



The Teaching and Learning of Reflective Practice in Medicine, Nursing, and Physiotherapy: A Grounded Theory Study

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Abstract

The purpose of this study is to develop a comparative understanding of the teaching and learning of reflection in medical and healthcare education in two UK universities. Reflection is claimed to fill the gap between theory and practice (Schon, 1987), encourage a deeper level of learning (Entwistle, 1997), and promote lifelong learning (Moon, 1999).

Using symbolic interactionism as an interpretivist theoretical perspective, this study adopted the grounded theory methodology. A hermeneutic approach informed both the theoretical perspective and the methodology of the study.

The methods of data collection used in the study included semi-structured interviews (n=38), non-participant observation, students' reflective assignments, and students' reflective diaries. Data were analysed by theoretical coding to identify concepts and categories. A constant comparison method (Glaser, 2004) of data analysis enabled the generation of theory. This was supported by the understanding and insight gained through a movement between the parts and the whole of the data in a hermeneutic circle.

This study revealed that teaching and learning reflection in different courses is based on the perceived image of the reflective practitioner and the personal and professional benefits of reflection. Different professions use reflection for different purposes. This is influenced by their socio-political stance, social position, and ambitions of the profession. These, in turn affect methods, strategies, and outcomes of reflection.

This research contributes to a growing recognition of the sensitivity of assessing students' reflective works, supports the idea that it is problematic and suggests that there are ethical and delicate educational issues to be considered in terms of assessing students' reflective works.

This thesis concludes with an acknowledgement of the complexity of teaching and learning reflection in medical and healthcare education. It calls for considering teaching and learning reflection as a "whole" when dealing with its different features (parts) in order to understand and work with the phenomenon. This study has some implications for lecturers, students, and educationalists.

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Chapter One

Introduction

Introduction

Reflection is claimed to fill the gap between theory and practice (Schon, 1983, 1987) leads to a deeper approach to learning (Entwistle, 1997) and contributes to personal and professional development. There is a wealth of literature about reflection in the education of professionals. This has been mostly about reflection in teacher training (Hatton & Smith, 1995) and nurse education (Atkins & Murphy, 1993). Fewer authors have written for physiotherapy (Donaghy & Morss, 2000; Clouder, 2000) and undergraduate medical education (Driessen, Van Tartwijk et al, 2003). These references indicate that reflection is now a part of the curriculum in education of most medical and healthcare professions. However, UK benchmark standards for healthcare professionals (QAA for H.E. 2001) seem to indicate that reflective skills are needed at the point of registration. An evangelical approach to reflective learning has been reported in the education of some professions (Greenwood, 1998; Moon, 1999). It seems a better understanding of the phenomenon benefits all involved parties.

1.1. Research aims

This research explores the meanings of teaching and learning reflective practice for teachers and students in medical and healthcare education and aims:

- To access and understand the meaning of teaching and learning reflection in medicine ,nursing and physiotherapy
- To obtain a wider perspective of the complexities of teaching and learning reflection in the courses under investigation
- To add to the knowledge of “reflective practice” as a notion widely used in professional education
- To explore the diverse and comparative understanding of and assumptions about reflective practice within medical and healthcare education

During the early stages of the research, I was interested in reflective practice *in its own right* and as a learning tool. I had not clearly thought about its different

applications in different professions. As the research process extended, however, it became increasingly evident that different professions may use reflection for different socio-political reasons. This realisation led to the inclusion of the fourth research objective

1.2. Overview of the research

From the beginning of the research, I had identified seven main beliefs about research in teaching and learning which helped and influenced my research design. Crotty defines three main epistemologies – constructionism, objectivism, and subjectivism (1998 p5). My experience of research training and my reading about research methodologies confirmed that my basic beliefs about the reflective learning and educational research were generally suited within the constructionist epistemology of research. Symbolic interactionism and hermeneutics have been very influential in this research as theoretical perspective. Hermeneutics also informed my grounded theory methodology. In the research design, I considered the issue of compatibility of the epistemology, theoretical perspective, methodology, and methods of the study. A sound research design requires the researcher to be clear about these issues and his/her own main beliefs about the research in the topic of investigation.

1.3. Thesis structure

The style of presentation of the findings and the process of data collection and analysis are influenced by the philosophical basis of the research and the requirements of the methodology. This thesis is presented in eight chapters. Short accounts of each chapter with an indication of their main trends are as follows:

Chapter 2- The Literature Review

This chapter discusses the literature relevant to the present study within four key areas. Firstly, I try to give a definition of reflection and reflective practice from different perspectives. Different definitions of reflection provided by the main commentators on reflection are presented and reflection is considered as:

- an evolutionary development in human psychology
- a historically recent learnt feature

- a way of being and becoming
- a way of thinking and doing

Secondly, the technical, practical, and critical levels of reflection are discussed and Mezirow's seven levels of reflectivity are examined. Thirdly, I review some influential models of reflection followed with a criticism of the models. Finally, I present the issue of assessing reflective accounts of students and argue that assessing reflective accounts of students is problematic and requires careful consideration and clear criteria.

Chapter 3- The Theory and Methods

This chapter begins with a discussion of epistemology, theoretical perspective, and methodology of the research. I discuss constructionism as the epistemology of the study then I give an account of its compatibility with research in reflective practice. I discuss symbolic interactionism and the way it has informed this study by providing some examples. Grounded theory as the methodology of the study is debated. I explore how hermeneutics informed both theoretical perspective and methodology of the study.

The other areas explored are sample decisions, data collection, and data analysis processes. This chapter ends with the issues of ensuring the rigour and ethical considerations of the research.

Chapter 4-Socialisation into Reflective Practice

This is the first of three chapters, which present and discuss the findings of the study. In this, chapter I argue that each profession has its own rationale for reflective learning and this rationale is based on a perceived image of reflective practitioner. Perceived image of reflective practitioner is created by general professional attitudes and literature, personal experiences with reflection, seminal works of authors and general literature.

This chapter shows that although there are some common implications for reflective practice between all professions, different professions may use reflection for different reasons.

This chapter explores reflective learning in the curriculum of medicine, nursing and physiotherapy and discusses their differences and commonalities. General and course specific methods of encouraging reflection are discussed.

Chapter 5- Assessing Students' Reflective Works

This chapter presents a discussion of assessing students' reflective works. The process of assessing reflective activities of students is a multifaceted complex phenomenon that affects other aspects of reflective learning. Students' concerns and some unresolved issues regarding assessment are examined. Although there have been enormous efforts and initiatives, the expectations and criteria for judging reflective writing remains unclear for most of the students who participated in this study. The students encountered dilemmas and conflicts when they wanted to submit their real reflections for someone else to read. The core category *going through the motions* involves students' strategic decisions to impress assessors of their reflective works in order to secure a good mark. The category is explained and defined by its properties (writing for striking impact, making artificial connections, and using the buzzwords) and dimensions (underlying reasons, awareness, and associations). Although going through the motions is not encouraged by lecturers, in a pragmatic view, it seems that it is working for both parties.

Chapter 6- Understanding the Complexity of Reflective Teaching and Learning

This final findings chapter discusses the overall understandings of participants and their perceptions of teaching and learning reflection.

In the first section of the chapter, I have explored whether or not reflection was a skill that could be taught and learnt. However, participants found issues such as culture, upbringing, previous education, personality types, and learning styles influential in the outcomes of reflective teaching and learning programmes. Then I define the category of two mentalities in terms of people's perspectives on implementation of reflective learning in the curricula. The relationship between learning styles, personality types, and job requirements with adopting a reflective or non-reflective approach to learning and practice is examined.

I have identified six influential factors in predisposition of graduates toward adopting a reflective or non-reflective approach to practice at graduation and beyond.

This chapter has also illustrated the reinforcement or resocialisation trends in supportive or not supportive organisations in terms of reflective practice.

I have compared the personal definitions of the participants, which turned out to have five characteristics, and five elements. I have argued that these definitions were different yet the same and they reflected the reality of the definition of reflection in the literature.

Chapter 7- Discussion

In this chapter, I outline some of the key findings of this research. These key findings have been discussed in preceding chapters but in chapter 7, I discuss the most important findings in detail and compare my findings with the literature. I also discuss substantive grounded theory and present the substantive theory in three diagrams.

Chapter 8- An Analysis of the Intersubjective Dynamics between My “Self” and My Research

In this final chapter, I attempt to explore the personal baggage I brought with myself into the research. I reflect on the impacts of my personal baggage on the research and acknowledge my subjectivity. The issue of language is discussed and the languages of the researcher and the research are explored. Then I reflect on the conscious and subconscious choices that have shaped the research and its outcomes and acknowledge that different choices would lead to different outcomes. Using the metaphor of journey, I identify how the research has challenged, modified, or changed some of my beliefs, attitudes, and assumptions and future choices.

I also outline some possible implications of the study for educationalists, lecturers, course organisers, and students involved in teaching and learning reflection. Then I suggest further research in three areas based on the finding of the present study. Finally, limitations of the research are explored and the chapter and the thesis is closed with a poem from Robert Frost (1874- 1963), "The Road Not Taken" which reflects upon the concept of choice that as a researcher I have encountered all the way through my research journey.

1.4. A word about the truth

Qualitative research like reflective practice tries to enhance our understanding of social phenomenon but never claim have found “the truth.” The qualitative researcher and reflective practitioner acknowledge what has informed the research and the practice including their own subjectivity. They also admit their enterprise is located in uncertainty and ambiguity and what they have achieved is an increased understanding rather than “the facts and the truth.” This increased understanding can give a direction to future practice and research. This thesis has to finish somewhere but I am aware that I am not closing a completed entity rather I view it as a journey that will be continued by others and myself perhaps in different directions.

1.5. Research timetable

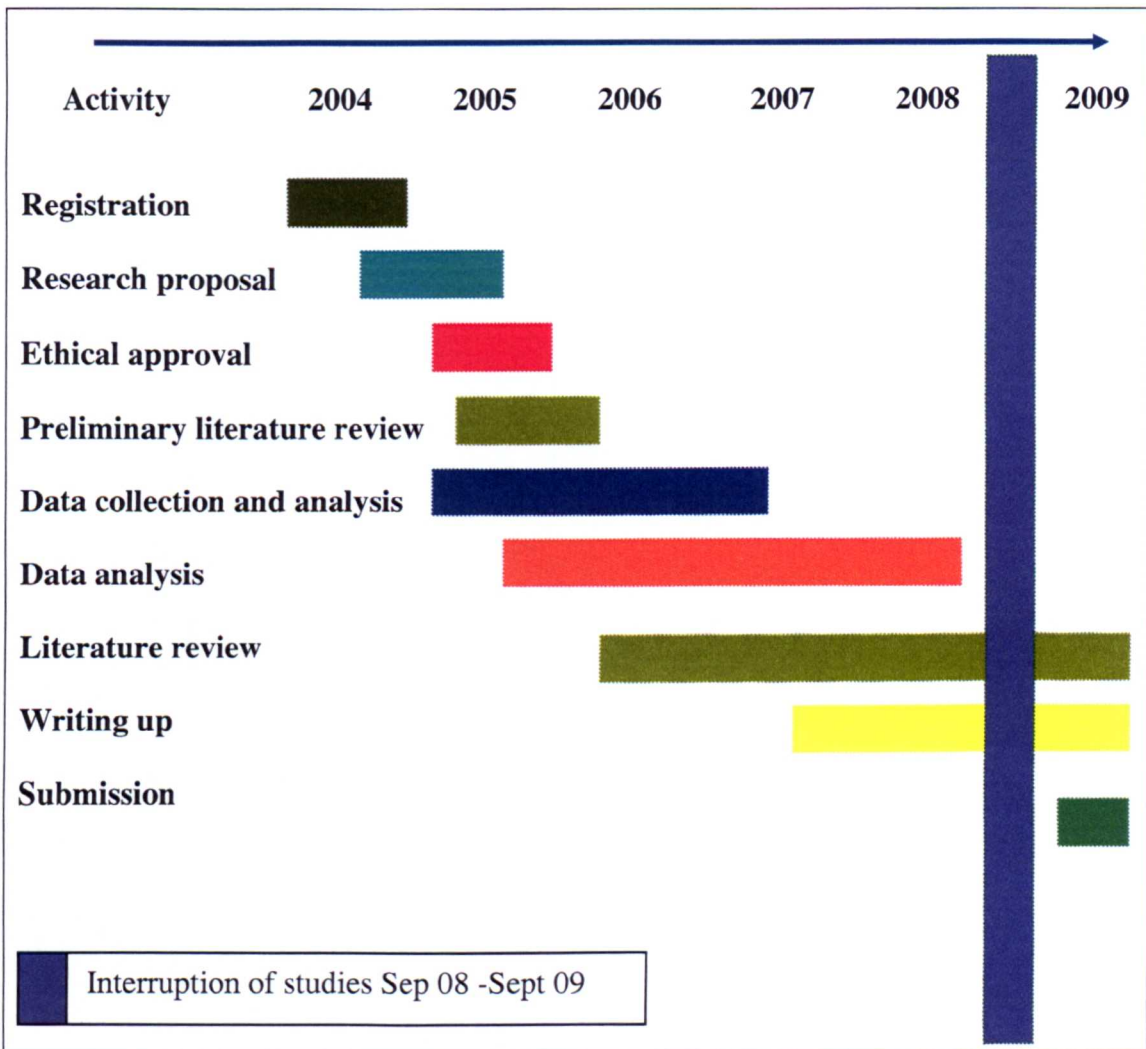


Figure 1.1 Overview of research timetable

Chapter Two

Literature Review

2.1. The definition and the nature of reflective learning

Introduction

The literature informing and focusing this study has been drawn from various disciplines and backgrounds including education, philosophy, psychology, nursing, and teacher training. The diversity of the literature on reflection reflects the development of the notion in different areas and the fact that they have informed one another. Reflection is not a new concept. Socrates refers to sensation and reflection as two sources of knowledge (Klein, 1970). Aristotle drew attention to the distinction between theory and practice (Rorty, 1992) which according to Habermas (1974) is important in the education of professionals. Reflection fills the gap between theory and practice (Schon, 1987).

2.1.1. What is reflection?

According to the online Compact Oxford English Dictionary, the meaning of the verb “to reflect (on/upon)” is “to think deeply or carefully about.” This definition is more about the cognitive process, which is involved in reflection. There is an implicit component of thinking about past events and what has happened in the past as indicated by the Latin origin of the word, which means bend back. Reflection and consequently reflective practice have been viewed and defined differently by different authors from different perspectives. The different definitions of reflection have some common characteristics, which indicate reflection is a positive, purposeful, and deliberative mental process that concentrates on a problematic situation (Moon, 1999; Atkins & Murphy, 1993). Nevertheless, they come from a different epistemological perspective to practice and it is to these I now turn.

1- Reflection as an evolutionary development in the human psychology

All human knowledge is constituted through three cognitive interests (Van Mannen 1977). “An interest in accurate knowledge about objects and knowledge about how to control the external environment, an interest in the understanding of meaning and an interest in emancipation and critical self-reflection” guide human ways of knowing (MacKendrick & MacKendrick, 2007 pp.42-3).

Morrison (1995) has classified reflective practice as technical reflective practice, hermeneutic reflective practice, and emancipatory reflective practice. See Table 2.1.

Type of human interests Evret (1991)	Type of reflective practice Van Mannen (1977) Morrison (1995)	Kind of knowledge Dan MacIsaac (1996)	Mode of inquiry
Technical (prediction)	Technical reflective Practice Improving current practice , replacing one routine with another	Instrumental Causal explanations	Positivism
Practical (interpretation)	Hermeneutic reflective practice understanding , clarifying , interpreting of meanings	Practical Understanding	Interpretivism Hermeneutics
Emancipatory (criticism)	Emancipatory reflective practice Wider socio-political interests , freedom, social justice, equality, resistance	Emancipation Reflection	Critical social science (critical theory methods)

Table 2.1 types of human interests, relevant reflective practice, and modes of inquiry

Technical reflective practice is concerned with the job at hand, improving practice, and replacing routines with technically proven better ones. This is similar to the concept of fine-tuning of the practice with reflection in action (Schon, 1983). Here the practitioner is looking for cause and effect relationship between the variables of practice and takes a positivistic epistemology of knowledge (Morrison, 1995; Dan MacIsaac, 1996). In hermeneutic reflective practice, the practitioner is mainly concerned with clarifying, understanding, and interpretation of meaning of the practice (Morrison, 1995;). Through emancipatory self –reflective enquiry, the practitioner may question the social positions, inequity, dominant powers in his /her domain of practice or in society.

Such capacities are not just given, they are also the outcome of evolutionary adaptive process through which human become humanized (Torres 2002 p.48). Habermas (1971) maintains:

The achievements of the transcendental subject have their basis in the natural history of the human species (p. 312).

He concludes that:

Reason is an organ of adaptation for men just as claws and teeth are for animals (p. 312).

However, humans' ability for thinking and self- reflection is not just a survival organ. Habermas believes thinking, reason and self-reflection, not only helped humans to adapt to their environment and survive but also helped them to change and adapt the environment to their own needs. Therefore, it is probable that through reflection on self and environment, human consciousness has developed and the human being has evolved into an autonomous thinking being. "Human consciousness is potentially the organ of self-knowledge for the entire ecosystem" (Kremer 1992). Human mind transcends the world of objects into the world of meaningful objects. The world "becomes a world of meaning only when meaning-making beings make sense of it" (Crotty 1998 p.10).

However, I do agree with Gelter (2003) who rejects Habermas' arguments and argues that the ability to reflect seems not to be an evolutionary old trait and genetically determined potential of mind rather a historically new learnt feature that explains why reflective thinking has not yet become an everyday activity in human life and needs training and focus.

2- Reflection as a way of thinking and doing

John Dewey (1933) who was one of the earliest advocates of using reflection in education defined reflective thought as:

"Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p.118)

Such reflective thought in other words, is “the mental process of structuring and restructuring an experience, practice, or existing knowledge or insights” (Korthagen & Wubbels 1995 p.55). The aim of this cognitive process is:

“to transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort into a situation that is clear coherent settled and harmonious” (Dewey, 1933 p.101).

Dewey maintained that the process of reflection involves some sort of deliberate behaviour attempting to question an accepted view to explore the adequacy of the ground or basis of that view. Reflective thought, hence, enables humans to consider beliefs, examine the accepted principles, and alter actions originating from those beliefs subsequently.

It is difficult to define reflection and reflective practice (Atkins & Murphy, 1993; Greenwood, 1993). However, Moon (1994 p.4) summarised that the “common usage of the word [reflection] implies a form of mental processes with a purpose and /or an anticipated outcome that is applied to relatively complicated or unstructured ideas for which there is no obvious solution”. Schon (1987) did not attempt to define reflection but emphasised that we engage in reflection when we encounter something contrary to our expectations or when our theories of how things should work fail to account for the way things really are. This is the time when our own learning starts from feeling some kind of inconsistency between our expectations and our real experience at the time (Moon, 1999).

Most of the definitions found in the literature on reflection are common in possessing some elements such as deliberation, purposefulness, drawing upon cognitive activities, and aiming at problematic situations (Atkins & Murphy, 1993; Loughran, 1996; Tann 1993). The knowledge obtained through such cognitive processes is a mean by which practitioners can develop greater self- awareness about the nature and impact of their performances. Such awareness creates opportunities for professional growth and development (Osterman and Kottkamp, 1993). Reviewing what most of the proponents of reflection have written about it reveals that most of them share one belief in respect to reflection. This common agreement is that reflection starts with uncomfortable feelings, which result into a changed way of seeing things. This

changed perspective is argued to be the core element of professional growth and development.

Although understanding the process and elements of reflection seems to be unproblematic to grasp by professionals, after they become familiar with the notion, its application in professional practice is seen by some to have suffered from unnecessary theorisation and complex categorisation (Bryant, 1996; Moon, 1999). Moon (1999 p.4) sees these categorisations “more academic than practical” which can be far from a normal ongoing process, which can, if desired, be more explicit, and more ordered (Boud & Walker 1990). In fact Moon 1999) maintains:

“It is possible to interpret reflection as a simple activity, a development of thinking that has associated with it a framework of different inputs, contexts, and purposes that cause confusion for those who study it.”(p.22)

Johns (1998) insists that attention has been given to the definition of reflection under the influence of rational model of thinking while what is of importance is the process of reflection not its definition. Nevertheless I agree with Hall (1996), who stresses that there is a need for a definition of reflection ,different from its everyday one, in order to make it more purposeful and draw a distinction between professionals’ reflection and useless or excessive self –contemplation and day dreaming. Nevertheless, this is not an easy task. It seems that we can distinguish reflection from thinking in everyday activities by noticing that reflection is a deliberate activity and is applied to complex issues to achieve an outcome (Moon, 2004). However, Boud et al (1985) commented:

“Despite all that has been written about reflection it is difficult to be precise about the nature of the process” (p.21)

The concept of reflection is vague, imprecise, and complex by nature. Many have attempted to define its structure (Mezirow, 1981; Boud et al, 1985; Gibbs, 1988; Johns 1994) but it remains confusing for those who study it (Moon 1999).

Reflection can be defined as a mental activity that engages recalling experiences with an aim to obtaining further knowledge. The reflector questions the knowledge and its underlying basic assumptions. There are not only cognitive but also emotional and

affective elements in reflection. Dewey's (1933) definition of reflection, as mentioned above, is related to experiential learning. Boyd and Fales (1983) define reflection as:

“the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self and which results in a changed conceptual perspective ” (p.113).

Schon (1983) explained this experiential learning in terms of reflection on action and reflection in action, which will be discussed in this chapter. Moon (2004) relates reflection to learning and thinking. She concludes that “reflective learning as a term simply emphasises the intention to learn as a result of reflection”

Clarke and Graham (1996 as cited in Bulman & Schutz, 2004) maintain by engaging in reflection people engage in a period of thinking in order to examine complex circumstances. This shows that reflection is not an everyday activity rather there are periods of time that we engage in reflection.

Moon's (2004, 1999) definitions of reflection in general and in academic contexts are based on her comprehensive review of literature on reflection and her own experiences can clarify the terms and reduce the vagueness of the concept:

“Reflection is a form of mental processing –like a form of thinking –that we may use to fulfil a purpose or to achieve some anticipated outcomes or we may simply be reflective and then an outcome can be unexpected. Reflection is applied to relatively complicated ill-structured ideas for which there is not an obvious solution and is largely based on the further processing of knowledge and understanding that we already possess”(Moon, 2004 p. 82).

