C and Monrouxe L, (2010) 'Theory in medical education research: how do we get there?' *Medical Education* 44 334-339.

Regehr G, (2010) 'It's NOT rocket science: rethinking our metaphors for research in health professions education' *Medical Education* 44 31-39.

Richards T J and Richards L, (1994) 'Using computers in qualitative research' in Denzin N K and Lincoln Y S (eds) (1994) *Handbook of qualitative research* Thousand Oaks, CA: Sage

Robson C, (2002) Real World Research Oxford: Blackwell Publishing

Rorty R, (1979) *Philosophy and The Mirror of Nature* Princeton: Princeton University Press

Rorty R, (1991) *Objectivity, Relativism, and Truth.* Cambridge: Cambridge University Press.

Roth L, Schlenk M and Bogdewic S, (2001) 'Developing clinical teachers and their organizations for the future of medical education' *Medical Education* 35 428-429.

RCGP (2012) GP Curriculum [online] http://www.rcgp.org.uk/gp-training-and-exams/gp-curriculum-overview.aspx [Accessed 19th February 2013)

Russell D, (2001) 'Looking Beyond the Interface: Activity Theory and Distributed Learning' in Lea M (ed) *Understanding Distributed Learning* London: Routledge.

Schön D, (1983) The Reflective Practitioner Farnham: Ashgate.

Sennett R, (2008) The Craftsman London: Penguin.

Sfard A and Prusak A, (2005) 'Telling Identities: In Search of an Analytic Tool for Investigating Learning as a Culturally Shaped Activity' *Educational Researcher* 34 14-22.

Siedman I, (1991) Interviewing as Qualitative Research New York: Teachers College.

Sikes P and Potts A, (2008) 'Introduction' in Sikes P and Potts A (eds) (2008). Researching Education from the Inside: Investigations from within. Oxford: Routledge.

Simon C, (2009) 'From generalism to speciality - a short history of General Practice' *InnovAIT* 1 2-9.

Sinclair S, (1997) Making Doctors - An Institutional Apprenticeship Oxford: Berg

Skinner N and Postlethwaite K (2012) personal communication.

Smyth A and Holian R, (2009) 'Credibility issues in research from within organisations' in Sikes P and Potts A (eds) (2008). *Researching Education from the Inside: Investigations from within*. Oxford: Routledge

Spencer-Jones R, (1997) 'Why do trainers train?' *Education for General Practice* 8 31-39.

Starfield B, (2003) 'The effectiveness of primary healthcare' in Lakhani M (ed) *A Celebration of General Practice* Abingdon: Radcliffe Medical Press.

Starr S, Ferguson W, Haley H L and Quirk M, (2003) 'Community Preceptors' Views of Their Identities as Teachers' *Academic Medicine* 78 820-825.

Stenfors-Hayes T, Kalen S, Hult H, Dahlgren Lo, Hindbeck H and Ponzer S, (2010) 'Being a mentor for undergraduate medical students enhances personal and professional development' *Medical Teacher* 32 148-153.

Stone S, Ellers B, Holmes D, Orgren D and Thompson J, (2002) 'Identifying onself as a teacher: the perceptions of preceptors' *Medical Education* 36 180-185.

Sweeney K, (2006) Complexity in Primary Care Oxford: Routledge.

Swift G, (1968) 'A Course in Vocational Training for General Practice in Wessex' *Medical Education* 2 63-70.

Sykes L (2011). 'How does the concept of professional practice develop in clinical medical students?' MA (Ed) University of Winchester.

Ten Cate O, (2006) 'Trust, competence, and the supervisor's role in postgraduate training' *British Medical Journal* 333 748-751.

Tripp D, (1993) Critical Incidents in Teaching London: Routledge.

Turchin A, Kolatkar N, Pendergrass M, Kohane I, (2007) 'Computational analysis of non-adherence and non-attendance using the text of narrative physicians notes in the electronic medical record' *Med Inform Internet Med* 32(2) 93-102

van de Wiel MWJ, van den Bossche P, Janssen S and Jossberger H, (2011) 'Exploring deliberate practice in medicine: how do physicians learn in the workplace?' Advances in Health Sciences Education 16 81-95.

Walker M, (1988) 'Training the trainers: socialisation and change in general practice' *Sociology of Health and Illness* 10 282-302.

Walters L, Prideaux D, Worley P, Greenhill J and Rolfe H, (2009) 'What do general practitioners so differently when consulting with a medical student?' *Medical Education* 43 268-269.

Waters M and Wall D, (2008) 'Educational CPD: An exploration of the attitudes of UK GP trainers using focus groups and an activity theory framework' *Medical Teacher* 30 e250-e259.

Webster C, (2002) *The National Health Service: A Political History* Oxford: Oxford University Press.

Wearne S, Dornan T, Teunissen P and Skinner T, (2012) 'General practitioners as supervisors in postgraduate clinical education: an integrative review' *Medical Education* 46 1161-1173.

Wellington J, (2000) *Education Research: Contemporary issues and practical approaches* London: Continuum.

West L, (2001) Doctors on the Edge: General Practitioners, Health and Learning in the Inner-City London: Free Association Books.

Whitehead C, Kuper A and Webster F, (2012) 'The conceit of curriculum' *Medical Education* 46 534-536.

Zeichner K, (1980) 'Myth and realities: field based experiences in pre-service teacher education' *Journal of Teacher Education* 31 45-55.