She adds to this common-sense view of reflection to define reflection in academic contexts as follows:

Reflection / reflective learning or reflective writing in the academic context, is also likely to involve a conscious and stated purpose for the reflection with an outcome specified in terms of learning action or clarification. It may be preceded by a description of the purpose and / or the subject mater of the reflection. The process and outcomes of reflective works are most likely to

be in represented (e.g. written) form, to be seen by others to be assessed .All of these factors can influence its nature and quality (Moon 2004 p. 83).

The other term that should be defined is reflective practice. This term came to use after Schon (1983) published his first book, *The Reflective Practitioner*. Schon described the use of reflection in professional activities where professionals encountered an ill –defined or unpredictable situation that needed to be resolved (Moon, 2004). While reflection itself is morally open , reflective practice is bound within the ethical code of the practice (Hargreaves ,2003). Therefore, reflective practice can be defined as using reflection within professional and ethical boundaries in order to enhance practice.

Reflective writing is the other term that needs consideration in the context of the present study. Moon (2004) distinguishes between reflective writing and reflection. Reflective writing, she avers, is not a true copy of what has happened in the head of the writer but it is a demonstration of the process within a chosen medium, which is writing.

3- Reflection as a way of being and becoming

Reflection has been viewed as a way of being in human life in Eastern ancient traditions. Moving on from reflection as a way of thinking and doing (Dewey, 1933; Mezirow 1981; Schon 1987; Gibbs 1988) which is rooted in Western rationality and pragmatism, Johns (2005) considered reflection as a way of being. He was influenced by some eastern ancient traditions as follow (p. 72):

- running in place; an interpretation of Zen Buddhism through the work of Charlotte Joko Beck (1989)
- an interpretation of the Buddhist Noble Eightfold path through the work of Sangharakshita (1990) and Lama Surya Das (1997)
- an interpretation of the Five Buddha Mandala through the work of Vessantara (1993) and
- an interpretation of the Native American medicine wheel through the work of Joseph Rael (1993).

Johns (2005) argues that reflective practice is mainly “dominated by cognitive approaches that characterize reflection as something someone does or applies.” These

cognitive approaches are underpinned by Western rationality. In an attempt to create a balance, he advocates a more esoteric approach to reflection. This according to Johns (2005) can be found in Eastern traditions rooted in mysticism and spirituality. For him the central principle to esoteric approaches to life is harmony and balance. He proposes the idea of mindfulness in practice based on Buddhist philosophy. He states:

“From a Buddhist perspective one is mindful as a balance of compassion and wisdom. One is strongly motivated by love and a sense of goodness towards easing suffering and nurturing growth in others. It is reflection-within-the-moment with the intention of realizing one's vision of desirable practice as a lived reality.”(p. 70)

Other eastern spiritual schools such as Sufism have emphasised the necessity of living life in a state of mindfulness. For instance, *The Masnawi*, the masterpiece of the thirteenth century Persian poet and mystic Rumi is mostly about becoming closer to ones inner being, creates a bridge of harmony between the Divine forces and Universe, through mindfulness and being aware of self, and universe. For Rumi the main source of harmony and mindfulness is human thoughts. The following couplets from Masnawi translated by Nicholson (1926) may partly represent this idea:

*A person's worth lies in his thoughts alone;
Apart from that we're only flesh and bone:
You'll be a rose, if all your thoughts are selfless;
If selfish, just a thorn which is deemed worthless.*

However, apparently not being aware of mindfulness in Rumi's Sufism, but inspired by other spiritual schools, Johns (2005) defines reflection as:

“being mindful of self, either within or after experience, as if a window through which the practitioner can view and focus self within the context of a particular experience, in order to confront, understand and move toward resolving contradiction between one's vision and their actual practice.

Through the conflict of contradiction, the commitment to realise one's vision, and understanding why things are as they are, the practitioner can gain new insights into self and be empowered to respond more congruently in future situations within a reflexive spiral towards developing practical wisdom and realising one's vision as a lived reality. The practitioner may require guidance to overcome resistance or to be empowered to act on understanding.” (p.71)

In his definition of mindful practice, Johns (2005) tries to complement the mainly Western notion of reflective practice with Eastern ancient traditions, which view reflection as a spiritual activity. In these traditions including Iranian and Islamic Sufism, which I add to his argument, reflection is an internal source of wisdom and understanding which complement the cognitive aspects of knowing. However, Johns (2005) writes.

“These ancient traditions emphasize that reflection is a spiritual activity pivotal to being and becoming the sort of person the practitioner seeks to be, able to realise their vision as a lived reality” (p.81).

Rumi’s poetry is a good example of reflection as a way of being and becoming rather than just thinking and doing. Reflection in this way helps the practitioner to realise his/her own potentials:

“Rumi’s poetry shows us our state and ourselves but more than that; it shows us the boundless glory of what we can become” (Star, 2000).

Considering these views of reflective practice helps to put cognitive Western approaches to reflection into perspective of the whole (Johns 2005). Albeit using this view of reflection should not lead to mystifying reflection on practice or increase the mystification of professional practice. Rather it is supposed to add more clarity to the

situation by considering the whole and using structured reflection. In the next section, I will examine the levels of reflection.

2.2. The levels of reflective practice

Van Mannen (1977) identified three different levels of reflection as technical, practical, and critical. These levels are associated with three human interests defined by Habermas (1971) see table 2.1. This typology of reflective practice has been espoused and modified by other commentators (Hatton & Smith, 1995; Moon, 1999; Morrison, 1995).

2.2.1. Technical reflection

The first level, technical reflection is concerned with the efficiency and usefulness of means to attain certain results. These means come from external sources of knowledge derived from extant formal theory and research and are not open to criticism or alteration. This level of reflection seems to be based on thinking about skills or competencies with a view to evaluating their usefulness almost immediately after an attempt at implementation, and then making changes to behaviour (Hatton & Smith 1995). Smyth (1986) describes technical reflection as being:

“characterised by the application or implementation of existing knowledge to the attainment of given ends. This is reflection of a technical-rational kind that culminates in instrumental action” (p. 18).

In this epistemological perspective to practice, the identified objectives of practice are not challenged therefore the purpose of reflection is to control/ direct practice and it is limited to the issues of efficacy, effectiveness and accountability. (Goodman 1984, Clift et al 1990). The technical level of reflection is an important aspect of learning for young professionals’ development and is a basis for other forms of reflection (Hatton & Smith 1995).

This mode of reflection does not seem to have considered non-rational sources of knowledge thus some writers question whether it can be considered as reflection (Van Manen 1997; Hatton & Smith 1995). Dewey’s definition of reflection presented

earlier in this chapter is mainly located at this level although his ideas of reflection influenced Schon (1988, 1983) and overlap with practical reflection formulated by him.

2.2.2. Practical reflection

In practical reflection, not only the technical and instrumental aspects of practice are questioned but also the process, content and outcomes of professional practice are all open to question, exploration and alteration (Burns 1994; Hatton & Smith 1995; Schon, 1988). This level of reflection is based on hermeneutic epistemology, which places importance on the meanings attributed to the experiences and is concerned with understanding, clarifying and interpreting meanings (Habermas 1974; Morrison 1995). Central to practical reflection is the critical questioning of theoretical underpinnings of professional practice (Morrison, 1995). The model supported by practical reflection is reflecting “in “and “on” practice from the basis of theory as presented by Schon (1983’ 1987). Schon’s model of reflection will be explained in this chapter.

2.2.3. Critical reflection

Critical reflection is the highest form of reflection (Hatton & Smith, 1995) which is based on Habermas’ (1971) critical and emancipatory source of knowing and is associated with transformative action. Critical reflection “involves an analysis of power and control and an examination of the taken- for -granted within which the task of problem is situated” (Reynolds, 1998). According to Hatton & Smith (1995) critical reflection is comprised of technical and practical reflection and also involves:

“Moral and ethical criteria, making judgements about whether professional activity is equitable, just and respectful of persons or not. In addition, critical reflection locates any analysis of personal action within wider sociohistorical and politico-cultural contexts”(p.35)

However, transformative action “seeks to provide emancipation from forces that limit people’s rational control of their lives” (Taylor, 2004) and “begins with such questions as to what ends and in whose interest knowledge is being used” (Clift et al 1990). Mallik (1998) maintains that personal and social change can be achieved when the power of ideologies is challenged. It is claimed that this form of reflection, which is also called emancipatory reflection, enables individuals to examine rules, habits traditions that are accepted without question (Duffy & Scott, 1998). Self-reflection coupled with action (the notion praxis supported by Freire, 1970) is central to critical reflective practice. It is assumed that knowledge obtained from critical reflection coupled with action can be liberating.

Critical theorists suggest that people must become aware of “how an ideology reflects and distorts moral social and political reality and what material and psychological factors influence and sustain the false consciousness, which it represents –especially reified powers of domination “(Mezirow 1981, p 145).

In fact, Mezirow (1990) seems to have taken into account these social and cultural factors in his transformative learning model. He describes three domains of learning, technical, practical, and emancipatory. Mezirow’s seven levels of critical thinking begin with a general awareness and end to a change in fundamental perceptions and assumptions. Mezirow’s (1981) seven levels of reflectivity according to Jarvis (1987) are:

- **Reflectivity:** an awareness of a specific perception, meaning, behaviour, or habit;
- **Affective reflectivity:** awareness of how the individual feels about what is being perceived, thought, or acted upon;
- **Discriminant reflectivity:** the assessment of the efficacy of perception, thought, action, or habit;
- **Judgmental reflectivity:** making and becoming aware of value judgments about perception, thought, action, or habit;
- **Conceptual reflectivity:** self-reflection which might lead to questioning of whether good, bad or adequate concepts were employed for understanding or judgment;
- **Psychic reflectivity:** recognition of the habit of making percipient judgments on the basis of limited information;

- **Theoretical reflectivity:** awareness that the habit for percipient judgment or for conceptual inadequacy lies in a set of taken-for-granted cultural or psychological assumptions which explain personal experience less satisfactorily than another perspective with more functional criteria for seeing, thinking or acting (as cited in Jarvis, 1987, p. 91).

Mezirow believes professionals become transformed when they recognise that their assumptions limit and distort their understanding of the reality. However, he suggests that there are two ways for this transformation to occur. The first one is a sudden transformation and new insight and the second is when the professional gradually progresses through a sequence of transitions. Mezirow has explained these sequences of transition in his seven levels of reflectivity. Models of reflection are an indispensable part of literature about reflective practice. I will explore the most influential models in the next section.

2.3. Models of reflection

Reflection requires a framework, structure process and a perceived outcome, which is of value to the student (Glen, et al 1995). This can be provided by using a model of reflection. A model is a structure of reflection around which reflective practice is based and guides reflective elements of practice. Without a structure, reflection is imprecise and difficult to define and facilitate in others. A number of models of reflection have been suggested (Schon, 1983, 1987; Mezirow, 1981; Boyd & Fales 1983; Johns, 1984; King & Kitchener, 1994; Boud et al, 1985). These models have had a key influence on the acceptance of reflection in medical and healthcare education by providing the readers with the potential contents of reflection, its quality, and strategies used for its development. Reflective models are used to identify the main stages involved in reflective process. It is appropriate to consider that any model is only a guide and is not an exact plan for action. Rather, models should be viewed as a tool that professionals use and modify according to their own needs.

All models of reflection seem to have some features in common. They all start from a position of doubt and uncertainty, follow a process of mental inquiry, questioning, defining and reframing a problem and move to a more settled situation with changed perspective. Mezirow's (1981) levels of reflectivity were explained above. In the next

section I will examine Schon (1983, 1987) model of the reflective practitioner ,Boud et al's (1985) model of reflective learning and Johns model as examples of numerous models of reflective practice that have been suggested in the literature.

2.3.1. Schon's model of reflective practitioner

Schon's (1983, 1987) model suggest that reflection is composed of five stages:

- Knowing -in –action
- Surprise
- Reflection in action
- Experimentation
- Reflection on action

According to Schon in the first phase the practitioner brings to the practice his/her own arsenal of tacit knowledge of practice, which has been developed overtime in different situations .This , he calls, knowing in action guides the professional's action. This is a vibrant, situational form of knowledge relies on intuition and is not easily verbalised or defined by rules and technical procedures. All skilled professionals are familiar with this form of tacit knowledge where they know something but cannot say it.

All reflective processes start with a feeling of discomfort, uncertainty and surprise when professional encounters a situation that a routine practice does not lead to an expected outcome.

Reflection in action is the first reaction to this feeling of discomfort and surprise. In this stage, the practitioner thinks about the problem, and tries to define it.

Experimentation is, in fact, the way the professional attempts to address the situation at hand while he/ she is dealing with the practice. In this phase the problem is reframed, a new order is imposed and a new direction is given to the action to control the situation. In other words, the professional is thinking on his/ her feet while reframing the situation. Schon (1983) describes reflection in action as follow:

“The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation, which he finds uncertain or unique. He reflects on

the phenomenon before him, and on the prior understandings, which have been implicit in his behaviour. He carries out an experiment, which serves to generate both a new understanding of the phenomenon and a change in the situation.” (p. 68)

In the phase of reflection in action, the professional does not closely apply established facts and well-devised techniques. Rather he/she has to draw on the uniqueness of the situation.

The last phase in Schon's model is reflection on action. This implies it takes place later. Argyris & Schon (1974) described two different types of behaviour namely Model Two behaviour and Model One behaviour. Model One behaviour is described as being mainly competitive and defensive in which the feedback received in response to the behaviour is used to reinforce the behaviour. Model Two behaviour is viewed as non-defensive, which encourages learning, growth, and freedom of choice. It seems in the literature, little attention has been given to the distinction between, reflection on action itself which can actually reinforce Model One type of behaviour and reflection on one's own reflection in action. The latter involves the practitioner evaluating both the action, his/her own view of that action including emotional responses to the situation. In reflection on action, the knowledge used is uncovered and alternative ways is considered.

The idea of reflection in action and on action has created a debate on the timing of reflection. Moon (1999) calls this “the time frame of reflection.” According to Hatton and Smith (1994) this timeframe can consist three times; before action, during action and after action. Schon has not talked about the reflection before action and has been criticised for not including anticipatory reflection in his typology (Van Mannen, 1991; Greenwood, 1993). Schon has been also criticised for failing to clarify what is involved in the process of reflection. Eraut (1994) finds a problem of timing in Schon's idea of reflection in action, when according to him “time is extremely short, decisions have to be rapid and the scope for reflection is extremely limited “(Eraut 1994). However, Schon (1983) maintains it is completely possible to think whilst acting and as a result of thinking modify or adjust (fine-tune) the action as it is occurring. For Schon (1983) “doing and thinking are complementary.” Moreover,

Mackintosh (1998) argues that Schon fails to define clearly what is reflective practice and fails to differentiate between levels of reflection.

However, students in medical and healthcare education learn in many clinical situations where they are participants or observers of professional activities. By reflecting after the practice they can consider what they have learnt and how this is related to their prior knowledge and theoretical information they have attained in non-clinical settings. There is a potential of identifying the gaps in their own knowledge if they reflect in this way.

2.3.2. Boud et al's (1985) model of reflective learning

For Boud et al (1985) reflection is a form of response of the learner to experience. They define experience as the “total response of a person to a situation or event: what she/he does, thinks, feels or concludes at the time or immediately thereafter” (p18)

Their model involves three levels:

- Returning to the experience
- Attending to feelings
- Re-evaluating the experience

They provide suggestions on how to promote essential skills needed in each level.

During the first level, the professional is given an opportunity to go back to the experience and record the chain of events that occurred during the experience. In this stage, the professional recaptures the experience and can give a detail account of what has happened, including thoughts, feelings, and responses to them. No judgment should be made in this stage.

In the second level, professional describes his/her positive or negative responses to the event, recalls the emotions involved and record them or talk through them with another professional. Negative feeling should be resolved otherwise; they may prevent reflection in the next level. Boud et al (1985) wrote:

“Negative feelings particularly about oneself can form major barrier toward learning. They can distort perceptions; lead to false interpretations of events and can undermine the will to persist” (p.11)

In the third level, the process of reflection occurs in four stages (Cronin & Rawlings- Anderson, 2003):

- **Association:** the connection of ideas and feelings from the experience being fitted with existing knowledge and attitude
- **Integration:** The processing of association- Relationships are observed and conclusions drawn so that new patterns of idea and attitude develop
- **Validation:** new appreciations are tested for internal consistency. Any contradictions lead to reappraisal of situation.
- **Appropriation:** new knowledge and perceptions are assimilated into the students' value system. (Cronin & Rawlings- Anderson, pp.150-151)

Boud et al (1985, p.32) have provided some guidance on the techniques that are useful in facilitating the first three stages of the level three. I have summarised these techniques in table 2.2.

Boud et al (1985) proposed that the outcomes of reflection might be:

“A personal synthesis, integration, and appropriation of knowledge, the validation of personal knowledge, a new affective state, or the decision to engage in some further activity” (p.20)

Outcomes of reflection	Techniques to facilitate the outcomes
Association,	Free association, brainstorming, drawing , tape recording
Integration	Brain patterns, concept maps, venn diagrams
Validation,	Rehearsal of how to put the plan into action , guided imagery , role playing
Appropriation	No technique is proposed

Table 2.2 techniques suggested by Boud et al to facilitate the outcomes of reflection (1985, p32)

2.3.3. Johns' nursing model of reflection

Johns' (1994) model of structured reflection is another model developed for encouraging learning through reflection and similar to other models of reflection (Mezirow 1981, Boud et al 1985, Schon 1987), tends to espouse a cognitive or rational approach to reflection (Johns 2005; Richardson, 1995). Initially, Johns (1993) developed his model to help the practitioner to implement therapeutic work and interventions in clinical settings. He offers sequence through which students examine their experiences under supervision. His model is similar to that of Fish and Twinn (1997). These two models try to provide what called identifiable skills of reflection that can be used in practice (Atkins & Murphy 1993). See tables 2.3 and 2.4.

<p>Model of structured reflection (Johns 1994) The following cues are offered to help practitioners to access, make sense of, and learn through experience.</p> <p>1-Description Write a description of the experience What are the key issues within this description that I need to pay attention to?</p> <p>2-Reflection What was I trying to achieve? Why did I act as I did? What are the consequences of my actions? • For the patient and family • For myself • For people I work with How did I feel about this experience when it was happening? How did the patient feel about it? How do I know how the patient felt about it?</p> <p>3-Influencing factors What internal factors influenced my decision-making and actions? What external factors influenced my decision-making and actions? What sources of knowledge did influence, or should have influenced, my decision making and actions?</p> <p>4-Alternative strategies Could I have dealt better with the situation? What other choices did I have? What would be the consequences of these other choices?</p> <p>5-Learning How can I make sense of this experience in light of experience and future practice? How do I NOW feel about this experience? Have I taken effective action to support others and myself as a result of this experience? How has this experience changed my way of knowing in practice?</p>
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Table 2.3 Model of structured reflection (Johns 1994)

Model of structured reflection (Johns 1994) –questions

1. Description of the experience

Phenomenon – describe the here and now experience

Casual – what essential factors contributed to this experience?

Context - what are the significant background factors to this experience?

Clarifying –what are the key processes for reflection in this experience?

2. Reflection

What was I trying to achieve?

Why did I intervene as I did?

What were the consequences of my actions for?

- Myself
- The patient / family
- The people I work with.

How did I feel about this experience when it was happening?

How did the patient feel about it?

How do I know how the patient felt about it?

3. Influencing factors

What internal factors influenced my decision - making?

What external factors influenced my decision - making?

What sources of knowledge did / should have influenced my decision - making?

4. Evaluation:

Could I have dealt with the situation better?

What other choices did I have?

What would be the consequences of these choices?

5. Learning

How do I now feel about this experience?

How have I made sense of this experience in light of experiences and future practice?

How has this experience changed my ways of knowing?

Empirics – scientific

Ethics – moral knowledge

Personal – Self-awareness

Aesthetics – the art of what we do, our own experiences

Table 2.4 Model of structured reflection (Johns 1994) –questions

2.3.4. A criticism of reflection and models of reflection

Lack of conceptual clarity, theoretical inconsistencies, missing elements, and unproven benefits in respect to patient care are examples of criticisms of reflection that have been repeatedly mentioned in the literature (Atkinson & Murphy ,1993; Foster & Greenwood, 1998; Mackintosh, 1998). Most of the models of reflection have drawn on Mezirow's transformation of meaning. It is not clear how this transformation occurs, since he has not presented any clear framework, set of guidelines or uniform instrumentation (Rideout, 2001).

Schon has been criticised for failing to provide practical guidance for teaching strategies of reflective practice (James & Clark, 1994; Rideout, 2001). According to Rideout (2001), John's model of structured reflection can be viewed as an effort to address this lack of clarity. She also reminds Smith's (1998) criticism of models of reflection for not taking into account positive feelings and thoughts, which can prompt critical reflection.

On the other hand, structured reflective models have been criticised for creating a technical rational model of reflection (Clarke et al, 1996). Greenwood (1998) maintains that some of the structured models of reflection encourage single rather than double loop learning (Argyris & Schon, 1974; Schon, 1983, 1987). Kelly (1994) had warned about adhering rigidly to a structure of reflection may damage the very reflection it has been built for. She suggested that the guidelines should be adapted to the requirements of the professional.

It seems there is a need for structure for reflection but the structure should not be considered as checklists and blueprint for action.

2.4. Assessing reflective works of students

Assessment of students' works in higher education is customary. Teachers usually mark students' works and return them, with or without feedback. Many educationalists view assessment as a way not only to mark students' works, but also as a tool to support the learning process. Assessment can be problematic if not treated with care and caution. Boud, Cohen, and Sampson (1999) emphasize that:

“assessment is a single most powerful influence on learning in formal courses and if not designed well can easily undermine the positive features of an important strategy in the repertoire of teaching and learning approaches”
(p. 413).

Designed well or not Bryan and Clegg (2006) state:

Assessment has become the currency with which we trade; the better the grade the bigger and better the reward (p.1)

Boud, Cohen, and Sampson (1999) summarised the literature about the effects of assessment on learning and identified the following points:

- Assessment puts the emphasises on individuals, encourages competition rather than cooperation
- Assessment exercises power and control over students
- Assessment exerts a backwash effect on learning
- Overload of tasks discourages deep approaches to learning
- Assessment practices need to be matched to outcomes
- Formal assessment processes should encourage self-assessment

They concluded that there is a need to design assessment processes carefully to avoid the many unintended and negative consequences. These features of assessment design need to be taken into account for reflective learning. As will be discussed throughout this thesis teaching and learning reflection is a complex phenomenon. If we add to this, “the increasing complexity of modern educational environments” (Cotterill, Bradley & Hammond, 2006) we would not be surprised when we see that the assessment of reflective works of students has been a matter of debate (Fade, 2003; Burn and Bulman, 2000; Ixer, 1999; Shumway & Harden, 2003; Bourner, 2003; Hargreaves, 2003). In fact, Ixer, (1999) argues that there is no theory of reflection in existence, which allows for the assessment of reflective abilities. He wonders when the nature of reflection is unclear in the mind of practitioners how can others assess its acquisition? The literature on reflection falls short of providing an explicit solution for the problems of assessing reflective activities. Hargreaves (2003) mentions some influential writers (Boud et al 1985; Schon 1987 and Ghaye and Lilliman 1997) in the field of reflection who fail to explain how it can be assessed. She concludes that others (Wong et al 1995, Jasper, 1999) have attempted to deal with this issue but have failed to give a solution.

Assessment of reflective works needs criteria. There is doubt that such criteria exists. Some commentators are reluctant to acknowledge that there are appropriate and practical criteria for judging reflection in essence:

“Assessing reflection is problematic. There are no measures by which to compare standard, and no definition with which to apply to the results. The assessors are assumed to be competent in reflective practice themselves, and

students are assumed to have written down all their reflective issues. In truth none of these may be the case” (Young, 2004).

What is to be assessed reflection or reflective practice? We should note that there is a difference between reflection, which is open and may end to any conclusion and reflective practice, which is limited within the professional boundaries and is expected to lead to good and acceptable practice defined by codes of practice and public acceptance (Hargreaves 2003). While criteria for measuring reflection seems to be problematic, Bourner (2003) argued that criteria similar to what is being used to judge critical thinking in academia might be useful in judging reflective practice. Bourner suggested:

“The core of reflective learning process is interrogating experience with searching questions and we can identify searching questions independently of the content of reflection” (p.270).

Hargreaves (2003), states that it is possible that assessment process is being used “to police” students’ beliefs. In such conditions, she concludes, students quickly learn to adjust their views to match the situation. Boud, Cohen, and Sampson (1999) maintain that assessment exercises power and control over students. They also point out that assessment promotes forms of self-surveillance, which discipline students via their own self-monitoring subconsciously. Studies of the relationship of assessment and students’ approach to learning have revealed that inappropriate forms of assessment seem to encourage surface approach to learning (Boud, Cohen, & Sampson 1999; Bryan & Clegg 2006). This is in contradiction with what reflective learning is designed for which is deep meaningful learning. The other issue that needs to be considered is the fairness of reflective works’ assessment. Flint (2005) suggests:

“There is an absence of literature on the topic of undergraduate students’ perceptions of fairness of educational assessment whilst in the same time the topic seems to be one that many educators feel knowledgeable about.”

This phenomenon is even more visible in terms of assessment of reflective accounts. In the centre of the issue of fairness of assessment is the teacher or assessor. Fade (2003) asserts that the assessors are the most important assessment tools. In lack of explicit criteria for assessing reflective accounts of students, the role of the teachers is even more critical. Tate (2004) refers to facilitating of reflection and assessing it as conflicting roles, which may be problematic for teachers:

“Reflective assessment can be used in two ways: to assess student reflective ability and to assess specific competencies using critical reflection as a format. Each approach will have its own particular issues but in general terms it can become a major problem for teachers of critical reflection when we adopt the apparently conflicting roles of facilitators and assessors.”
(p.15)

The general concerns in terms of effects of assessment on learning are true with reflection. I am in agreement with Friesner and Hart (2005) that some strategies might force students simply to go through the motions. I also acknowledge Grant's (2001) assertion that “If a piece of reflective work is to be assessed it is likely that students' motivation will be to gain best marks rather than to maximise their learning “(Grant, 2001). Indeed, Entwistle and Entwistle (1991) found that students are very strongly influenced by the form of assessment they expect.

To put it briefly, in the current education system, assessment of reflective works of students seems to be inevitable. In fact, some believe that “reflective learning will not achieve full legitimacy within the academy until the assessment of reflective learning is secure” (Bourner 2003, p.268). They argue that reflection should be assessed if it is to be accepted as a valid subject for learning and practice (Jones & Cookson, 2001) and if it is meant to be the focus of students' attention in relation to learning (Fade 2003; Scouller & Prosser, 1994). On the one hand, Hargreaves (2003) indicate that current methods of assessment of reflective works of students are not appropriate and need to be revisited. Therefore, I would agree with Grant (2006):

“Methods of assessment would have to be considered carefully if reflective learning were to be embedded in the curriculum. Methods were have to be selected that made the student feel that reflective learning would help them to succeed” (p.228.)

This stresses the importance of clear criteria for assessing reflective works of students. Fade (2003) argues that broader assessment criteria are more appropriate as it allows discussion and explication of rationale. She acknowledges that the criteria for assessing reflective works of students can vary from profession to profession because each profession may have its own definition and emphasis of reflective practice.

Without fair, transparent, and carefully designed criteria, assessment can easily inhibit the process it is designed to enhance (Boud, Cohen, & Sampson, 1999; Richardson & Maltby, 1995; Fade, 2003). The other point needs consideration is that formal assessment of reflective practice can only cover reflection on action (Schon, 1987). Reflection in action, due to its very nature, is out of the scope of formal assessment when others judge reflective activity. Self-assessment seems to be an alternative.

However, I feel it would be appropriate to acknowledge the limitations of reflection, before I begin to explain the research methodology and findings:

“Reflection is just a metaphor intended to help us understand the complicated patterns of thought, emotion and their communication, which arise within and between people and such metaphors, can only ever contribute a certain amount to our understanding” (Ward & McMahon, 1998 p.224).

2.5. Summary

In this chapter, I have used the literature to define reflection. Different epistemological definitions of reflection and consequent reflective practice have been presented. Reflection has been viewed as an evolutionary development in human psychology. Drawing on Habermas, (1971, 1991) Morrison’s (1995) classification of reflective practice has been discussed. In this vein, a distinction between technical, hermeneutic and emancipatory reflective practice have been made. Reflection as way

of thinking and doing based on Dewey (1933) Schon (1983, 1987) Mezirow, (1981) and Boud et al, (1985) and as a way of being and becoming (Johns, 2005) has been discussed. In addition, technical, practical, and critical levels of reflection have been explored and Mezirow's (1981) seven levels of reflectivity are explained.

It is argued that reflection requires a framework, structure ,process and a perceived outcome, which is of value to the students (Glen, et al 1993). This can be provided by using a model of reflection. Some examples of models of reflection are discussed in more details (Schon, 1983, 1987; Mezirow, 1981; Johns, 1984; Boud et al, 1985). These models have had a key influence on the acceptance of reflection in medical and healthcare education by providing the readers with the potential contents of reflection, its quality, and strategies used for its development. Then I have provided a criticism of reflection and models of reflection. I have emphasized that it is appropriate to consider that any model is only a guide and is not an exact plan for action. I have argued that models should be viewed as a tool that professionals can use and modify according to their own needs.

A review of literature on assessment of reflective account has been presented (Fade, 2003; Burn and Bulman, 2000; Ixer, 1999; Shumway & Harden, 2003; Bourner, 2003; Hargreaves, 2003; Ixer, 1999). Some argue that the idea of assessing reflective works of students using traditional methods of reflection is ,in essence, problematic (Ixer, 1999; Hargreaves, 2003) while others believe that it is important to assess reflective learning to be able to provide feedback to students ((Bourner, 2003) and to make it the focus of students attention (Fade, 2003). As it will be outlined throughout this thesis, teaching and learning reflective practice is a complex and multifaceted phenomenon therefore its assessment requires careful consideration of that complexity.

Chapter Three

Theory and Methods

Introduction

This chapter delineates the philosophical and methodological framework supporting this study. Crotty (1998) proposes four questions that are essential to be carefully answered in developing research. The questions are as follow:

- What *methods* do we propose to use?
- What *methodology* governs our choice and use of methods?
- What *theoretical perspective* lies behind the methodology?
- What *epistemology* informs this theoretical perspective?(p.2)

Throughout this chapter, I endeavour to answer these questions in relation to this research. I begin with the issue of epistemology and the need for compatibility between the topic under investigation, research methodology, and the researcher's main assumption of the nature of knowledge. Then I will explain symbolic interactionism and hermeneutics as theoretical perspective of the study, which informed a grounded theory methodology.

3.1. Constructionism as Epistemology

Research paradigms, at a broad level, are classified as either positivist or naturalistic. The epistemology underpinning positivism is objectivism, which holds "things exist as meaningful entities independently of consciousness and experience and that they have truth and meaning residing in them as objects "(Crotty 1998, p.5). Naturalism conversely, assumes that reality is:

"not a fixed entity but rather a construction of the individuals participating in the research, reality exists within a context and many constructions are possible" (Polit & Hungler, 1997 p. 12)

In a positivist research, the researcher is independent of reality, seeks objective knowledge, and follows a fixed design and deductive processes. On the other hand, in

naturalistic research the researcher is interactive with the participants, acknowledges subjectivity, and follows a flexible research design and inductive processes.

The aims of this study and the nature of teaching and learning reflection and reflective practice directed this research in the spirit of interpretivism. In interpretivism, the aim is to interpret the world, mainly the social world where knowledge is constructed “through the search for meaning, beliefs, and values and through looking for whole and relationships with other wholes” (Higgs, 2001 p. 49).

3.1.2. Constructionism and its compatibility with research in reflective practice

From my personal and professional experiences, (see Chapter 8) I identified several key main beliefs about research in teaching and learning which enlightened my research design.

- Students and teachers are both significant as participants in any study about education and should be considered as potential beneficiaries of the study
- The nature of teaching and learning reflection is indeterminate
- My intention of the research is not to find “the truth” about teaching and learning reflection but to contribute to existing understanding and meanings of the phenomenon
- There are unexplored aspects of a complex social phenomenon that can be elucidated
- Research process, researcher and research outcomes are significant in providing a better understanding about the researched
- Meanings and interactions are important elements of any situation which involves human consciousness
- The individuals experience and interpret the reality individually but they are interdependent.

The research training I undertook and my reading about research methodologies (e.g., Crotty 1998, Silverman, 1997, and Robson, 1993) confirmed that my basic beliefs about the proposed topic of investigation and educational research were mainly compatible with a constructionist epistemology of research. Crotty (1998)

has explained three main epistemologies constructionism, objectivism, and subjectivism (p.5).

The objectivism epistemology holds that meaning, and therefore meaningful reality, exists *per se* apart from the operation of any consciousness. This view of human knowledge implies that the knowledge is discovered and verified through direct observation and precise measurements of constituent fractions (Crotty, 1998; Cousins, 2002; Healy & Perry, 2000).

Subjectivism holds that the object does not have a meaning *per se* and does not contribute to the generation of meaning. Rather meaning is personal and imposed by the subject (Crotty, 1998). Therefore, knowledge is only personal opinion.

Constructionism holds that reality is socially constructed. It is also called interpretive (Schwandt, 1994) and naturalistic (Guba & Lincoln, 1994). Constructionism rejects the idea of there being an objective truth waiting to be discovered. It instead argues that meaning is constructed out of human engagement with reality. Therefore, meaning is neither imposed on the reality nor discovered (Robson 1993; Crotty, 1998). The role of the researcher is to understand the multiple socially constructed meanings and knowledge. The research methods help the researcher to obtain multiple perspectives in his interplay with the participants. In addition, constructionism argues that because there are multiple realities, research questions cannot be fully determined in advance (Robson, 1993).

Clearly, my key main beliefs about the research are much more in sympathy with constructionism rather than objectivist or subjectivist epistemologies. In addition, the compatibility of research strategies and the subject matter of research is an important issue (Guba and Lincoln, 1985). Mason (1996) holds that sound research design is dependent on the compatibility between the subject matter of the research and its ontology and epistemology. This poses a question to this research:

Is reflective practice a subject that can be investigated using a qualitative paradigm underpinned by interpretive frameworks such as constructionism?

The answer is readily yes because constructionism and reflective practice share basic assumptions about knowledge and learning such as the view that ideas and actions are integral, interdependent, and essential aspects of the learning process

(Osterman, 1998). Central to both constructionism and reflective practice is knowledge construction not knowledge absorption or recording (Noori, 1994) and they share the central importance of the context in learning (Brockbank & McGill, 2007).

The interpretive process becomes a logical outcome of the constructionist approach to knowledge generation. Hermeneutics holds interpretation is unavoidable (Schwandt, 1990; Usher, 1996). The hermeneutic tradition acknowledges the complexity of human action and the use of interpretation to extract implicit meanings. I now explain the theoretical perspective of this study.

3.2. Theoretical perspective

Before I begin to describe my chosen research methodology, I will explore the theoretical perspective of the study. Based on the epistemology of constructionism this study adopted an interpretivist philosophical stance, which informed the methodology. Phenomenology, symbolic interactionism, and hermeneutics are the main theoretical perspectives within the interpretivist approach (Crotty, 1998) that can be considered. Phenomenology places emphasis on individual experience and interpretation of events but does not consider the issue of interdependence of individuals in an explicit manner like symbolic interactionism. An alternative philosophical stance was critical theory, which failed to be compatible with the purpose of this study due to its emphasis on emancipation and collective oppression (Crotty; 1998). Symbolic interactionism provided the basic theoretical perspective for this research. In addition, I could not resist looking at the research in a hermeneutic spirit at times. Picking and choosing of this kind is legitimate provided the researcher obtains a comprehensive understanding of both theories (Crotty, 1998). However, the two theoretical perspectives are interpretive and their main principles are not in contradiction with one another. Now I explore symbolic interactionism and hermeneutics as theoretical perspectives of the present research.

3.2.1. Symbolic interactionism (SI)

SI is rooted in the works of Mead (1863-1931) and his student Blumer (1969) in their attempt to present a behaviourist account of the origin, uniqueness, interrelation of human mind and society. Blumer (1969) provided three main core assumptions of SI:

- Human beings act toward things on the basis of the meaning that things have for them.
- Language, gives humans a means by which to negotiate meanings through symbols, therefore meaning is derived from and arise out of the process of social interaction between people. It is not originated from their internal psychology.
- Humans modify and interpret the meanings of things.

According to Taylor and Bogdan (1984) these three core principles are:

1 – People do not simply react to stimuli or perform a cultural script. People base their actions in the meanings of things.

2- Meanings are social products and arise out of interaction. That is, we learn how to see the world from other people.

3- Social actors attach meaning to things (situations, others, and themselves) through a process of interpretation.

3.2.1.1. Some basic propositions of SI

These three premises of meaning, language, and thought originate from the assumptions held by SI about the nature of self, mind, and society. Based on above three main premises Manis and Meltzer (1978) explained some basic propositions of symbolic interactionism summarised as follows:

The meaning component in human conduct

Meaning has a social character and is an emergent concept assigned to the stimuli through a process of interaction, consideration, interpretation, and reconsideration of the interpretations already made. This viewpoint puts interpretation between the stimulus-response couple and defines the meaning of stimuli not as a substantive attribute of it, but something assigned to it in an interaction process. That is, humans do not directly (biologically) react to the actions of one another but interpret each other's acts, assign meaning to them and respond actively in a purposeful way. (Diagram 3.1)

Humanisation is an interaction process not an instinct that humans are born with

Human conduct is the outcome of association with others and with the self. Human beings are born as an organism necessary but not enough for humanisation. This organism has certain characteristics such as plasticity, highly developed cortex, teachability that makes it ready for the process of humanisation but the concepts like “self,” “mind” and human nature and conduct are not congenital and biological givens. Humanisation is an emergent, ongoing process of the formation of humans who are in a constant shaping and reshaping through the processes of interaction with others and self.

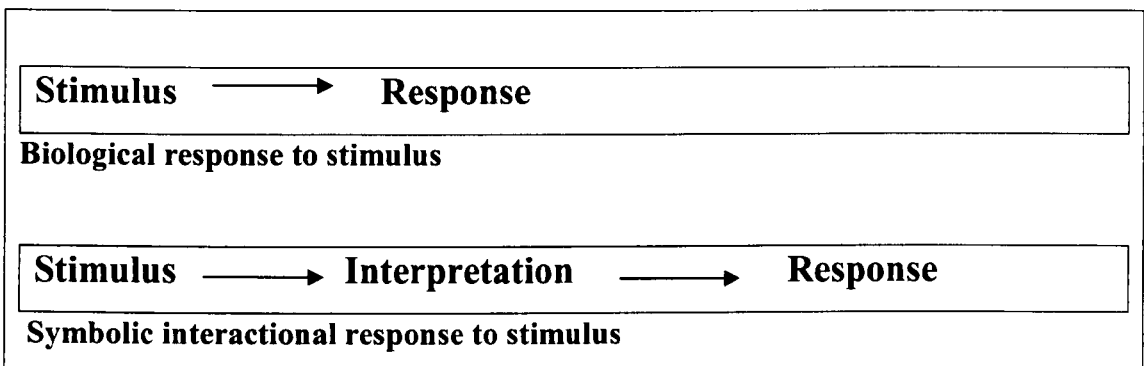


Diagram 3.1 Biological and symbolic interactional responses to stimuli

Individuals in interaction shape the society

Symbolic interactionism maintains that human society is a framework within which social action with human nature takes place. These human actions determine the structure of the society and are always changing, remodelling, and rebuilding it. The social structures, in turn, do have their own impact and set barriers for human conduct, but there always remains empty room for humans’ free will to act and reshape the conditions to some extent.

Human beings’ conduct is active and voluntary

Symbolic interactionism, by recognising the importance of interpretation between stimuli and response, and stressing the function of self as capable to initiate interaction with the self and others, views human behaviour as intentional, active and rather self directed. This view maintains that thought and interpretation enables

humans to entangle themselves in the nets of society and at the same time to liberate the self from its determinants.

Internal dialogue between components of self

The interaction of an individual's self-conception "I" and the socially reflective portion of self, "Me," in the form of an internal dialogue is an exclusively human function. Humans' ability to imaginatively rehearse different lines of action and reflect upon them in a prospective manner to see the possible reactions and consequences assists them to learn without having direct experience.

Emergent behaviour

Human behaviour in symbolic interactionism is seen as emergent, that is, humans shape their behaviour through interaction with others, and themselves. They do this by interpreting, adjusting, and readjusting the behaviour in the course of time. By the term emergent symbolic interactionists mean considering, choosing, or rejecting different lines of action. In this way, they construct their behaviour and therefore create, construct or shape their destiny.

Symbolic interactionists stay somewhere near to the middle point of an imaginary continuum between absolute determinism on the left and complete free will advocates on the right hand. Their standpoint is slightly skewed to the right because of their own inclination toward and origination from humanism, pragmatism, and constructionism, which all share the hope and aspiration for liberation of humans from Mother Nature. Thus, they draw attention to the creative choices; interpretive selections and rehearsed alternatives, rather than macrostructure, giant determinant forces as found in Marxism.

Discovering the actors' meaning of actions, determines the validity of an observation

As explained by Blumer (1969), human beings act toward things according to the meaning they assign to those things. If so, there might be covert meanings for actions in addition to the overt and ready at hand ones. Understanding these covert meaning is essential if an observer wants to grasp the actors' view of their social world and then to conceptualise their conduct. This last proposition is the main methodological

implication of symbolic interactionism and it contradicts the viewpoints that maintain we only can address explicit, observable activities.

Thus, in a symbolic interactional point of view self, society, and significant symbols are interwoven and interdependent on each other (Manis & Meltzer, 1978). This has some implications for the social researcher. Psathas (1973 as cited by Crotty 1998) writes:

“Methodologically the implication of symbolic interactionist perspective is that the actor’s view of actions, objects, and society has to be studied seriously. The situation must be seen as the actor sees it. The meaning of the acts and the object must be determined in terms of the actors’ meanings, and the organisation of the act must be understood as the actor organises it. The role of the actor in the situation would have to be taken by the observer in order to see the social world from his perspective” (in Crotty, 1998 p. 75)

Basic premises of symbolic interactionism and the above propositions derived from them alongside interactionist strategies such as dramaturgy, negotiated order theory, labelling theory and internal dialogue were useful in understanding the participants’ meanings, actions, intentions, and the ways they resolved problems. Hewitt (1988) maintained that there are three areas in where symbolic interactionism would be useful. Firstly, when there is an emphasis on reality as a social creation. Secondly, when the researcher wants to understand the perspective of those under investigation and thirdly when there are “tensions and contradictions as well as interdependence of self and society” Hewitt (1988). These areas were important in this study. In the next section, I will give an account of how SI ideas contributed to the development of this study.

3.2.1.2. Examples of SI Ideas used in this study

SI ideals directly with issues such as language communication, interrelationship, and community (Crotty, 1998). Throughout the research, I was aware of those basic social interactions. Symbolic interactionists use certain metaphors and concepts to explain the social interactions they study. After I had collected, coded the data and the categories had emerged I used some of the relevant SI ideas to make more sense of

the data The following examples may help to understand how I used symbolic interaction ideas and concepts in my study.

Dramaturgy

Dramaturgy is associated with Goffman (1971). It draws on the analogy between social life and the theatre. It uses the metaphors of stage actors and audience to observe and analyse the particulars of social interactions. In a conflict-ridden situation, the team rehearse performances back stage and then offer the dramaturgical exact copy of a service to the audience who are viewing just front stage. They do “all of this to convince others as to who they purport to be and what they purport to be doing” (Crotty, 1998 pp. 76-7).

These dramaturgical metaphors helped me to understand and explain the category of “going through the motions” where students claimed to have reflected on practice and produced a rehearsed version of a reflection.

Hierarchy of credibility

According to the concept ‘hierarchy of credibility’ that has been recognised by symbolic interactionism, legitimacy of an argument does not always ensure a higher place in the hierarchy. Those who are officially in power have more power to define what is true (Becker & McCall, 1990). This concept helped me to understand why reflective practice in clinical settings in undergraduate medical education is not embraced as it is expected. The question was whose voice is dominant in clinical settings, the clinician voice, or the educationalists’?

Labelling

Labelling theory is based on the everyday ways in which we categorise people and things. Society is quick to style certain groups or individuals “deviant” (Crotty, 1998). Deviance is nonconformity with existing traditional social norms. Nonconformity is regarded as positive when those in moral or social power approve it and negative when it challenges power and privilege.

The concept of labelling helped me in dealing with the issue of reflection and surgeons. On the one hand, some surgeons seem to label reflective practice and

reflection as nonsense and an utter waste of time because it challenges their power, privilege and their way of learning and doing. On the other hand, the educationalist and the advocates of reflection have labelled surgeons as those who do not reflect.

Internal dialogue

From a symbolic point of view, the self encompasses the “I” (active social performer of behaviour) and the “Me” (reflective controller of the acts of “I”). Internal dialogue is the conversation between these two parts of the self. This is a unique trait of human beings. The medium of this conversation is language. The internal dialogue makes it possible for students to rehearse their practice and reflect on it retrospectively. In this way, they can imagine different lines of action and reactions to them. They can produce reflective accounts on practice without having directly experienced that practice in the way they represent it. This is the analysis that makes some students and lecturers believe that even going through the motions of reflection is an indication of learning how to reflect on practice.

Hermeneutics informed both methodology and theoretical perspective of this study. This will now be explored.

3.2.2. Hermeneutics

According to Crotty (1998) hermeneutics was the science of biblical interpretation, which came into modern use in the seventeenth century, then migrated to other areas of scholarship. It is positioned within the interpretive paradigm. It has been associated with Dilthey (1976), Ricoeur (1974), Heidegger (1962), and Gadamer (1975). Hermeneutics is the theory and practice of interpretation (Van Manen, 1990), which allows discovery of hidden meanings in the text. The subject matter of hermeneutics is not only written texts but also human society, as explained by Crotty (1998):

“Not only has hermeneutics been brought to bear on texts other than Scriptures, but it has been brought to bear on unwritten sources also- human practices, human events, human situations – in an attempt to “read “these in a way that brings understanding.”(p. 87)

Hermeneutics is about understanding. For Gadamer (1975) human understanding is always interpretational.

“Included in much hermeneutic theory is the prospect of gaining understanding of the text that is deeper or goes further than the authors’ own understanding” (Crotty, 1998 p.91).

This is possible through a hermeneutic circle, the process of moving back and forth between a general interpretation and an interpretation of important parts. This is one of the most popular concepts of hermeneutic rules.

A hermeneutic circle is a metaphor for understanding and interpretation, which is viewed as a movement between the parts of data and the whole (developing understanding of the phenomenon), each giving meaning to the other and being used to interpret the other. In this way, understanding is circular and recurrent. Thus, the researcher is open to questions that appear from investigation and enters a dialogue with the text. Understanding is the result of this dialogue.

Hermeneutics refers to shared understandings that we already have with each other (Koch, 1999) and this sharing occurs through language. This vision is translated to Gadamer’s metaphor of fusion of horizons whereby different interpretations of the subject matter are blended through a dialogue to construct shared understandings.

Knowledge is constructed through dialogue in the context of language. Meaning comes into sight gradually in the course of a hermeneutic dialogue between the researcher and the text (Koch, 1999). The nature of hermeneutics is an open dialogue between the whole and the parts, the returning to the object of inquiry repeatedly each time with a fresh understanding and increased knowledge (Packer, 1985). The researcher is viewed as a part of the circle moving back and forth frequently. Schleiermacher (1977) reports researchers could develop empathy with the text as if they are listening to a speaker. A principle of hermeneutics is that people interpret their own situation and engage in a process to make sense of their environment to find out what is important and real for them then they create their own construction of reality (Koch, 1999). Now I attempt to describe how hermeneutics was used in this study.

3.2.2.1. Examples of hermeneutic concepts in this study

In order to consider how hermeneutics as a theoretical perspective- and in some parts as a way of looking at the data and making sense of the data - has informed this study I explore some of the hermeneutic concepts in relation to the research and analysis and findings.

Hermeneutic circle

The metaphor of hermeneutic circle helped me in two levels of the study. Firstly, it shaped my way of looking at the whole research (the phenomenon of teaching and learning reflection) and its parts, such as emerging categories, concepts developed, different groups of participants, and different courses when I described the substantive theory. In fact, the diagram 7.3 in chapter seven represents the interrelationship of understanding the complexities of teaching and learning reflection as “the whole” and all identified categories and concepts as “the parts.” That diagram also represents our (the participants and the researcher) shared understanding of the phenomenon (Koch, 1999).

Secondly, it helped me in dealing with the actual data such as interview audio recordings, interview transcripts, field notes, and students’ diaries and so on. In the level of dealing with the texts, I considered the meaning (possible meanings) of each part of the data and compared it with bigger relevant parts of data (each bigger part can be considered as a whole for a smaller part). In this way, I could identify a number of “parts” and “wholes.” On the other hand, I interpreted each bigger part in relation to the meaning of the part or parts that it encompassed. The more parts and wholes the researcher identifies the more likely he gets a better understanding of the phenomena.

This method was in line with my grounded theory methodology and constant comparison of the data and in fact, I did the two type of analysis in the same time. The aim was a better understanding. Table 3.1 contains the parts and the wholes I identified in this study. However, Gallagher (1992) states:

The meaning of part is only understood in the context of the whole and the whole is understood when we understand the parts, understanding therefore requires a circular movement from parts to whole and from whole to parts. The hermeneutic circle therefore it is not a vicious circle the more movement

in this circle the larger the circle grow embracing the expanding contexts that throw more and more light upon the parts (p. 59) .

Fusion of horizons

Gadamer maintained that the researcher inevitably brings his /her expectations, meanings, and experiences to combine them into a hermeneutic interpretation (Koch, 1999). The word “prejudice” introduced by Gadamer (1975) refers to values, experiences, and preconceptions that affect how an individual interprets new experiences. These preconceptions are derived from traditions we have come from and to which we have access through language. We belong to our language and our language owns us. (In chapter 8 I have reflected upon the issue of language in this research) Therefore, we not only have access to traditions, but traditions have a certain power over us (Gallagher, 1992). The allegory of fusion of horizons was used by Gadamer to demonstrate how prejudice joins other information from other perspectives to create a new knowledge and understanding (Crotty, 1998).

Part	Whole
Segment of data (word sentence-paragraph ...)	The same interview as a “whole “
All data from one participant (n participants)	The data from the same group
All data from one group (6 groups)	Data from all groups
All data from one course (3 courses)	Similar concepts
Data from all groups	Other data in the same category Whole phenomena (Findings , understanding , literature)

Table 3.1 depicts a list of what I considered as parts and wholes in my hermeneutic circle

Gadamer described horizon “as the range of vision that can be seen from a particular vantage point” .For him the interpretation of phenomena involves the connection of the vision of the researcher which belongs to the past and the perspective of the text which belongs to the present. The understanding occurs at this intersection, which is called the fusion of horizons. Traditions and languages of others are foreign for us until we attempt and succeed to understand them. When the horizons of different perspective merge, new understanding emerges.

In this study, the metaphor of fusion of horizons occurred as new understanding emerged through the interpretation of data in each period of the study. Analysing and interpretation of any new data set (e.g. a set of data from students vs. teachers, or data from nursing as apposed to medicine) broadened my range of vision. For me fusion of horizons occurred repeatedly after each cyclic movement between the parts and the whole. Understanding of complexities of teaching and learning reflection is the ultimate result of this process.

I also used the metaphor of horizons to understand the different perspective about reflection. For example, we can assume that some educationalist who advocate reflection and some surgeons who deny its usefulness in professional practice have different horizons of reflection. In addition, different courses may have different range of vision of reflection as this study shows they have different rationale and expect different professional outcomes from reflecting on practice, although there are common rationale and expectations.

Dialogue with the text

Gadamer suggested that understanding could emerge only through deep engagement with the text. This is possible through frequent act of readings and persistent process of asking and answering questions of information that investigates new directions and possible answers (Gadamer, 1981; Aylesworth, 1991; Van Manen, 1997b), an engagement in a dialogue with the text.

A shared understanding of teaching and learning reflection was gradually constructed in this study by analysing data from different sources (student and teachers, different courses, clinical settings and academia). Understanding emerged from reading and re-reading all written texts (interview transcripts, written exercises, and field notes) for each participant in order to become very familiar with the texts. I listened repeatedly to the audio recording of the interviews along with the relevant field notes. I felt I needed to listen to the audio recordings even more than a native English speaker might need to do so because English is not my first language and I needed to consider the subtleties of language. I used a small digital voice recorder and a MP3 player so I could have my audio files with me all the time and was able to listen to them even in my spare time. A professional native English speaker helped in transcribing the interviews so I was confident I understood what was being said completely. I checked all the transcriptions with the relevant voice file for accuracy. The process of reading

transcriptions and listening to the voice files helped me to get more familiar with the data. This process is often named immersion in the data (Van Manen, 1997). In this stage, I aimed to get involved with the meaning of the texts and become familiar with it. This facilitated the process of coding in later stages. I had regular meetings with my supervisors, where I not only reported my progress but also discussed the findings and understandings. Dialogues in supervision meetings served as a medium for reflection on emerging ideas and contributed in development and expansion of my ideas. Such dialogue was important for creating new insight, considering alternative interpretations and contradictions, and meticulousness in interrogating the data (Barbour, 2001).

Hermeneutic alertness

Another concept of hermeneutics, which contributed to the development of this study, was hermeneutic alertness. It is a commonsense idea that if the researcher is fluent in the language of the participants he is more likely to obtain a greater access to their world without being required to ask for explanation. This may be true but based on my own experiences with different languages (see chapter 8), I could argue that if we are very familiar with the language we may ascribe meanings to certain words, jargons, behaviours, and decisions different from what participants mean because we are not very attentive to the language and may take it for granted. One can find many examples of misunderstandings between the people from the same culture and language in everyday affairs because people may ascribe different meanings to the same thing. Banner (1994) states that Heidegger believed we do not see because of familiarity.

In both cases, the researcher should remain hermeneutically aware of the importance of language and the impacts of discourse and culture on what is being, said, done and understood. This awareness is what Van Manen (1997 p. 69) called hermeneutic alertness. The concept of hermeneutic alertness in line with reflexivity as will be discussed in chapter eight, helped me, adopt a reflective approach, to the text considering all possible factors and lines of meaning. This approach helps to see the familiar as strange, and look anew and make the strange familiar and accessible in a hermeneutic cycle.

We all interpret our situations

A principle of hermeneutics is that people interpret their own situation and engage in a process to make sense of their environment to find out what is important and real for them then they create their own construction of reality (Koch, 1999).

This concept in line with symbolic interaction principle of people act toward things based on the meanings they ascribe to those things (Blumer, 1969) helped me understand the different lines of action different participants followed. For example, I found out students go through the motions because they interpret their situation as a student in terms of reflection. They see reflection does not have immediate impact on their course and other subjects. They face heavy volume of tasks to do and their aim is to pass with good marks. Therefore keeping a reflective diary is not important for them because it does not help with the assessment of other subjects. In this way, they construct their own reality in terms of keeping a reflective diary or writing a reflective account. Then what they do is acting based on their own constructed reality not what the theory of reflection says about its usefulness. They may go through the motions to secure a mark and save time for other subjects because in this stage it is the most important thing. Moving on from theoretical perspective, the next section considers grounded theory as the methodology of this study.

3.3. Methodology: Grounded Theory

This study uses a grounded theory method as explained by, Glaser and Strauss, (1967) and Glaser (1978, 1992, 1996, and 1998). Grounded theory is a method of qualitative research that uses a systematic set of procedures to develop and inductively derive grounded theory about the phenomenon with a stress on the constant comparative data collection and analysis. It is informed by symbolic interactionism. Glaser (1996, 1998) and Vaughan (2007) reminded that Hughes and Blumer trained Strauss in symbolic interactionism and qualitative analysis at the University of Chicago (Diagram 3.3). The grounded theory approach to qualitative analysis evolved from the philosophical ideas of American pragmatism specifically writings of Dewey, Mead, and Peirce (Strauss, 1987). Glaser was strongly influenced by Lazarfeld's (1901-1979) inductive methodology (qualitative and quantitative) whereas Samik and Rahmat (2000) believe his thesis adviser Merton (1910-2003) influenced Glaser's inductive theory generating methodology.

Grounded theory appears to be one of the most accepted and rigorous methods of deriving theories from qualitative data. Data is gathered, organised, and examined systematically in an ongoing interaction between analysis and data collection (Glaser & Strauss, 1967; Strauss, 1987). Grounded theory study is based on the assumption that the social world can be discovered via naturalistic investigation of the social situations shaping interactions and human conducts. Glaser and Strauss (1967) drew the method from the qualitative tradition developing an interpretive method that embraces the systematic collection and analysis of data in the everyday life in a way that ensures trustworthy and rigorous results. They extended conservative quantitative techniques, including field observation, semi-structured interviews, and the examination of an array of documents as a valid means of understanding how people identify and understand their own situations and adjust their behaviour and tendencies with others in a symbolic interactional manner. The main features of grounded theory are comparative analysis, theoretical coding, and theoretical sampling, and other processes leading to the systematic generation of theory, (Glaser, 1978, 1998; Glaser & Strauss, 1967; Strauss, 1987).

Grounded theory is a highly structured but eminently flexible methodology of qualitative inquiry that looks systematically at qualitative data aiming at the generation of theory that account for a pattern of behaviour that is relevant and problematic for those involved (Glaser, 2004, 2005). The theoretical orientation of grounded theory studies is symbolic interactionism, which emphasises that human conduct is developed through human interactions, through an ongoing process of negotiation and renegotiation. Indeed, symbolic interactionism focuses on how people define events and realities and how they behave based on their beliefs (Eaves, 2001). Grounded theory is used to explore the social processes that present within human interactions. Through grounded theory, researchers develop explanations of key social processes that are grounded in empirical data (Hutchinson, 2001).

Unlike quantitative inquiry approaches, grounded theory does not begin with an existing theory but rather generates a specific substantive or formal theory for the phenomena under the investigation. Glaser and Strauss (1967, p.32) differentiated substantive theory from formal theory. Substantive theory is grounded in data on a specific substantive or empirical area of investigation. It can be a facilitator for formal

grounded theory, which involves developing a higher abstract level of theory from a collection of substantive theory studies regarding the phenomenon of interest. Both types of theory may be considered as *middle-range* that is they fall between *minor working hypotheses* of everyday life and *grand theories* Glaser and Strauss (1967 pp.32-3) (see diagram 3.2)

Substantive and formal theory differ in their level of generality however one type may overlap with the other (Glaser & Strauss 1967, pp.32-3). An analogy used by Kearney, (1998) to differentiate substantive theory and formal theory might be useful to be considered.

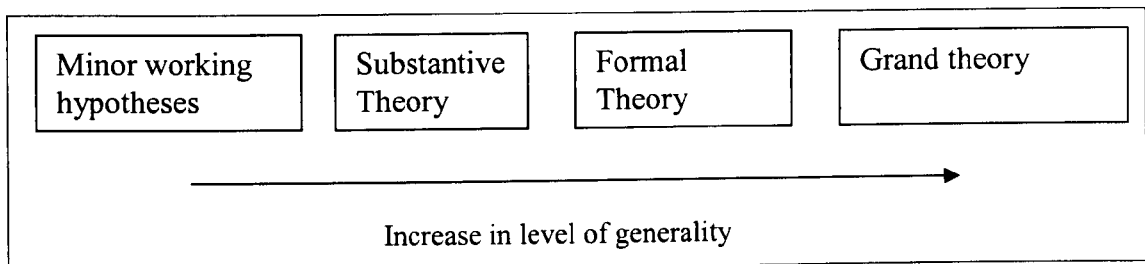


Diagram 3.2 depicts the position of substantive and formal grounded theories based on Glaser and Strauss (1967 pp.32-3)

In this analogy, substantive theories are likened to “custom-tailored clothing” and formal grounded theories are assumed to be as “ready-to-wear clothing.” Therefore, formal theories (clothes) can fit a wider variety of users. They are not personally tailored like substantive theories (clothes). Rather they provide a conceptualisation that applies to a broader population experiencing a common phenomenon. I move now to describe some important features of grounded theory considered in this study.

3.3.1. Some important elements of grounded theory

Research questions

In a grounded theory methodology, the researcher states research questions, rather than hypothesis or objectives (Creswell, 2003). In grounded theory it is assumed that firstly, all of the concepts related to specified phenomena are not yet been identified. Secondly if they are identified their relationship is poorly understood or are not conceptually developed. Thirdly, nobody has asked these specific questions thus it is yet impossible to determine all variables (Parker & Roffey, 1997; Strauss and Corbin, 1998). Therefore, the research question in a grounded theory research differs from hypothesis or null hypothesis determined in a positivistic experimental design. The

question in grounded theory is flexible and open-ended in order to allow the theory to emerge. It is also broad enough to facilitate a systematic enquiry of all features of the phenomena (Strauss & Corbin, 1990). Research questions are developed in the course of data collection and analysis facilitated by the emergent design of the inquiry.

Since the methodology of grounded theory is an emergent design (a design that unfolds in the course of a grounded theory study as the inquirer makes ongoing design decisions reflecting what has already been learnt and remains consistent with core principles), researchers improve the research question as they generate and analyse the study data. The focus of the research may change in the light of new information emerged in the course of data collection and analysis therefore the initial research questions may not necessarily remain unchanged until the end of the study.

It is worth mentioning that the data generated in a grounded theory might change the study focus. This does not necessarily mean that in all grounded theory studies the final questions are completely different from the original ones rather indicates there is an organic relationship between the generations of questions. Therefore an area of inquiry is identified not a specific research question (McDonald, 2001). In fact, Glaser (1992) maintains you start the research not with clear question but with a sense of:

“abstract wonderment of what is going on that is an issue and how it is handled” (p22).

Theoretical Sensitivity

Theoretical sensitivity according to Glaser is the process of developing the insight with which a researcher comes to the research setting (1978). It refers to the personal quality of the investigator and his /her ability to make fine distinctions of meaning of data, i.e. having insight, the ability of making sense of the data and the ability to separate the relevant from what is not relevant. The researcher can come to the research setting with different levels of theoretical sensitivity, but it can be developed during the research process and reading literature, gaining professional experience and commitment to enhance his ability by thinking about the possible meanings and differences and reading the reports and critiques of similar research. Schreiber and Stern (2001, p.60) view theoretical sensitivity as a guard against researchers bias and ensuring rigour. They maintain that this is the researchers' ability to think inductively and move from particular to general or abstract to build the theory from observation

of specifics. For them developing theoretical sensitivity requires vigilance and practice.

This study claims to be significant in taking on theoretical sensitivity throughout the research. I read the relevant literature to any emergent concept and compared them. For example, the issue of participants' concerns about assessment of reflective accounts emerged and was saturated, then I started reading about it in the relevant literature as another source of data and I read about the related concepts such as fairness of assessment and students perceptions of fairness of assessment in general. This increased my sensitivity in this area. However, grounded theory is based in the actual data thus the researcher should step back from the data to see whether or not the theory has indeed emerged from the data or whether his own conception is directing the study (Glaser and Strauss, 1967). In grounded theory, the theory is emerging from the data not from existing theory so literature is viewed as another source of data and there is no need to spend a lot of precious time on literature (Glaser, 2004). Theoretical sensitivity implies a creative action from the side of the researcher with elements of uncertainty, and intuition, which is hard to be expressed. Glaser and Strauss (1967) acknowledge the researcher's flashes of insight, which they maintained must be brought into the data otherwise there would be a risk that the theory and empirical world might not match.

Theoretical sensitivity refers to the concept of reflexivity and the relationship of the researcher and the researched. This implies that the researcher may come to the research with previous knowledge and professional background (Glaser, 1978; Strauss and Corbin, 1990). Chapter 8 will explore the issue of reflexivity in this research. I now describe theoretical sampling as an important feature of grounded theory.

Theoretical Sampling

An important feature of grounded theory relates to the sampling of information. Using a process called theoretical sampling the researcher initially goes to the most likely places of information and finds those who might have the most information about the phenomenon (Green & Thorogood, 2005; Goulding, 1999). When concepts are identified and theory starts to develop further informants, places, and settings will be added to the study. In this way the researcher jointly collects , codes, and analyses data and then decides “what data need to be collected next and where “ as a tool for generating an emerging theory (Glaser and Strauss, 1967).

Theoretical sampling continues until the researcher feels he/she has theoretical saturation whereby no new data are being emerged to develop properties of the categories. This involves staying in the field until no new data information emerges from more data collection. Theoretical saturation also implies that the negative cases have been identified and addressed. Glaser and Strauss (1967) refer to the theoretical saturation point as the time when the researcher encounters similar instances repeatedly and he becomes empirically confident that a category is saturated. Constant comparison is the essence of grounded theory, as we shall see in the next section and throughout this chapter.

Constant comparative method

Constant comparative method is a process of comparing “likes to like” and involves three types of comparisons. Incidents are compared to incidents, concepts are compared to more incidents, and finally concepts are compared to concepts. I have summarised these three types of comparison in table 3. 2.

Types of comparison	The aim of each type of comparison
Incident to Incident	The uniformity and the conditions become generated concepts and hypotheses. (Glaser , 2004)
Concept to Incident	To generate new theoretical properties of the concept and more hypotheses (Glaser, 2004)
Concept to Concept	To establish the best fit of many choices of concepts to a set of indicators, the conceptual levels between the concepts that refer to the same set of indicators and the integration into hypotheses between the concepts, which becomes the theory. (Glaser 2004)

Table 3.2 summarises the three types of comparison in grounded theory and their underlying outcomes according to Glaser (2004)

Glaser and Strauss (cited in Lincoln and Guba 1985, p. 339) described the constant comparison method as having four distinct stages:

- 1- Comparing incidents applicable to each category

- 2- Integrating categories and their properties
- 3- Delimiting the theory and
- 4- Writing the theory

The final purpose for these comparisons is to identify the concepts and explore the relationships between and across the incidents. In grounded theory literature, comparison is stressed repeatedly with fit and refit being terms used in terms of category development (Heath & Cowley, 2004). Constant comparisons as defined here leads to the development of core categories.

Development of Core categories

Not all categories that emerged are evenly pertinent and necessitate in-depth investigation. During analysis, the researcher will identify some categories with the greatest power for explaining the phenomenon. These are known as core categories and should be saturated as completely as possible. In deed, a core category is the product of comparing incident to incident and incident to categories (Glaser, 2004). Glaser argued that “the researcher undertake the quest for this essential element of theory, which illuminate the main theme of the actors in the setting, and explicates what is going on in the data” (Glaser, 1978). The core category is related to the main concern of participants and how it is resolved. The criteria for establishing the core category, according to Glaser (2004), are that it is central , relating to as many other categories as possible and accounting for a large portion of the variation in a pattern of behaviour.

Data collection

Glaser maintains “while interviews are the most popular methods, grounded theorist works with any data {“all is data} not just one specific data” (2004 section 3.3). The researcher enters the research situation and gathers data by such means as participant observation, interviews, or other written documents. The data can be from any source and in any form and shape including documents from previous research (Darkenwald, 2005). Indeed Glaser (2004) reminds that data should not be discounted as subjective, obviously constructed etc. The process of data generation requires the researcher to collect, code, and analyse data concurrently (Darkenwald, 2005). Grounded theory methodology is a flexible one and permits the researchers to benefit from choices in

their treatment with the data. Researchers may tape-record interviews, transcribe them verbatim, organise field notes, collect other forms of data, and then analyse them methodologically.

Data analysis:

It is a unique feature of grounded theory research that the researcher simultaneously collects data, codes and analyses the data from the onset of the research. The researcher's aim is to develop the core category. Glaser claimed that the researcher looks for this indispensable element of theory, which clarifies the main theme of the participants in the setting, and explains what is happening (Glaser, 1978). To achieve grounded theory, the researcher should analytically go through a defined procedure. The researcher must start from somewhere. Once an adequate amount of data has been gathered the researcher should start familiarisation with the data by listening to tapes, reading and re-reading transcripts or field notes. Then the analyst begins with open coding with minimum preconception to generate codes and to find relevance (Glaser, 2004). Coding is the first formal phase of data analysis and it is to this I now turn.

Coding

The aim of coding is to progress from having some collected data to developing a theory (Flint, 2005). The procedure is aimed to get "the analyst off the empirical level by fracturing the data, then conceptually grouping them into codes that then become the theory which explains what is happening in the data" (Glaser 1978, p.55). Open coding, also called substantive or in vivo coding, is the act of conceptualising the data in the first level of abstraction. Glaser (2004) suggest a set of questions that the researcher should ask himself, such as

- *What is this data a study of?*
- *What category does this incident indicate?*
- *What is actually happening in the data?*
- *What is the main concern being faced by the participants? and*
- *What accounts for the continual resolving of this concern?(section 3.6)*

The coding is often written in the margin of the data preferably using participants' own words or phrases. As the research progresses and more and more data are coded, the codes are grouped, named, and renamed until new concepts emerge. The core variable, which explains the main concern of the participants, will emerge eventually. Selective coding is applied when the core variable has been identified which guides coding procedures and helps to not bothering about the concepts with less important or irrelevant to the core category. Glaser (2004) stresses the importance of "line by line coding" in forcing the analyst to verify and saturate categories, and in minimising the risk of missing, an important category. Therefore, when the core variable is identified selective coding starts. This means an end to open coding and a start to selectively coding those variables, which relate to the core variable. Selective coding results in delimiting the coding.

Theoretical coding occurs concurrently with substantive coding and is related to when the researcher is sorting his/her memos and is trying to make sense of them theoretically. Glaser (1978) maintains theoretical codes conceptualise how the substantive codes may relate to each other as hypotheses to be integrated into a theory. For him, the role of theoretical coding is to reassemble what has already been dismantled by open and substantive coding into a theoretically coherent set of concepts. Glaser provides a long list of coding families (Glaser, 1978, 1998) among them; he presented his 6Cs as the bread and butter theoretical code (Flint, 2005) which includes Causes, Contexts, Contingencies, Consequences, and Conditions.

Theoretical coding is closely related to memoing, which I now turn to.

Memoing, sorting and writing up

Memos are theoretical notes about the data and the conceptual connections between categories (Glaser, 2004). Memoing is a free writing activity without rules of writing, grammar, or style, which expands ideas; captures the analyst's thinking and then assists theory articulation (Glaser, 1998, 2004). Glaser, warns against skipping the important stage of writing theoretical memos. Theoretical sorting is the key to formulating the theory for writing or presentation He maintains if this stage is omitted the procedure is not a grounded theory (Glaser, 2004). Once data saturation happens, further data add hardly any new concepts to the core category, the researcher starts sorting the memos. Sorting involves reviewing, and integrating numerous memos related to the core category, its properties, and other related categories. Memo writing

is a continual process capturing the “frontier of the analyst’s thinking” while he is simultaneously collecting, coding and sorting the data (Glaser, 2004). Undoing preconceived notions, hypotheses, and scholarly baggage are achieved by constant comparison of memos (Glaser, 2004). This process gives direction to theoretical sampling. Memos contain the logic of the analysis, the content of the categories and their properties, and an exposition of their interrelationship (Darkenwald, 2005). Using literature in grounded theory is a matter of debate and will now be explored.

Using Literature in Grounded Theory

Glaser and Strauss (1967) maintain the main reason for not carrying out an extensive literature review at the beginning of the research is that the preconceptions obscure the judgement and suffocate creativity in the process of the research. This idiosyncratic way of approaching literature in production of grounded theory has been a matter of debate.

Allen (2003) observes that some people have interpreted the grounded theory to mean fieldwork before literature search. He suggests that this is a misunderstanding of the original principle proposed by Glaser and Strauss and he reminds that they had encouraged “using any material bearing in the area” (1967 p. 169). It seems that Glaser’s advice “Learn not to know” has been taken literally (McCallin, 2003). The advice was given so that the researcher might anticipate the problems that might be defined by participants. Glaser (2004) insists:

“It is critical in grounded theory to avoid unduly influencing the pre-conceptualisation of the research through the extensive reading in the substantive area and forcing of extant literature” (Section 3.4).

The logic for this comes from the basic principle of grounded theory, that is, emergence of theory from the data rather than being forced from the literature. Strauss reminds that too much literature may take the researcher in potentially wrong directions (1985).

However, the timing of literature review, and the urge for the researcher to ensure a state of blankness of mind when entering the substantive area, is the main issue that should be considered. Grounded theory postpones the literature review until “the core category, its properties, and related categories have emerged, and the basic conceptual

development is well underway (Glaser, 2004). Charmaz (1990) stated that this is not about neglecting or failing to use the literature rather a delaying in order to reduce the possibility of being locked into “preconceived conceptual blinkers.”

Blumer (1979) was sceptical about ignoring literature in research. He wrote “ignoring the literature in order that emerging categories will not become contaminated is like believing the chicken and the egg can be separated.” Although it is conceivable to start the study in relatively unrehearsed areas without any knowledge of the subject matter at all, this does not seem to be the case with most of the topics today when easy access to information in all areas is possible. Therefore, like other methodologies, reading the literature is important in grounded theory, as everything is data, and contributes yet another perspective. Previous knowledge becomes data to be integrated into a study using constant comparative analysis in order to refine emerging concepts and categories (McCallin, 2003). I shared the view of delaying the extensive literature review and integrated previous knowledge, as another source of data, into the research, in my study. Grounded theory has diverged making it necessary for the researchers to consider what method of grounded theory they espouse in their research.

3.3.2. Split in the methodology

Grounded theory has branched out. Three main approaches to theory are Glaserian, Straussian, and constructivist grounded theory. However, Heath and Cowley (2004) maintain that the most important divergence is between Glaser and Strauss, the founders of grounded theory.

Glaserian grounded theory originates from a traditionalist approach that depends on an open attitude to the research activity where researcher’s preconceptions does not direct the theory but the theory emerges directly from the data. This is generally in line with original propositions declared by the founders. Glaser maintains that if you do something different to this, you cannot call it grounded theory (Glaser, 1999) Glaser’s approach to grounded theory is more creative and flexible. This study is in line with this approach and I have discussed grounded theory in this chapter mostly in the spirit of Glaserian grounded theory.

On the contrary, to Glaserian approach, Strauss and Corbin’s grounded theory is a more pragmatic prescriptive and procedural approach with a more structured attitude to

theory building. They reformulated the classic grounded theory (Anells, 1996 as in Heath and Cowley, 2004). They were responding to critics of grounded theory, as described in the original text (Glaser and Strauss, 1967), who saw it as loose, lacking verification and possessing a scrambled description (Stern, 1994). In Strauss and Corbin's approach, mixing grounded theory with other methods is encouraged and researcher may apply extant insights and experiences to the topic if he thinks this is appropriate (Warburton, 2005). This method generates good descriptions, but focusing on good qualitative descriptions prevents researchers from developing the creativity and flexibility that is essential in discovering theory (Bunch, 2004). This approach leads to microanalysis of data word by word and line by line, which is time consuming and confusing. Glaser (1992) condemned microanalysis approach as producing over conceptualisation. Alternatively, he suggests identifying key points. Heath and Cowley (2004) demonstrated that Strauss and Corbin had added another level of coding (Axial coding). They did this because the open coding created hundreds of codes that needed considerable reduction. They conclude that Strauss and Corbin had moved away from the original position of grounded theory, which was emergence of theory. While constant comparison is central to grounded theory, axial coding advocated by Strauss and Corbin does not rely on constant comparison of incidents to generate categories (Glaser, 2001). In Strauss and Corbin's method despite the initial emphasis on interpretation the theory, become created rather than creative (Heath & Cowley, 2004).

The other branch of grounded theory is Kathy Charmaz's (1995) constructivist interpretation, which appears to depend more on the original writings of Glaser and Strauss than the later writings of, for instance, Strauss and Corbin (Warburton, 2005). Charmaz (2000) maintains that positions of both Glaser and Strauss and his co-author Corbin remain imbued with positivism with its objectivist underpinnings. She claims that Glaser's position is located within traditional positivism while Strauss and Corbin move toward postpositivism because they try to give voice to their participants and represent them as accurately as possible (p. 250). Then she goes on to introduce her own position, which is, constructivist grounded theory.

Glaser (2002) answers Charmaz's criticism and very clearly states: "Constructivist data, if it exists at all, is a very very small part of the data that grounded theory uses." For Glaser all is data and what Charmaz (2000) has written is about qualitative data analysis

not exactly about grounded theory. Although Charmaz (2000) starts her chapter on constructivist grounded theory with addressing ontological and epistemological assumption of grounded theory Glaser does not articulate his epistemological position when he criticises the constructivist approach of Charmaz (Flint, 2005).

No doubt, the debate over different approaches to grounded theory and its methods will continue. When Glaser and Strauss developed grounded theory, ontological and epistemological questions were not of paramount interest of social scientists and the authors (Bunch, 2004). It seems much of the debate between Charmaz and Glaser is ontological and epistemological rather than methodological. Whilst, the debate between Glaser and Strauss and Corbin is methodological rather than epistemological, there are some irreducible features that all grounded theorists, regardless their specific approach, appear to agree on. I have described these elements in this chapter. I adopted a Glaserian method of grounded theory as I found it more compatible with my own way of working and understanding. I do agree with Heath and Cowley's (2004) assertion that:

“Novice researchers needs to select the method that best suits their cognitive style and develop skills through doing the research (p.141)”

Regardless the method selected it is important for the researchers to consider the criteria for rigour in their research. The next section considers this in the context of my research.

3.3.3. Criteria for rigour

According to Lincoln and Guba (1985), the main question in terms of trustworthiness is “How can an inquirer persuade his or her audiences that the findings of an inquiry are worth paying attention to?” (p. 290). Trustworthiness is central concern of any type of research (Koch, 1994; Carr & Kemmis, 1986). Positivism requires validity, reliability, and objectivity while qualitative research with an interpretivist epistemology demands conformability, fittingness, credibility, and auditability (Guba

& Lincoln, 1985 Koch, 1994). Table 3.3 summarises Guba and Lincoln's terminology for ensuring rigour in quantitative and qualitative studies. In interpretive inquiry, trustworthiness is achieved through a variety of strategies. These include prolonged engagement, persistent observation, and triangulation (data method researcher and theory) peer- review, reflexivity, and use of external audit (Guba & Lincoln, 1985). Added to this list are a full description of the subject of the study, and methodology used, in addition to using appropriate methods for checking emerging concepts with sample and wider research community and looking for disconfirming data (Guba & Lincoln, 1985).

Moreover, positivist criteria for evaluating scientific inquiry are redefined to match the realities of qualitative study, which investigates the real social world (Strauss & Corbin, 1998). For example, the terms generalizability used in quantitative research is redefined. Grounded theorists draw attention to the explanatory power of theory rather than its generalizability as they see theory as dynamic and evolving rather than fixed and a perfect product (Haig, 1995).

3.3.3.1. The terminology of criteria for rigour in grounded theory

While Glaser and Strauss do not articulate a specific description of the nature and place of theory testing in social science, they do make it clear that they do have criteria for rigour developed by them. Fit, work, relevance modifiability parsimony and scope are criteria that Glaser (1976, 1992) uses for judging rigour in grounded theory (Hall & Callery, 2001).

A study has fit when theoretical categories match the data. *Fit* is consistent with the research validity (Glaser, 1998). Categories are not preconceived or forced to fit the pre-existing hypotheses. Explanations are harmonious with the emerging patterns and justify the participants' construction of reality. In other word, fit refers to the relationship of the core category to the salient social problem and its ability to account for most of the variation in behaviour used to address the problem (Glaser, 1978).

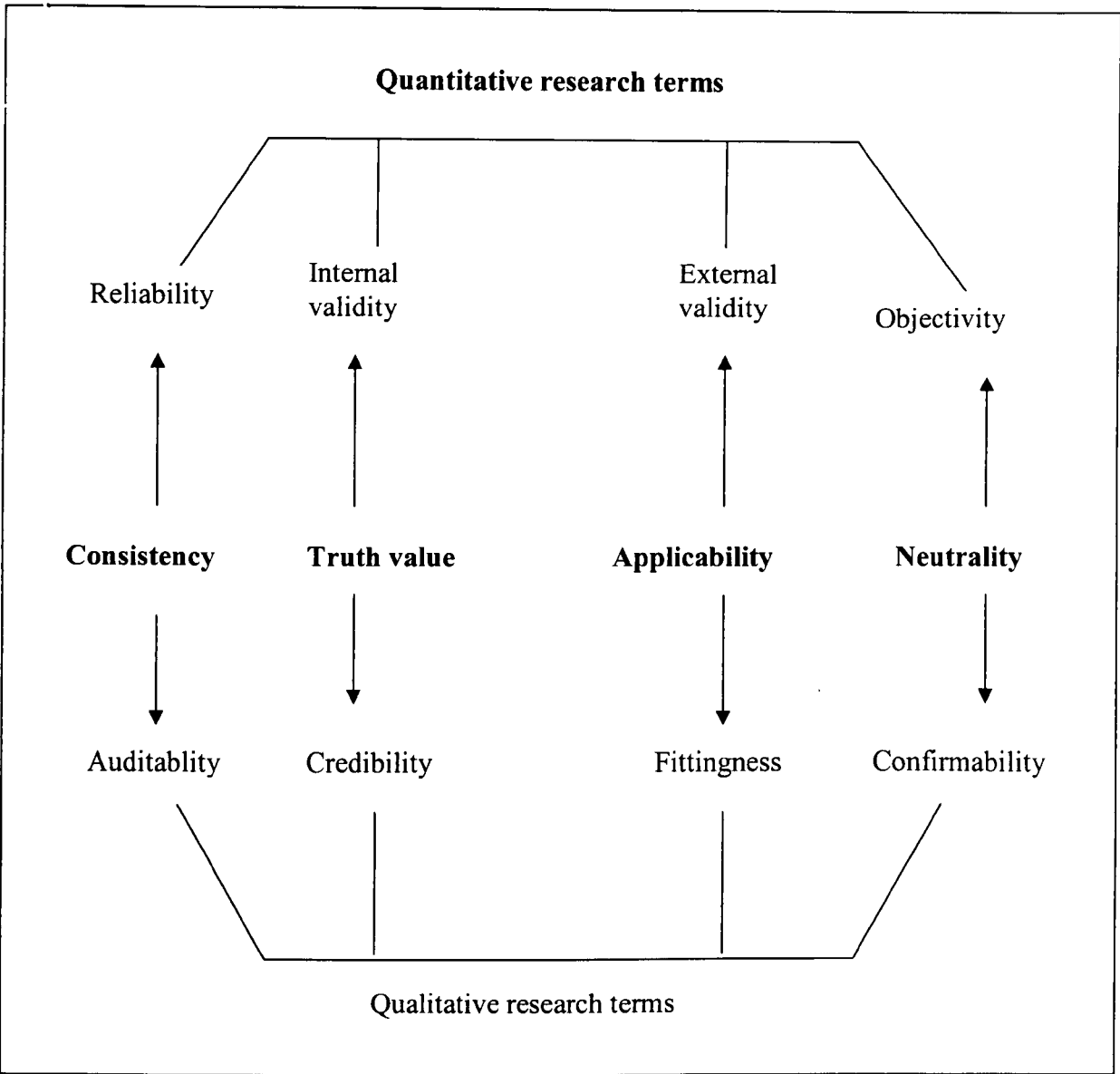


Table 3.3 Adapted from: Guba and Lincoln (1985) Effective Evaluation Jossey Bass publishers (table six, p. 104)

A theory should explicate, predict, and interpret what is going on in the area of investigation. “If a grounded theory works it will explain the major variations in behaviour in the area with respect to the processing of the main concerns of the subject “(Glaser, 1992 p.15).

Relevance is a concept dependant on the two pervious criteria; “if the theory fits and works then it has achieved relevance” (Glaser, 1992 p.15).

Glaser (1992) insists that the theory should be flexible enough to be able to take into account any new available data without losing what has already been achieved .It should be readily modifiable when new data present variation in emergent properties and categories. The theory is neither verified nor thrown out it is modified to accommodate by integration of the new concepts (Glaser, 1992 p.15). In other words, a reliable grounded theory is modifiable because theoretical development is always in progress. That is in agreement with the symbolic interactionists' idea, which believes that as social conditions change, so does theory, if it is to remain applicable. Ongoing modification makes findings transferable across various settings. Modifiability grants the user some power to control the theory as daily circumstances alter in the course of the time (Hall & Callery, 2001). Accounting for as much variation in the data with as few concepts as possible maximizes parsimony and scope (Glaser, 1978). This is the time when theoretical completeness occurs.

Straus and Corbin's (1990) criteria for judging rigour include plausibility, reproducibility, generalizability, concept generation, systematic conceptual relationships, density, variation, and the presence of process and broader conditions (Hall & Callery, 2001).

However, the researcher and the reader evaluate the trustworthiness of grounded theory, based on the detailed elements of the actual strategies used for collecting, coding, analysing, and presenting data when generating theory and then on the explanatory power of the theory in the substantive area (Glaser & Strauss, 1967). Glaser (1998) suggests that the researcher should stop talking about grounded theory and get on with doing it.

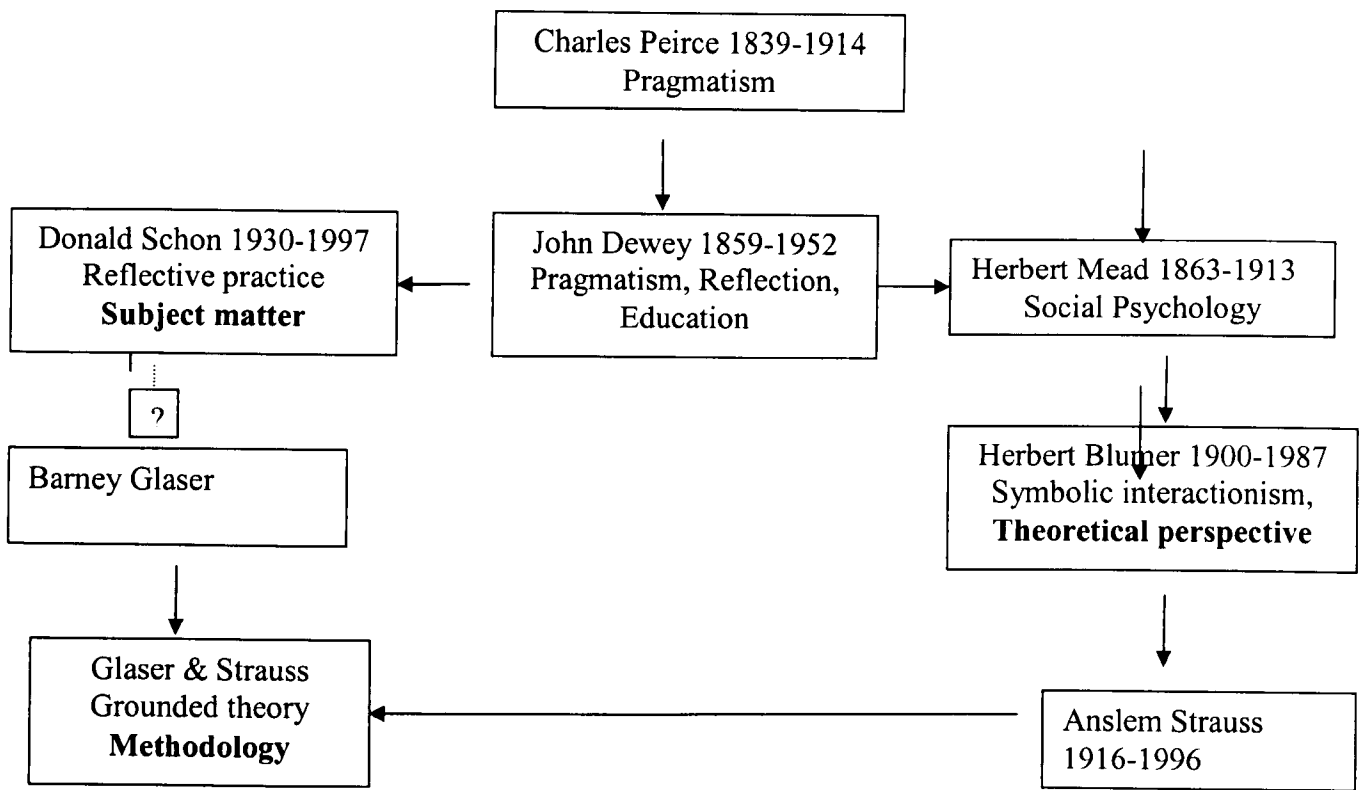


Diagram 3.3 depicts the interconnectedness of the subject matter, the theoretical perspective, and the methodology of this research.

This diagram shows how pragmatism, symbolic interactionism, grounded theory, and the notion of reflection are interconnected by a student-teacher, relationship among the founders of them and thereby by shared premises, and epistemological foundations. I have not related Schon and Glaser, because of lack of direct evidence of influence, but in Glaserian grounded theory the element of reflexivity plays a role for example, reflexivity is embedded within the development of theoretical sensitivity (Glaser 1978, 1992).

Up to this point, in this chapter, I have outlined the main theoretical and methodological aspects of this research. I move now to describe how this theoretical and methodological idea has been operationalized in the context of this study.

3.3.4. Doing the Research

Introduction:

As stated above, this research was designed based on a qualitative grounded theory underpinned by symbolic interactionism, which in turn is rooted in pragmatism. A pragmatist approach guides research activities such as sampling, data collection, analysis, and presenting the findings. Sample decisions are decisive research activities, which influence the quality and outcomes of the research. A purposeful sampling strategy encompassing a decided number of teachers and students both currently involved in the process of reflective learning was selected. Teachers and students from three different courses, medicine, nursing, and physiotherapy were selected to participate in the research based on a set of criteria.

3.3.4.1. Sample Decisions

Why did I select these three courses?

These three courses were selected for different but interrelated reasons, which are discussed briefly. Reflective learning has been used in nursing from the 1980s and there is a plethora of literature exploring reflective learning and reflective practice in nursing. This has apparently created a tradition of using reflection as a dominant dialogue in nursing. On the other hand, it seems opponents of using reflection are silent or invisible in the literature in the absence of an equal dialogue. Exploring reflective learning in nursing can not only serve as a basis for comparison with other courses -which have embraced it relatively later - but also could potentially lead to making the invisible visible.

Medicine has started using reflection as a learning tool and is going to find its own ways of recruiting it, creating its internal reflective dialogue through ongoing research and building up its literature and reflective discourse. Unlike nursing, the reflective non-reflective debate seems not only to be alive but both sides appear to be visible and challenging one another's assumptions. This makes exploring reflective learning an interesting and essential issue for research in medical education.

Physiotherapy has developed through the centuries from the premature forms to the modern complex system of practice. It has its own presumptions about human beings, diseases, health issues, and therapy. These assumptions are partly shared with medicine and nursing and partly rooted deep in the "therapy" way of looking versus

“caring” or “treating.” Physiotherapy educationalists and practitioners have employed reflection and similar to other professions, using reflection seems to be creating a forum for theoretical and practical physiotherapy related issues.

Making comparison between teachers and students’ perception of and experiences with reflection in each course, in addition to comparing reflective learning between the three courses can be valuable and would potentially add to our understanding of the usefulness and the process of reflective learning in healthcare and medical education.

The other reason for selecting these courses was my own interest in these courses and my background. Qualitative research paradigm accepts that the researcher is a part of research and thus his/her subjectivity influences research decisions including the population under study. I am a physiotherapist by background. I have been working in a medical school as a lecturer. I am aware of the decisive and even imperative role of medicine or at least medical doctors in healthcare. This has created an enthusiasm for comparing the two courses and with other courses in different aspects including reflective learning. Nursing has always fascinated me by its inclusion, its indispensable presence every where, its unique way of being and doing, as if it is the contextual matrix of healthcare which holds all other components tied together in an organic way.

Finally selecting these three courses was a pragmatic decision because access to participants seemed to be both possible and easy in comparison to other potential courses like occupational therapy, psychology and so on. My familiarity with these three courses, the context and hierarchy of power, the way the things are being decided and done, gave me a sense of being insider with the potential participants, made me more confident in approaching and recruiting the participants and analysing the collected data. How large should the sample size be in a qualitative research? The next section considers the answer to this question in terms of this research.

Sample size

Sample size in qualitative research is as important as it is in quantitative studies but the concept has suffered from a misconception that numbers are unimportant in ensuring the adequacy of a sampling strategy (Sandelowski, 1995). Although there are some broad ideas about sample size in qualitative research, the sufficiency of sample size in a flexible design depends on the quality of information obtained per sample

unit and the findings claimed have been attained or theoretical saturation (Lincoln & Guba 1985, Strauss and Corbin, 1990). However, Cresswell (1998 as cited by Robson 2002) considered interviewing 20-30 individuals typical to saturate categories and detail a theory in a grounded theory study. Similarly, Morse (1994) recommended 30-50 interviews for ethnographic and grounded theory studies. But these are just numbers.

Several factors considered by Morse (2000) were considered while deciding on an estimate of the number of participants. These factors included the scope of the study, the nature of reflective learning, the quality of data intended to be collected, and the study design, which included in-depth interviews. Each of these factors in addition to pragmatic issues like limited timescale for a PhD project, practicalities of access to participants, possible non-response cases and withdrawals determined the primarily estimated number of participants. This estimation was not considered as a “must to achieve goal” rather it was regarded as an indication for the broadness of the scope of the study.

It was decided to recruit 7 teachers and 10 students from each course using a purposeful sampling strategy at first and then continue by theoretical sampling. It created a sample size of 51 participants, which principally seemed to be big enough to demonstrate the reality of the topic and support the reported claims even after the deduction of withdrawals and non-responding cases. This was also a requirement of the project needed by the Local Research Ethics Committee, sponsors, and assessors to determine an estimated number of participants. From the beginning of the study, I was aware that the theoretical sampling and data saturation are the main determinants of the number of participants so any other number would be only estimation.

Criteria for participant selection:

Who can participate in the study is a question related to representativeness. Robson (2002) suggests that in grounded theory studies seeking a representative sample for its own sake is not the case rather the researcher samples people or events to obtain additional information about the phenomenon under study. In this case, there is a need for the researcher to specify who is the richest source of information and what are the criteria used to demonstrate that.

It was decided that teachers who were involved in reflective learning either by teaching and/ or designing reflective courses or by researching and contributing to

the literature in the Universities of Newcastle and Northumbria were the people who possibly had the best information about the topic. They had to be identified, approached, and recruited. These criteria seemed to be helpful in getting access to the possible richest source of data about reflective learning as is aimed at by purposeful sampling. Reflective learning is not a subject that all teachers in the target courses are necessarily using or are interested in, therefore, these criteria could help me to approach the individuals who were interested and involved in the subject and were able to give me more information about it.

Similarly, for the student participants a set of criteria was used to select them in the three courses. I identified and approached people who were a current student in the targeted courses, had passed at least one semester, had been involved in a form of reflective learning activity such as reflective assignments, reflective diaries, reflective portfolios in the current course of study and were happy to share their ideas, experiences and perceptions about the phenomenon. Identifying students using these criteria was much easier than the teachers were and the number of potential participants was greater because reflective learning as an integrated or distinct part of curriculum is now being introduced in physiotherapy nursing and medicine thus all students are exposed to it. Research in any form requires ethical considerations.

One of the issues that I faced during the data collection was the smaller number of nursing students who participated in my research. When compared to the other two courses (table 3.8) nursing students did not appear to be very motivated to talk about reflection and take part in my research. In the spirit of “no data is data” I had to think about this phenomenon in the light of the findings of this research and check for possible impacts of my methodology.

I had adopted an identical method of approach and advertising my research for all three courses and data collection was in the same time of the academic year. Therefore, I think this was due to the differences in how reflection is viewed in different professions. Reflection had been embraced in nursing before medicine and physiotherapy. It is culturally accepted and is a part of most of what is being taught and done in nursing. Therefore, it is taken for granted as a normal part of the course. As will be discussed in this thesis, (diagram 4.1) different professions may be in different phases of reflection. Nursing seems to be in the second implicit phase in which the phenomenon consciously exists, and it is used as a basis for other phenomenon. Thus, nursing students did not view reflection as an interesting subject

to talk about. In addition, nursing students who participated in the research did not show the same amount of concern and criticism toward reflection when compared with medical students. This shows that, in general, nursing students did not find reflection a matter of debate and concern so they did not participate in my research.

Now I will explore the process of ethical approval and ethical considerations in this study.

Ethical approval, participant approaching, and recruitment

The proposal of the study underwent a number of stages of amendment and approval before I was able to start the process of accessing the research participants. These chronological stages are as follow:

- Iranian Ministry of Health and Medical Education (my sponsor)
- Supervisory team
- Peer review of the proposal in the School of Medical Education Development
- Research and Development Department of North Tyneside NHS Trust Hospitals (sponsored the research in hospital sites)
- Supervisory team
- Local Research Ethics Committee
- Supervisory team
- Research Ethics committee School of Health Community and Education Studies in Northumbria University (for access to nursing and physiotherapy participants)

Accessing the sample through related schools required permissions to be obtained from the managerial hierarchy in the Medical School in University of Newcastle and School of Health Community and Education Studies in Northumbria University. I also had to apply for ethical approval from the Local Research Ethics Committee and as a prerequisite for that a sponsorship from Research and Development Department of North Tyneside NHS Trust Hospitals. I had to begin from the latter, and I therefore applied for a sponsorship, submitted my proposal, and assured them that the proposal had been peer reviewed, well thought about, and was in the line with the interests of the Trust. After revising the proposal, making some minor changes and submitting the

answer to their questions the R&D committee were assured that they were able to sponsor my study.

Applying for ethical approval is most of the times referred to as one of the nightmares of research as it is considered to be time consuming, bureaucratic frustrating and in some cases irrelevant. Wald (2004) tried to determine exactly how much effort was needed to obtain a favourable ethical approval for clinical research under the new UK system by recording the submission of their first application. He concluded that the process was complex, bureaucratic, and required more than necessary time and effort. His paper generated an online forum in which many people echoed his observations.

On the one hand, I shared the experience and concerns at the time that I was going through Local Research Governance approval process. I had to complete 54 pages of COREC forms and wait for the outcome. While I was dealing with the form I found out that, it had been designed mostly in the spirit of a quantitative research atmosphere and to some extent in a “one size fits all” approach to research. This made me feel frustrated and uncomfortable with some of the fields because I had designed a qualitative research, which in essence follows a different epistemology and theoretical perspective from a quantitative research.

On the other hand, it was a process of learning, helped me to clarify my thoughts, and revealed many aspects of the study that I had not reflected on before. Going through the process of ethical approval had a positive effect on the research design and on me as the researcher. It increased my ethical awareness and I became more attentive that “poorly designed research is unethical in that it may bring great harm to others” (Polgar & Thomas, 2000).

North Tyneside and Newcastle Research Ethics Committee eventually approved the study (See Appendix 1). Thus, I approached the managers of the related schools to get permission to recruit the participants.

Access to participants in an organisation where the researcher is not familiar with is only achievable through “gatekeepers.” These are the people who have the power to award or deny access to participants or events for the purpose of the study (Burgess 1984). My supervisory team facilitated identification and approaching of appropriate gatekeepers in both schools, as I was unfamiliar with the management composition in those organisations. I tried to build and maintain a good relationship with the

gatekeepers and “be ready to involve in political and social discourses within the organisations in order to inform [my] research” (Calveley & Wray, 2002).

In Medical School Newcastle University, a straightforward approach to the gatekeeper was sufficient to gain access. Access to nursing and physiotherapy participants requested further discussion, and submission of forms for the school’s internal ethics approval.

The main concerns of the gatekeepers were the confidentiality and anonymity, possible time the research could take, and subsequent extra workload required of the teachers and the real purpose of the research. The fact that I had ethical approval for the study assured the gatekeepers that I was aware of the importance of confidentiality and anonymity. I offered to conduct the interviews in a convenient time and place for the respondents even in their own time and away from the organisation. The concern that was implicitly raised was the purpose of the research and the consequences of the possible reports and publications. I explained that the study was a PhD project and that I was an overseas student. The most important report of the study would be a PhD thesis and papers in academic journals. Another issue that made access to participants easier was the fact that reflective learning is being introduced in the targeted courses and the gatekeeper were keen to see a direct outcome of their own works as a need of their organisation (Burgess 1984 as cited by Calveley & Wray, 2002).

When the formal and ethical approvals were obtained, the gatekeepers read the proposal, the participants’ information sheets and became fully aware of the criteria for recruitment. Then, they facilitated access to participants by sending emails to target groups or introduced me to the key people in the fields. Potential participants received my invitation letter and participant information sheet in which I had provided them with all required information. The Research Ethic Committee had already approved the content of the participant information sheets for each group of teachers and students. The next section explains the data collection methods and procedures in this research.

3.3.4.2. Data Collection

Choosing qualitative data collection methods is determined by specific purposes of the study. In the present study, I aimed to know more about how people understood reflective learning, and what their perceptions, opinions, and behaviours were in this

regard. Talking to people, listening to what they say about the phenomenon, and watching what they do, seemed to be the natural and obvious techniques I could use. Of course, I knew that these conversations and observations must be recorded in some way, in order to make it ready for analysis and interpretation. In line with a qualitative style of enquiry, using a grounded theory approach, a diversity of sources of data were used with the intention of describing the perceptions and experiences of teachers and students about reflective learning in healthcare. In this section, the contexts and methods of data collection within this study will be considered.

Two main approaches to collecting qualitative data can be broadly described as the approaches that concentrate on naturally occurring data and those that tend to generate data through the research processes. Ritchie (2003) made a distinction between the two approaches by giving example of the methods involved in each approach. She mentioned observation, documentary analysis, conversation analysis, and discourse analysis as methods involved with naturally occurring data, while considering in-depth interviews and focus group discussions as the main methods of generated data. According to Ritchie (2003), the researchers have to decide which approach and methods, is suitable for their study. This critical decision is made based on which type of data will best shed light on the research topic. The other factors influencing this decision-making are the researchers' tendency, and experience toward and with a particular method of data gathering, their own epistemological and ontological positions (Mason, 1996), and practical considerations such as locations of the study, time and resources available to the research project. Now I consider the context of data collection in the present study.

Research Context

The qualitative research paradigm emphasizes the importance of contextual understanding of social behaviour. This means that behaviour, values, or whatever must be understood in context (Bryman, 2004). Qualitative studies are almost always confined to a small number of geographical and organizational locations (Ritchie, 2003). These locations are to be described by the researchers in order to help the reader fully understand the meaning and significance of findings and to contribute to the issue of their potential applicability to other contexts. In this study, the research context, as perceived by the researcher, was defined by what participants described as

their personal and organizational context and how they related to it (Ritchie, 2003). This is not just a delimited geographical space or organizational entity rather it is a framework for social processes, which are “a sequence of individual and collective events and actions and activities unfolding over time in context “(Pettigrew 1997 as cited by Bryman & Bell, 2007 p. 418). This view of research context is in line with what Messey (2003) describes as open and porous which is linked to the rest of research by a chain of practices. In the present study, data was collected in two main geographical places, the Medical School Newcastle University and the School of Health Community and Education Studies of Northumbria University. I also collected data from some participants working in clinical settings in hospitals. The participants were teachers and students of medicine, nursing, and physiotherapy who were involved in reflective learning. Considering the above definition of context, a brief explanation about the importance of reflective practice in the curriculum of these three courses, seems to be useful in understanding research context.

Reflective learning is a part of curriculum in most medical education and healthcare related courses. A variety of methods including reflective assignments, reflective diaries, and critical incidents are being used to employ this technology, which is claimed to help the professional trainees connect theory and practice (Habermas, 1976; Schon, 1987) and contribute continuing professional development. Reflection is a core component of professionalism and “lie at the heart of most discussions about professionalism” (Thistlethwaite & Spencer 2008, p.195). Professional and regulatory bodies have acknowledged the importance of reflective learning. Quality Assurance Agency (QAA) benchmark statements for healthcare programmes (2001), physiotherapy (2001), and medicine (2002) are examples of this acknowledgement. Recent changes in undergraduate medical education guided by the Tomorrow’s Doctors reports (GMC, 1993, 2003) have emphasized the need for reducing the volume of information that medical students are required to learn. Meanwhile, the need to improve the quality of student’s learning using groundbreaking methods (GMC, 1993) has put reflective learning in the centre of the medical educationalists’ attention and a part of undergraduate-postgraduate and continuing professional education programs. It is claimed that medical students who use reflective learning demonstrate deeper understanding of their subject (Kinnersley, 2004); physiotherapy students who are familiar with this method are more likely to develop knowledge embedded in practice (Ward & Gracey, 2006).

The majority of data was collected in such research context via interviewing people who were actively involved with reflective learning either as teachers or as students. I used interviews as the main method of data collection, which I now explore.

Interviews

The interview is probably the most widely employed method in qualitative research and there are many different types of interviews. A commonly used typology differentiates among structured, semi structures and unstructured interviews. This is based on the level of formality and structure of the interview. Extremely structured interviews typically employ a pre-determined set of questions to be asked in a specific order, possibly with a series of alternative answers for the interviewees to choose from in comparison, unstructured interviews are considered as having no or little structure in terms of content or flow. They tend to be very similar to a conversation (Burgess, 1984). Semi-structured interviews stand somewhere between the two extremes. Here the researcher has a list of questions or moderately specific topics to be covered, often referred to as interview guide but the informant has a good deal of freedom in how to reply. Studies situated at the interpretivist end of the paradigm spectrum (Crotty, 2003) tend to use the less structured types of interviews (see diagram 3.3)

Another typology (Healey & Rawlinson, 1994) distinguishes between standardized and non-standardized interviews. Researchers sometimes use the term qualitative interview to encapsulate the semi and unstructured interviews, because they are, in essence, very different from quantitative interview which is standardized and fully structured to maximize the reliability and validity of measurement of key concepts and is to seek the answer for a range of pre-set questions (Bryman, 2004 p.319).

Robson (2002) refers to a different typology proposed by Powney and Watts (1987): respondent interviews versus informant (non-directive) interviews. In respondent interviews the interviewer remains in control, or tends to remain in control during the entire process of the interview, thus directs the interview and the interviewee responds to the questions. Both structured and semi-structured types of interviews can be labelled, respondent interviews (Robson, 2002). On the contrary, in informant interviews, it is the interviewee's perception, which guides the course of the interview by talking freely about events, behaviours, and beliefs in relation to the topic of interests. There are overlaps between these different typologies; however, considering

each typology would increase our understanding of the nature of interview research (diagram 3.4).

Other important features of interview such as purpose, context, and the role the researcher in the interview are discussed in the literature (Kvale, 1996; Sarantakos, 1998; Bryman, 2004). Regardless the type and features of interviews, most of them rely on the principle that Kvale (1996) starts his book with: “if you want to know how people understand their world and their life, why not talk with them?”

This study could choose a structured form of interview but considering the nature of reflective learning, and the data aimed to be collected, a more flexible method of data collection was needed. A method that allows participants to share, their personal ideas, beliefs, perceptions, experiences, and tell their own story (Melia, 1987) , while I had had some control over the course of conversation to keep the interview in line with the aims of the research. The nature of the information I was seeking was personal, therefore, the participants needed to have some control, over the flow and the level of sharing information with me.

It seemed that a one to one, face-to-face semi- structured interview would present a more balanced bilateral researcher participant control over the situation of data creation.

A semi-structured style of interviewing was selected because, while it involves a degree of structure, which is controlled by the researcher, it allows room to pursue topics of particular interest to the workers [participants] (Leinder ,1993 as cited by Bryman, 2004).An interview guide was used to give a degree of structure to the interview.

This was a list of issues and topics to be covered during the interview with the emphasis on the worldview of participants. Literature around reflective learning in healthcare, personal puzzlement stimulated by random thoughts in different contexts, discussions with peers and supervisors were the main source of initial interview guide. In this research, this does not mean the literature review and the concept of finding the gaps in the literature determined interview questions.

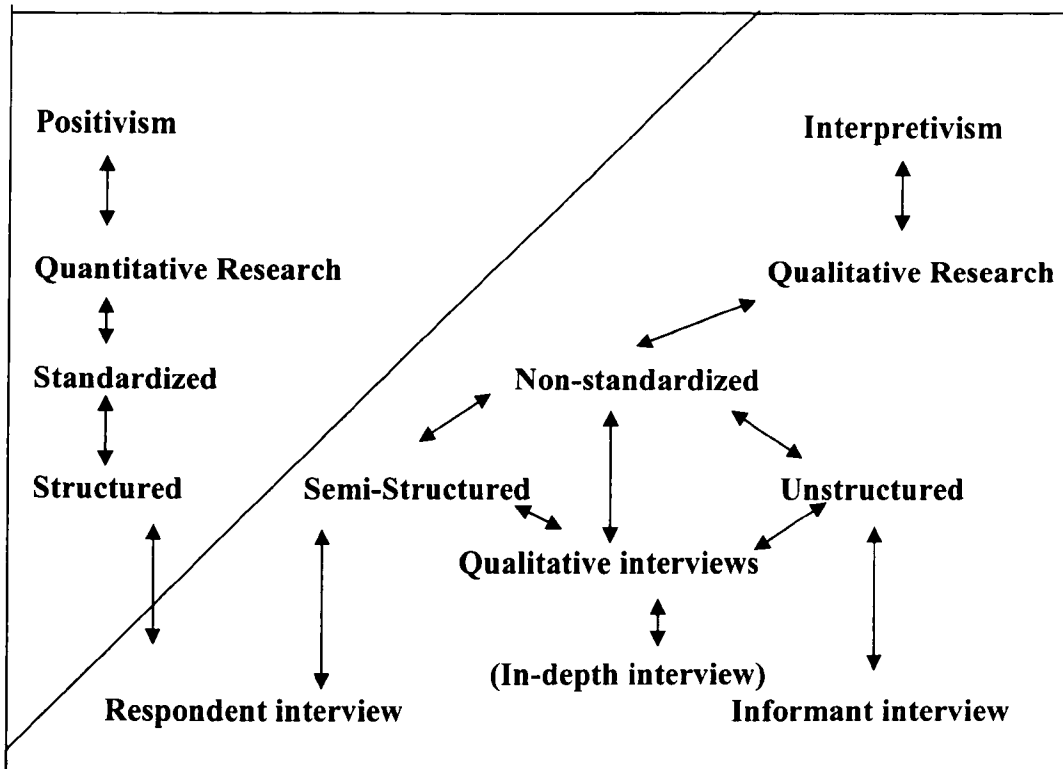


Diagram 3.4 shows the overlaps between different typologies of interviews in respect to different paradigms.

Although most of the issues in the initial interview guide survived in the course of data collection, the sequence of topics covered was flexible allowing different participants outline new issues. In fact, the new issues, which emerged in the interviews, guided theoretical sampling. Thus, interview gradually gave focus to the interview guide and to the research process.

Preparing for conducting research interviews

Interviewing is not an easy and straightforward task; rather it requires practice, preparation, and careful attention. The qualitative paradigm acknowledges the subjectivity of the researcher and his or her impact on the quality of research as a research instrument. “A good instrument is an expert in the topic of the interview as well as in human interaction” (Kvale, 1996). In order to become an interviewer, in addition to reading about the topic of interest, and about how to conduct an interview, I tried to practice the subject and reflected on each interview setting to learn from it. As Kvale (1996) suggests reading interviews, and listening to interview tapes, were the strategies, I selected to master the skills although true learning was through

listening to my own initial tape-recorded interviews, while transcribing them and reflecting on them. I also considered other suggestions found in the literature about the quality of an interviewer (Kvale, 1996, pp. 148-9; Robson, 2002; Bryman 2004). Interviews were conducted either in participants' offices, which was the case with teachers or in my own office for student participants. On some occasions, interviews were conducted in a study room in one of the university libraries. In all cases, a suitable time and venue for participants were negotiated with them. All of the interviews were tape-recorded and subsequently were transcribed verbatim. Interviews lasted about one hour to ninety minutes. Interviews ended only when participants stated that they did not have further comments to make. Before the interview, I focused on developing rapport and creating a relaxed comfortable sphere for the participants by introducing myself, talking about my background and the purpose of the study. This helped to minimize hierarchical situation because with both groups of teachers and students I had social characteristics in common. I manage to establish a relationship with the students as a PhD student and with the teachers as a former university lecturer. I have attempted to keep an open mind about the fact that, issues like ethnicity, language, gender and cultural norms might have hindered an appropriate rapport. Although I had some control over the interview situation in order to cover most of the topics I wanted to ask, I maintained a passive position (Glaser, 2002) in the course of interview to let the participants tell me what they felt was necessary. The example of interview transcript provided in Appendix 2 reveals this style of interviewing. Observation was another method of data collection. I move now to describe limited observation in this research.

Limited Observation in this study

Patton (1990, p.217) described a typology of five dimensions of observation in fieldworks that the researchers should think about as follows:

- (1) Role of the observer
- (2) The extent to which those observed is aware of the observations
- (3) The extent to which those observed know the purpose of observation
- (4) The duration of observation
- (5) The focus of observation

Everston and Green (1986) distinguished between closed and opened observations. Observations where categories are defined in advance and systems for coding data,

which use categories, checklists, and rating scales are in place, are defined as closed. Open observations, in contrast, do not have predetermined categories. Thus, a narrative approach in form of diaries, research journals, or fieldnote is used to record the data.

In terms of the role of the researcher in observation Gould (1958; cited by Burgess, 1984) described a four distinct types of roles. See table 3.4.

Observer role	Description
Complete participant	Covert observation
Participant as observer	The researcher participates as well as observes
Observer as Participant	Contact with informants is brief , formal and openly classified as observation
Complete observer	No participation at all

Table 3.4 typology of the role of the researcher in observation adapted from Burgess (1984)

In the present study, I used some limited observations to make myself familiar with the context of the research and collect data and information. In spite of importance and advantages of observational data, this study did not generate much observation data due to the nature of teaching and learning reflection, which is personal, perception related and does not take place in an overt and observable manner. Although the direct observations were limited, they were invaluable in providing me with the information and insight I needed to understand the data collected by my interviews. Furthermore, observations facilitated my entry into the field, rapport with participants, and familiarisation with the hierarchy of schools and clinical settings.

It is expected for participant observation to fit into the environment. However, teaching and learning reflection in the courses under investigation did not have much regular pattern apart from some formal classroom based settings in the beginning of the academic year where the lecturers were talking about reflection. In these classes, I was able to observe how teachers teach reflection and lecture about it. Alternatively, students talked about their own reflections or problems with reflection. After these classes, students were required to submit a reflective assignment based on what they

had been instructed in the classes and tutorials. Therefore, I was not able to fit in the environment.

The first of Patton's dimensions of observation is the role of the observer. The researcher should determine his /her role in the setting. I made it clear for all my participants that I was a researcher and I was solely an observer for the research purposes in the settings. I did not intervene in the normal social settings and tried to minimise the impacts of my presence by taking a back seat in the classroom.

Observation may produce anxiety and discomfort for the observer and observed (Patton, 1990). The observer may be physically in the social world but is he is not from that world. In my first, observation, which was in a small group tuition conducted in a hospital, I felt isolated and uncomfortable. Later on in subsequent settings, I felt more relaxed, and informal in my relation with students and the teachers.

The second and the third of Patton's dimensions are concerned with the extent to which the participants are aware of the observations and its purposes. In most of observation settings, I asked the teacher to introduce me to the students at the beginning of the class or give me a few minutes chance to talk about my research and the purposes of the current observation so participants were fully aware of the observation and its purposes. I also sought their consent for observation and remaining in the class. Because it was not practically possible to ask for a signed consent form in a big classroom, I asked for verbal consent. I did not face any objection to my presence in the classes.

The fourth in Patton's typology of dimensions of observation is the issue of duration of observation. The formal observations in the classroom or clinical setting lasted from the beginning to the end of the session but on most occasions, I had the opportunity to have an informal talk about reflective learning with one or two students after the class. In most of these occasions, students approached me and asked more questions about my project or myself. This created another opportunity to advertise my project, and ask students to liaise among other target groups and distribute my project advertisements. This relationship later helped more data gathering and the theoretical sampling process.

The last in this typology is the focus of the observation. This is mainly about what to observe. I did not have predefined categories. I was looking for any information that would give me more insight about how people perceive and experience teaching and

learning reflection and what is the meaning of these activities for them. According to Everston and Green (1986), this type of observation can be categorised as open observation. I recorded the data in form of fieldnotes and in my research diary. Data collection and data analysis are concurrent research activities in a grounded theory study. I move now to describe the data analysis procedures and activities in more detail.

3.3.4.3. Data analysis

Introduction

Grounded theorists should conduct a number of simultaneous data collection and analysis activities. These activities include concurrent data collection and analysis, coding, memoing and writing about the processes and the outcome of the processes, which is the grounded theory. In order to deal with this, I used the principles advised by Glaser and Strauss (1967), and Glaser (1976). These texts in combination with reviewing literature on qualitative research helped me in the processes of coding memoing, theoretical sampling, and theoretical sensitivity for generating the theory. Although the process of generating a grounded theory is difficult to record due to the lack of strict rules and principles and the creativity inherent in it, the following is an attempt to give an idea of the process used in this research.

Labelling the data, an ethical and practical issue

Qualitative data collection ends up with a pile of different types of data from different participants .It is ethically and methodologically essential to label the data so that the participants are not identifiable and the confidentiality is preserved.

In order to achieve this I provided a system of coding. My participants were either:

- Male or Female
- Teacher or Student
- From Medicine, Nursing or Physiotherapy

Therefore, by assigning a number to each person's attributes a code was provided.

Table 3.5

For example, "Teacher Medicine Female 15" was attached to all data (audio- taped interviews, transcripts, chunks of data copy pasted to form categories, quotations used

in writing up etc.) from a specific female medical teacher who participated in the study. Only in one document, which was kept separated from all other data, I had put the real name of the participants in front of the codes. This was negotiated and approved by the Research Ethics Committee.

Participants	Gender	Courses	No
Teacher	Male	Medicine Nursing Physiotherapy	
	Female		
Student	Male	Medicine Nursing Physiotherapy	
	Female		
Examples of Code : Teacher Medicine Male 7 Student Nursing Female 8			

Table 3.5 shows the labelling of the data and its logic

How the split in the methodology of grounded theory has affected this research

Since their original publication in 1976, Glaser and Strauss disagreed on how to do grounded theory resulting in a split in the theory between Glaserian and Straussian paradigms. I have discussed this previously in this chapter, however I want to explain which paradigm I have used in this research. By the time of starting coding, I had been reading Strauss and Corbin's (1990) basics of qualitative research while I was influenced by Glaser's (2004) theoretical sensitivity and the dictum "all is data." This meant that the researcher not only can use interview or observational data but also they may use "whatever comes to their way while studying a substantive area" Glaser (1978). This also suggested that the discovery of grounded theory implicitly takes it for granted that the researcher shows a degree of creativity in order make the discovery possible.

The element of creativity added to the attractiveness of the Glaserian approach for me. This resulted in implementing a Glaserian approach while I made use of what I had learnt from Strauss and Corbin (1990) to make my analysis more systematic especially at the beginning of the process where I needed clearer advice and guidelines. To this end, I planned the following coding framework:

Getting familiar with the data as a whole

I started becoming familiar with the data while I was listening to the tape-recorded interviews for many times in order to get ready to transcribe them .I knew that I

would need assistance in transcribing all the interviews. However, this did not prevent me listening to the tapes and comparing the transcripts with the original tape-recorded interview to get the subtleties of what was being said. This helped me to understand data, raise questions, evaluate my interview skills, and write down my theoretical memos. The process of familiarisation with the data before coding is important because it helps the researcher in finding the best codes that reflects what the participants want to say. It helps in comparing the whole and the parts as described in the section concerning hermeneutics.

Coding Framework for Analysis
1. Getting familiar with the data as a whole
2. Substantive-open coding
3. Theoretical coding (related to sorting the memos)
4. Selective coding
4.1 Demarcating the theory to those categories that relate to core category
4.2 Identifying the core variable that guided further data collection /theoretical sampling

Table 3.6 Coding Frameworks for Analysis

Coding

As soon as I started coding I realised I was not competent at coding so I started reading a few grounded theory reports to understand the theory that I had read about and to see how people have coded their data in practice. Based on my own experience this strategy helps the novice grounded theory researcher to see how to code a piece of data. Later he will develop his own way of coding and becomes more competent by doing so. However, I set aside time and space for coding so that I could do the job with minimum disruptions. I provided a set of questions and phrases and put on the wall in front of me to help in my dialogue with the data. This was provided from the literature mostly offered by Glaser (1978, 1992) to carry out the process of open coding or running the data open as mentioned by Glaser (1978). I have summarised these tips in table 3.7.

There were times I felt I was lost in the data, referring back to these questions and phrases used to guide me back to my aims. This also sharpened my sensitivity to the subtleties of meanings inherent in each piece of data. This strategy was helpful

throughout the process of data analysis although my dependence on looking at it, gradually decreased.

Codes can be based on :

Themes, Topics, Ideas, Concepts Terms, phrases, Keywords

Questions to be asked Glaser (2004)

- *What is this data a study of?*
- *What category does this incident indicate?*
- *What is actually happening in the data?*
- *What is the main concern being faced by the participants? and*
- *What accounts for the continual resolving of this concern?(section 3.6)*

What can be coded:

Behaviours- specific acts

Events – Activities- Strategies- States

Meanings (Having in mind the core premises of symbolic interactionism)

Participation- Interaction “Causes, Contexts, Contingencies, Consequences and

Conditions “(Glaser 1978, 1998)

Reflexive:

My reaction to the data

My own role in the process

How my intervention generated the data

Why do I think/ feel like this? Evidence in the data

Memos:

Always interpret in form of a memo

Find the patterns among incidents

Comparisons (Glaser 2004)

Incident to incident

Concept to incident

Concept to concept

Table 3.7: A summary of the questions and phrases used in the process of analysis

I provided the data sources in a form that I had enough space for the codes in the margin of the text. I placed the open codes in the margin of the text so that I could easily find the relevant text. This provided the provisional categories, which served as a basis for theoretical sampling. This helped me not only search for other rich sources of data but also modify existing questions or raise new question that needed to be answered. A list of such early codes was provided. As the process of coding continued, the list became larger but this trend did not last until the end of the last interview. Soon I realised that the codes were getting repetitive. New codes were needed almost only when I was analysing the data from a different course, gender, or between student and teacher participants. For example, the code of *legitimacy of “marking reflection”* appeared only when I coded the students’ interviews from medicine. Then I talked to the teachers about that. Another example is the code “*care*

versus treatment” that emerged in an interview by a nursing teacher. However, the diversity among the participants in this research was not very wide-ranging so after having enough data coded from all groups the amount of codes generated remained in a plateau.

When hardly any new codes were needed while analysing the data I wondered if that was the position of data saturation. I was not sure. According to Glaser, and Glaser and Strauss “the general rule when building theory is to gather data until each category is saturated (Glaser, 1978, pp.124-126; Glaser & Strauss, 1967, pp.61-62). Therefore, I continued coding and creating my categories, waited for all categories to be saturated and their relationship is well defined. I am documenting this because other novice researchers in grounded theory may also experience an early feeling of saturation while the categories are not still developed.

Categorisation

In the early stages of analysing data from the interviews, the number of codes generated led me to identify broad categories within which codes were located. All interview transcripts were provided in form of Word documents. By using the copy and paste function of my computer, I assembled analytic files according to the data source for each group of participants (three courses and two groups in each course). Each file was comprised of coded extracts of data. For example the analytic file on teachers in medicine was comprised of five broad categories- why reflection (rationale for reflective learning) – curriculum – getting students to reflect- reflective practitioner – definition of reflection –and students at graduation and beyond.

Each of these categories was defined by means of several conceptual elements. For instance, the last mentioned category here, *students at graduation and beyond*, was defined, and elaborated by properties such as organisational culture, learning style, job requirements, and familiarity with reflection.

In the course of constant comparison of data categories and concepts, other elements joined this category and the category saturated. By category saturation I mean, no new data information emerged from more data collection in the context of this research and negative cases had been considered (Glaser and Strauss 1967).

The category of going through the motions, which has been explained as the main category in chapter five was initially a category in the file related to medical students. Then in the course of theoretical sampling and collecting data from teachers and other

groups it saturated and was defined and elaborated by means of nine conceptual elements each of which were explored in chapters five and six. Within each conceptual element, there were large numbers of codes. Codes and their meaning were defined in the form of memos. As the iterative analytic process, developed codes were deconstructed and reconstructed. With regard to the category of going through the motions, it became possible to distinguish between a general tendency in reflection on negative cases and students' intention to write about negative cases to create a dramatic impact on teachers and secure a good mark.

Conceptualisation

After I had coded all the different data, and categories were fully developed, a natural conversation of data with each other became possible. The process of conceptualisation links all data. It is abstract of time, place, and people (Glaser, 2002). In the process of analysing, the data about teaching and learning reflection in the courses under investigation the complexity of the phenomenon became more and more apparent. Understanding this complexity is not reducible to some descriptions and definitions. Glaser (2002) emphasised:

“the complexity of the world and therefore the freedom, and license required to write generated theory that explains what is going on in this world, starting with substantive area (p.2).”

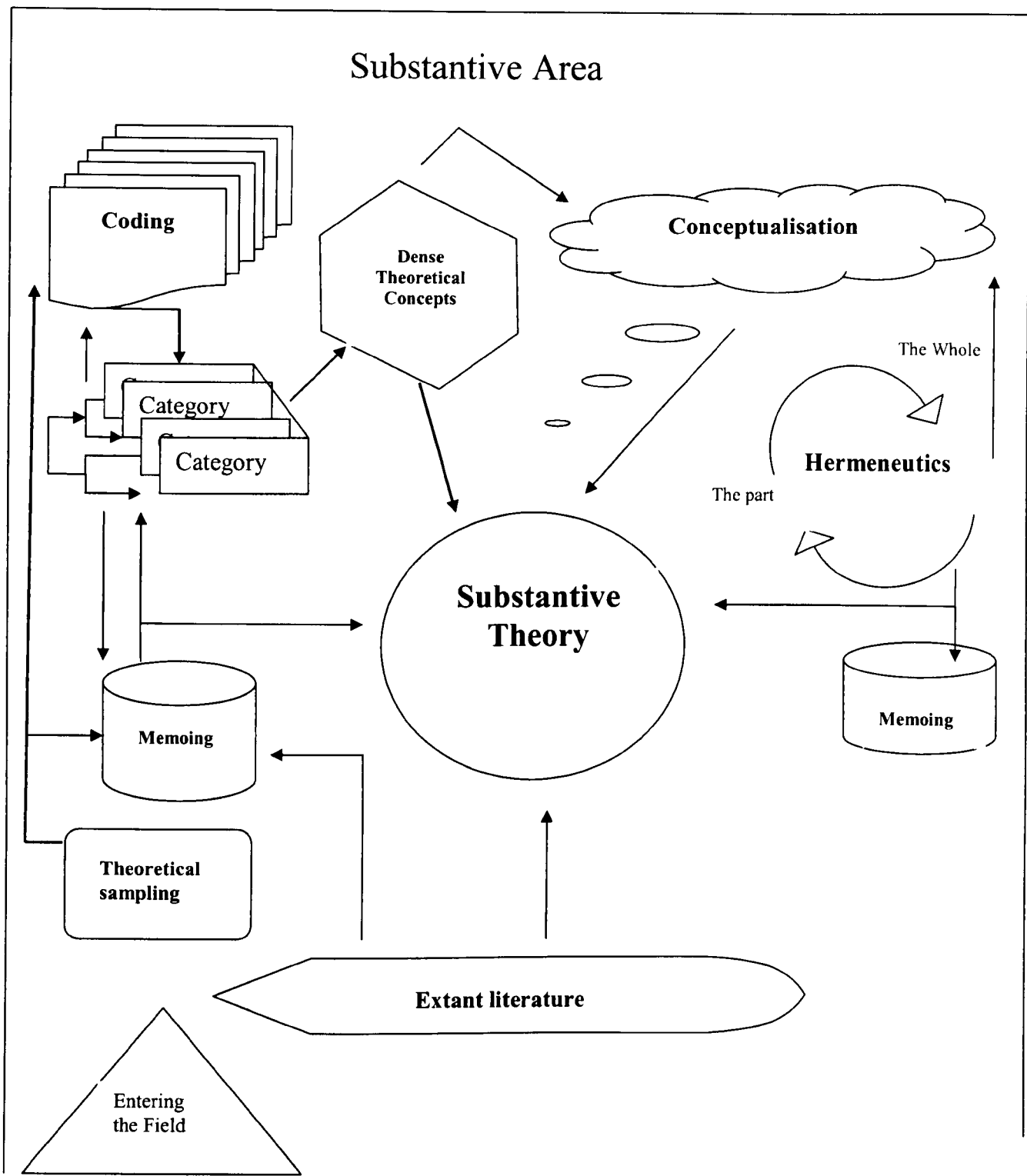


Diagram 3.5 illustrates relationships between different strategies contributing to the emergence of substantive theory in this research.

I have summarised the data analysis phase of this research in diagram 3.5. This diagram also depicts how hermeneutics informed data analysis through creating theoretical memos and helping to the process of conceptualisation. Grounded theory is flexible creative, responsive to emergent concepts and “generates conceptualisations of emergent social patterns in research data” Glaser (2002) but it retains its rigour. In the next section, I will explore how the criteria for rigour in grounded theory have been interpreted in the context of this research.

3.3.4.4. Ensuring rigour

The trustworthiness of findings from a qualitative research is a matter of an ongoing debate (Robson, 2002). Fixed design advocates have criticised qualitative researchers for not employing standard tools of assuring reliability and validity, such as direct replication and quantitative measurements. Some researchers have denied the appropriateness of the methods and techniques used in fixed design in qualitative research. For example, Guba & Lincoln (1989) argued that the conventional criteria for judging the rigour or trustworthiness of quantitative research, which include internal validity, external validity, reliability, and objectivity, are not always appropriate. They introduced concepts such as credibility, transferability, and dependability as alternative ways of achieving trustworthiness. Others have paid considerable attention to the subject. Although the debate continues and different terminology is being used it seems that “the basic strategy to ensure rigour, and thus quality, in qualitative research is systematic, self conscious research design, data collection, interpretation and communication” (Mays & Pope, 2000).

In the present study, the basic strategy to ensure trustworthiness was interpreted in terms of Glaser’s (1978, 1992) criteria for rigour of a grounded theory which were explained above as fit, work, relevance, modifiability, parsimony and scope. These are working when the research has identified the categories and concepts. These criteria explain the relationships between categories, the data and categories, and categories and substantive area. Dialogue between the researcher with the data and between the researcher with himself (I and Me) is an indispensable part of the process of data analysis in hermeneutics and grounded theory studies. The dialogue takes the form of question and answer. I asked the following questions in terms of any emergent category and concept.

- Does it fit?
- Does it work?
- Is it relevant?
- Is it modifiable?

Answering these questions based on their definition in the literature (explained above) helped me to assess the integrity of my grounded theory.

In addition, some other strategies for ensuring trustworthiness of a qualitative study did not seem to be incompatible with my study therefore; I considered them to judge the quality of the research. These include ensuring validity and reliability as explained by Robson (2002), avoiding threats to validity (Maxwell, 1992), and using reflexivity to identify area of potential researcher bias (Ahern 1999 pp.408-10).

Inadequate amount and variety of data (Maxwell, 1992):

Two main threats to validity are incompleteness and variety in the types of data collected to support the claims. These threats transpire if the researcher has not collected adequate data or data from different sources to certify claims. These threats were addressed by collecting data from different sources such as interviews, limited observations, student reflective assignments, one student reflective diary and using literature on reflective learning as data. The adequate number of participants generated enough amounts of data. Saturation, the non-emergence of any new confirming or disconfirming evidence, was used as a criterion for judging the adequacy of the data collected.

Invalid interpretation of data (Maxwell, 1992):

An invalid interpretation of data happens when the researcher consciously (Heath & Cowley 2004) or unconsciously tries to impose “a framework or meaning on what is happening” rather than letting the meaning emerge out of the data. This threat occurs when the researcher has not been involved with the data long enough or the respondents have been deceitful. This threat was addressed by prolonged involvement strategy advocated by Robson (2002). I was in the field for more than one year and a half. This gave me an opportunity to develop a trusting relationship with most of the participants particularly among the teachers. In addition to a close attention to the depth and amount of confirming and disconfirming data for each assertion, charting

and justifying the steps through which the interpretations were made as suggested by Mason (1996) was kept in mind and on paper throughout the analysis phase of the research.

Inadequate disconfirming data (Maxwell, 1992):

This threat to validity happens when the researcher performs an insufficient search for disconfirming data. For example, the researcher might only look for data that support assertions or preconceived preferences rather than conducting a thorough check of the data looking for disconfirming data. In this research, this threat was encountered by collecting data from a variety of people and events, investigating all the data collected, maintaining an openness to disconfirming data and accepting interpretations only after checking against the whole body of data collected on the topic.

Insufficient comparison of confirming and disconfirming data (Maxwell, 1992) :

This threat develops when the researcher fails to compare contradictory evidence and ignores or does not search for the data that does not confirm interpretations made. Two tactics were used to address this threat. Firstly, all of the data were analysed to compare concepts, categories, and disconfirming evidence that appeared. Secondly, a process of checking and rechecking of the interpretation was performed to make sure no disconfirming data could disprove them and negative cases have been taken to account.

Member checking (Robson, 2002):

In addition to checking for the threats to validity, I benefited from member checking in two chronological stages of the research, during the interviews and following data collection. During the interview, I tried to paraphrase, summarise, and restate what being said to the participants to make sure that I have recorded what they actually wanted to say (Kvale, 1996). Following data collection, I reported preliminary findings to some participants to ask if they found them familiar, accurate, or believable. By doing this, the researcher not only might receive critical commentary from the participants but also “demonstrates that he/she values their perception and contributions” (Robson, 2002).

Triangulation of data (Robson, 2002):

Triangulation is a widely used strategy for improving the validity and reliability of research. There are four types triangulation (Murphy, 1989; Denzin, 1988):

- Observer triangulation: using more than one observer in the study
- Methodological triangulation: combining qualitative and quantitative approaches , or different methods
- Theory triangulation: using multiple theories or perspectives
- Data triangulations: the use of more than one method of data collection

Triangulation of observer, allows multiple observation of the subject. It was beyond the scope of this study to be carried out by multiple researchers. However, the data and findings were regularly discussed in the supervisory meetings. Supervisors performed a second coding of some parts of interviews. These strategies give me a basis to compare my own understandings of the data with my supervisors even minimally.

Triangulation of method has been regarded as problematic by some authors (Bloor, 1997; Barbour, 1998) arguing that it raises the possibilities of discrepancy and disagreement among the different sources of data. However, this criticism may be true when the methods, their epistemology, and the type of data they use differ radically.

In this study symbolic interactionist theory (Blumer, 1969), and grounded theory (Glaser and Strauss, 1967; Glaser, 1987, 1992) were the predominant influences. Influential to a lesser extent was the use of hermeneutics as a theoretical perspective to be able to look at the data from another angle rather than symbolic interactionism. Hermeneutics also helped me to make more sense of the data and contributed to data analysis. Therefore, hermeneutics contributed to both theoretical perspective and methodology of the present research. This picking and choosing is legitimate enough provided the researcher has a comprehensive understanding of the methods and remains aware of the process (Crotty 1998).

In the present study, I used triangulation of data and informants. Although the main source of data in this study was interview transcripts, I used limited observation, student reflective assignments, student reflective diaries, and literature as data in order to gain a better understanding of the subject under study. In respect of collecting data from multiple informants, I tried to recruit various key informants to interview.

Students from three different courses of physiotherapy, nursing, and medicine were recruited. Table 3.8 shows the demographic information of participants of the study.

In respect to teacher participants, I recruited male and female teachers in physiotherapy and medicine, but in nursing, I was only able to interview female teachers because there was not any male lecturer among the volunteers of participation in this course.

All together 38 participants were recruited, all were interviewed. The interview transcripts and audiotape were the main source of data. I had access to student reflective assignments with permission of the school but I was not authorized to make copies of them. I was allowed to take notes and all assignments were anonymous. Some students send me their reflective works or reflective diary voluntarily. I was able to observe five sessions based in the medical school and two hospital based sessions about teaching reflection to students.

Participants	Students						Teachers
	Number	Male	Female	Home student	Overseas/ Country of origin	Mature / Accelerated programme	
Medicine	9	5	4	7	2 Nigeria female 1 Indonesia 1 male	1 male 1 female	4 male 3 female
Physiotherapy	7	4	3	6	India female 1	1 female	3 male 3 female
Nursing	4	1	3	4	-----	---	5 female
Total	20	9	11	17	3		18

Table 3.8 Demonstrates demographic information of participants.

I also had numerous informal conversations with students and some staff other than participants about teaching and learning reflection in the course of the study.

Another source of data in this research was the documents about reflection such as course guidelines or instruction. I now explore the issue of reflexivity as a strategy to ensure rigour in this research.

Reflexivity

Qualitative paradigms typically do not use standardised fixed methods and acknowledge the researcher as a research tool. This makes the issue of subjectivity and the impact of the researcher on both the research process and product obvious and important. In this sense, reflexivity has been considered as an important concept in qualitative approaches to research defined as an “awareness of the ways in which the researcher as an individual with a particular social identity and background has an impact on the research process” Robson (2002 p.172). Reflexivity thus, means:

“To explore the ways in which a researcher's involvement with a particular study influences, acts upon, and informs such research.” (Nightingale & Cromby, 1999, p. 228)

In this spirit, it is required to acknowledge that it is impossible to remain outside of one's subject of interest while doing the research in a social world. In fact “the ability to put aside personal feelings and preconceptions is more a function of how reflexive one is rather than how objective one is because it is not possible for researchers to set aside things about which they are not aware” Ahern (1999,p.408 as cited by Robson, 2002).

In essence, reflexivity entails engaging in critical appraisal of ones own research in two main ways: reflexivity of person and reflexivity of epistemology. Robson (2002) has summarized ten tips suggested by Ahern (1999) to address the issue of potentials researcher bias using personal reflexivity. Her ten tips of personal reflexivity framework involves reflecting upon the ways in which the researcher's own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research. This process also involves in thinking about the ways in which the research has inevitably changed the researcher as a person.

Epistemological reflexivity encourages the researcher to think about the assumptions (about the world, about knowledge) that he has made in the course of the research, in order to become more aware about the implications of such assumptions for the research and its findings. (Willig, 2001: 32).Engaging in such reflection potentially reveals the underlying assumptions on which arguments and stances are built (Holland, 1999).

In the present study both personal and epistemological reflexivity were used to enhance trustworthiness of the findings in the forms of a reflective diary and research journal in which I wrote personal issues that arose in undertaking the research, clarifying my personal value system, notes about the gatekeepers and participants after each encounter, feelings and so on. These have been fully explained in chapter eight.

To summarise, Glaserian criteria for rigour (1978, 1992) in grounded theory, triangulation (Robson, 2002), considering threats to validity (Erickson, 1989; Maxwell, 1992) and reflexivity (Ahern, 1999) were strategies considered to ensure trustworthiness and rigour in this study. The next section considers ethical consideration in this research.

3.3.4.5. Ethical considerations

Both quantitative and qualitative researchers are equally expected to comply with a set of related and justified code of ethics throughout their research. Therefore, ethical consideration occupies a central place in every research design and conduct. Although the basic principles of ethics such as autonomy, beneficence and nonmaleficence (Newman & Brown, 1996), remain the same for different frameworks, different codes of ethics have been produced for diverse perspectives and disciplines. British Educational Research Association, (BERA, 2004), Declaration of Helsinki (WMA, 2004), Nuremberg codes (1947), British Psychology Society (BPS, 2006) and British Sociological Association (BSA, 2002) are good examples of statements of ethical practice which researchers must be familiar with.

Addressing ethical issues and dilemmas using an appropriate ethical perspective and code of conduct remain the responsibility of the researcher. One of the main functions of the research ethics committees is to evaluate the ethical base of a study before the actual research is conducted and some times during the research process (Kylma et al ,1999) and by doing this to help the researchers to identify ethical issues that are to be addressed. This does not eliminate the importance of discussing ethical issues that materialize in the course of the research with peers and more experienced members of the research community (Kvale, 1996). In fact, he notes, “the ethical skills embodied in local professional communities represent an important extension of the written ethical principles rules and examples” (p.112).

In the present study, in the light of my research principles and those mentioned above I endeavoured to identify and address ethical issues concerning my research. In order to do this I had to learn more about ethical behaviour in a research setting with human participants. Reading about the philosophy, theory, and principles of ethics in different paradigms, participating in workshops on ethics, going through ethical approval procedure, peer reviews, reflexivity, and discussing ethical dilemmas and issues with supervisory team helped me to develop the necessary “sensitivity to identify an ethical issue and the responsibility in regard to such issues” (Eisner & Peshkin, 1990, p.244).

The participants of the present research were competent adults. It seems that there is a broad consensus on principles of research on competent adult participants. In respect to the human rights that have to be protected, these principles could be broadly summarised as informed consent, confidentiality, anonymity, fair treatment, and protection from harm and discomfort. Ethical considerations in the present study, in relation to participants, are presented, here, using three main concepts of (Kvale, 1999 pp.1110-20):

- Informed consent,
- Confidentiality and anonymity, and
- Consequences

Informed consent:

Informed consent is an explicit agreement by the research subjects to participate in the research after risks, benefits and alternatives have been sufficiently explained to them. Kylma et al (1999) introduced four main components of informed consent synthesised from literature as

- Volunteering,
- Competence to give consent,
- Comprehension and
- Information

In this study, different informed consent forms were produced for different data collection methods such as observations, interviews, access to assignments and reflective diaries .A participant information sheet was provided. The actual process of informed consent began when the participants received basic information about the

purpose and the main features of the design. Subsequently volunteers received a participant information sheet, which contained a detailed description of the ways of maintaining confidentiality, anonymity, and their right to withdraw (see Appendix 1). It also contained information about the duration of the study, why they were selected, what would happen to them if participated, and how they could find more information about the study. The comprehensiveness of the information sheet and its appropriateness in relation to the research design and participant groups were both peer reviewed and approved by Local Research Ethics Committee (LREC).

At the beginning of the interview, observation and access to the reflective assignments or diaries, the contents of information sheet was discussed and the participant signed the consent form. All attempts were made to ensure that the participation was voluntary, participants understood the information provided and the decision were made by participants and respected by the researcher (Lidz and Roth (1983 p.147) and Silverman (2000 p.201). A copy of the signed consent form was given to the participant and another copy was kept in a secure file in the research base.

Confidentiality and Anonymity:

The terms confidentiality and anonymity have been used interchangeably thus, the researchers have an obligation to explicate precisely what they mean by anonymity and confidentiality to research participants before they actually involve in the research. They should spell out the measurements that will be taken to guarantee protection of respondents' identities. Researchers should ensure that the information collected is stored in a secure place and must explain who has the custody of the data about the participants. In this study, it was clearly explained to the participants that by anonymity I meant concealing the identity of the participants in all documents resulting from the research while confidentiality was defined as an issue concerned with who has the right of access and custody to the data provided by the participants. As explained above a code was provided for each participant (See table 3.5). These codes were used as a label on all research documents such as digital and tape-recorded files, transcripts, diary and reflective assignment extracts and so on. The list of participants name was kept in a secure place and separate from research documents. All data and documents related to research were kept in the research base, which is the School of Medical Education Development University of Newcastle upon Tyne and remains in the custody of the University. The only people who have access to the

research data and documents are the researcher and supervisory team. These issues were explicitly explained to participants and in the COREC ethical approval form.

Consequences:

Researchers should reflect on the consequences of research engagement for all participants, and try to lessen any possible disadvantage to participation for any individual or group of people (Dench et al, 2004). This is based on the basic ethical principles of beneficence (benefiting others) and nonmaleficence (doing no harm).

In the case of this study, the research participants were all competent adults and no intervention to their daily routine of life and work was imposed by the research engagement. However, in addition to abovementioned measures, other ethical issues such as stress during the interviews, or observations, consequences of publication of any reports for the participants and also the group or institution they represent (Kvale, 1999 p.111) were taken into account and appropriate strategies to address such issues were rehearsed and discussed with the Ethics committee that I attended.

The issue of time

The issue of time is an ethical matter because academics and students are busy people; they undergo lots of pressure due to the lack of enough time to accomplish expected tasks and responsibilities. From an ethical perspective, it was noted that the research process should not overburden participants with unnecessary engagements. There are many research projects that academics and students are invited to take part. Therefore, any participation should be regarded as a great favour and as an indication of their commitment to contribute to research environment. In return, the researcher is morally obliged to make sure that, he/she has been as much flexible as possible in terms of the time with the participants. This issue was considered in the research design and participants were able to attend in the research interviews in the most convenient time and place for them.

A good research design was considered as a general way to avoid wasting both the researcher's and participants' time and institutional resources. Therefore ensuring rigour and reflexivity were regarded an ethical issue to guarantee the fact that the research was worth doing, peoples' time had not been wasted and it was based on the abovementioned basic ethical principles.

Stress during interviews

According to Kvale (1999), one of the possible consequences of participation in a research interview is stress. This was considered true particularly with student participants. Two main measures were taken to address this issue. Firstly, participants were assured about, the voluntary nature of participation, confidentiality, and anonymity. Secondly, they (particularly student participants) were assured that there were no right or wrong answers to the research questions and that the aim of the study was to know about their perception and experience of the phenomenon under study.

The fact that I was a PhD student contributed to the interview environment, because the students could easily accept me as “one of us” and this in turn decreased the possible concern about the situation. Although all of the academic participants were university lecturers who, normally are familiar with research interviews, have done a PhD or MD, and are experienced enough not to undergo much stress, I endeavoured to make the participation in the research a positive experience for them by listening to them and the quality of listening (Kvale, 1999 p.116).

3.4. Summary

In this chapter, I have described the philosophical and methodological framework supporting this study. In doing so, I have explored the issues of epistemology, theoretical perspective and the methodology of the study.

I have explained that the aims of the study and the nature of teaching and learning reflection and reflective practice directed this research in the spirit of interpretivism. I have discussed constructionism as the epistemology of the study and its compatibility with the research in reflective practice. I have explored symbolic interactionism and hermeneutics as theoretical perspectives of the present research followed by actual examples of how symbolic interactionism and hermeneutic concepts have been used in this study to make sense of the data.

Grounded theory as the methodology of the study is explored and, its main elements, criteria for rigour, split in the methodology, and how these have affected this study are described. Ethical considerations in the research and the process of ethical approval are examined. I have described the methods used for data collection and analysis. In the second part of the chapter “*Doing the research*” I have given a rather detailed account of the data collection and analysis and how the theoretical perspective of the research has informed its methodology.

Chapter Four

Findings: Socialisation into Reflective Practice

Introduction

This chapter is the first of three chapters, which address the findings from the data and its analysis. The process and practice of reflective learning in medicine, nursing, and physiotherapy courses were the subject matter of this research. Therefore, the actual behaviours of the students and teachers within the universities and their interpretations of their experiences, in respect to reflection, gained the central importance for developing the theory.

Data provided evidence of the complexity of the process and practice of reflective learning in medical and healthcare education. I followed the process of constant comparison, looking for similarities and differences in order to be able to identify key categories explaining how participants viewed and explained issues that affected their thoughts and behaviours. These categories were constantly revisited to build, densify, and saturate them. I constantly compared the data within any individual interview transcripts, between student group, between teacher groups, different courses and teachers and students.

Three main categories identified in this research are socialisation into reflective practice, assessing reflective works of students and understanding the complexities of teaching and learning reflection. Socialisation into reflective practice is the central social process identified in this study. The other two core categories, assessing reflective works of students and understanding the complexities of teaching and learning reflection, are closely related to and resulted from the process of socialisation of reflective learning. Socialisation in the context of this research includes all the teaching and learning processes by which students become familiar with notion of reflective practice , its importance requirements, strategies and possible outcomes.

In this chapter, I will discuss this central process. In this process, universities try to introduce the concept of reflective learning to the students, provide them with a rationale behind the notion, and try to get them to reflect on their learning and practice. In a social interaction, students try to make sense of the concept of reflective learning, assign their own meanings to the phenomenon, act based on those meanings,

and redefine that meanings as they progress in their personal and professional development.

The process of data analysis as described in previous chapter revealed that the central categories “Socialisation into reflective practice” included the following three main dimensions:

- 1) A rationale for reflective practice
- 2) Perceived image of reflective practitioner
- 3) Teaching and learning reflection

I now examine the rationale for teaching and learning reflection.

4.1. A Rationale for Reflective Practice

The dimension of implementing reflective learning and the rationale behind it comes from literature about reflective practice and professional and regulatory bodies standards. In this section, I examine the rationale for reflective learning mostly from the teacher participants’ points of view. This is because the teachers as course designers and tutors, naturally have more to say about “why reflective learning?” than the students, who were unlikely to have been involved in any decisions about implementing reflective learning into the curriculum. However, what the student groups thought and told me about this concept was important because it revealed how they understood and interpreted the rationale provided to them.

Although all participants expressed similar grounds for using reflection, it seems different courses have also their own course specific rationales for using and teaching reflection to their students or at least they place more emphasis on certain aspects of usefulness of reflective learning for their own course. In the following sections, teachers from three courses explain why they teach reflection and why it is important for their students to attain reflective skills. It seems reflection is seen as a tool to achieve a wider course specific goal and objectives in addition to what has formally come from abovementioned professional or government bodies.

4.1.1. Medicine

Medical teacher participants who were involved in teaching reflection thought it was necessary for medical students to get familiar with the notion and obtain reflective skills because it was a part of developing their professionalism as medical students.

The data revealed that teachers perceived reflection as a core component of the process of professionalism, which starts from undergraduate studies:

As a person who reflects which I think I do quite a lot I feel that it is the key to developing professional thinking specifically in the context of medicine but I think it applies in life actually as well (Teacher Medicine Male 16)

This participant also thought they were teaching reflection because Newcastle Medical School wanted to break new ground in medical education and in order to achieve that position it should be able to compete with other institutions via achieving recognised methods of teaching. (In the context of this research “the medical school” means those members of faculty who plan and deliver MBBS curriculum):

Its part of the rhetoric of contemporary medical education and Newcastle as a Medical School tries to be a leading light in Medical Education, we talk about it all the time, and it is in the documentation around our curriculum. (Teacher Medicine Male 16)

Some of the medical teachers thought students would eventually encounter the need and the pressure for reflecting on their practice after their graduation and entering practice as doctors. The perceived needs for reflection were reported to originate from the nature of the practice and the pressure of professional assessments and appraisals as reflection is a key aspect of Foundation Programmes for junior doctors. Therefore medical teacher participants thought the students would need a framework and structure to use in their reflections once they entered professional practice:

I think it helps potentially give them a little framework for their own professional development in the future in their own folders, they will have to write up, they will have to do, they will have to do this the whole of their working life, that's why we're doing it. (Teacher Medicine Female 15)

One participant related reflective learning with good medical practice expected from doctors such as continuing professional development and maintaining standards of competence. He thought that doctors are not only required to be reflective but they would also need that skill if they wanted to be a competent doctor:

It's seen as a core attribute that doctors should be naturally reflective naturally able to learn from their process, develop in terms of knowledge and in terms of skill, and in terms of their aptitudes of personal attributes. I think that Newcastle very much emphasises and underlines the importance of developing reflective approach to medical practice. this is something that we also tell our students as well, that actually this whole process of reflection is something that is now an integral part of being a practising doctor. It is not just about the student progress, this is about your life long progress (Teacher Medicine Male 7)

It seems one of the motives behind the movement of using reflective learning in medical education comes from policy makers in order to create a safer environment and a better patient care. In this vein, having a reflective approach to practice is regarded as having important implications for patient safety. As we shall see in later chapters, one of the findings of this research is that some specialities in medicine, for instance surgeons, are assumed to have a tendency to perceive reflection as unnecessary. In the following example, a medical teacher is trying to justify the need for reflection, the political intentions behind it, and its importance in patient safety:

So I think there is perception that it is unnecessary from certain people, who that I would hope, even surgeons, if they make a mistake would reflect on it, and think about it, and see what they're going to do next time. And that's certainly a change that the government are trying to make with league tables and so on that performance counts and you can't just blindly go ahead and just cut and kill your patients and do surgical procedures for which you're not ready or fit. You know the whole Bristol heart scandal and other things like that have, I think hopefully, raised the profile that even for the most hard nosed, hard edged clinical specialities that at times reflection really is essential (Teacher Medicine Male 13)

The concepts of danger and the compromising of patient safety when a professional is not reflecting on practice and consequently does not improve the practice was a concern shared by many participants both in medicine and in nursing. This seemed to

have contributed to the rationale for a reflective learning approach. Similar to the perspective described above, the following female medical teacher is concerned about the dangerous positions that professionals encounter due to lack of reflection on practice:

In practicing medicine if someone is not learning from previous experience would I guess be potentially be in a dangerous position. Because you're not going to learn from practice, you're not going to recognise that coming down that path is not going to work because it didn't work last time, it didn't work the time before, and that's I would've thought going to impinge on patient care. If you think, if you really and truly not learning from past experience that does feel like a potentially, bad path to be going down. And I guess potentially dangerous even. (Teacher Medicine Female 14)

Attention needs to be turned to the point that not only is reflection perceived by medical teacher participants to be associated with professional development and learning but also a lack of reflection is seen as a potential danger for both patients and consequently professionals.

4.1.1.1. Spin-off benefit of reflective practice for professionals

There are various examples throughout the data from medical school that indicate reflective thinking and taking a reflective approach not only is beneficial for the practice and professional development but also it helps professionals take care of their own mental health. Looking after one's own health and mental health is the responsibility of the doctor and is regarded as an essential part of being a competent and effective doctor (Department of Health, 2008). The following medical students are aware that being a medical student and aspiring to a career in medicine is stressful. They mentioned that they have found reflection; particularly reflecting with peers provided them with a kind of emotional support:

I think in some ways that is just as important, just as valid, for students to talk to their own peers and to see how other people are coping with it. And not just about, disease, but medicine, which is difficult, lots of people want to

give up at some point, it's a long, long time. Even when you graduate, then you do long hours and really bad shifts and so it's very important that you feel you have the support of your peers around you, and that in itself is quite reflective. So it's very important that you talk to your peers. Because you've got to look on yourself and your own coping strategies and things like that (Student Medicine Female 4th year, 8)

For example, say, you had a woman with an eating disorder or something like that and then you might get asked about it very often while sometimes you might be frustrated or something, because you don't see it as an illness, you just see it as their personality. So it's important to address those issues because if you're going to carry on thinking, "Well, it's just so annoying" being frustrated, then in the long run it's not very healthy for you. It does not really help, and when you reflect on how you felt about things, and you talk to other people about how they felt, just helps you within yourself really. (Student Female Medicine 3rd year, 4)

A medical teacher demonstrated a "reflective dialogue with self" in order to protect the "self" from adverse effects of various stressors that doctors may face in their everyday practice:

But good reflective practice is that it actually aids good mental health because you can put various happenings into some kind of context, deal with them and then move on. So it's been a particularly stressful patient or if you've made a mistake or whatever the emotion can be dealt with processed, and can be moved on. I have learnt that from that. Or very upsetting but I think I did everything reasonably. Faced with the same situation I would actually do the same thing again, I do not think I have done anything that I need worry myself about here. Or well, actually I think I did that wrong, for future I'll rephrase that question whatever. Or I need to go away and read up about something because I clearly have a gap in my knowledge. So I think a part of the benefit of reflection is good self care. (Teacher Medicine Male 7)

4.1.2. Physiotherapy

Physiotherapy as a profession is still developing its knowledge base. It does not seem there are specific step-to-step guidelines for every day physiotherapy practices. As an emergent profession, physiotherapy needs to strengthen its own theory to base its practice on it. It seems from this research that physiotherapy teachers perceive reflection as a tool to address the scarcity of specific step-to-step guidelines for clinical practice and as a way to contribute to the development of physiotherapy theory of practice. In my interviews and informal conversations with participants it was evident that their main focus in terms of teaching reflection was on clinical decision-making.

Physiotherapy is a practical profession in essence where the “practical application of skills is so important” (Piercy, 1979). In such a profession, clinical experts have a substantial body of knowledge and skills that is not necessarily reflected in the published literature. A male physiotherapy teacher perceived reflection as a tool for students to compare their gained knowledge and skills against these experts’ knowledge and formal published theory of practice. By using reflection, practitioners are hoping to gain new knowledge, which contributes to both theory and practice:

I think it makes them better thinkers, I think it makes them better able to use information and knowledge that they have We are in this kind of clinical governance looking for the best evidence and I think the students, the reflective practice that they go through here, makes them very critical of evidence. When I am talking about evidence, I mean written I mean published evidence as well as the evidence they get from clinical experts out there. So they are very much in a position where they understand by the end of the course where their skill is, where the clinical experts’ skills are and what the knowledge base is and they are more aware of the gaps and the importance of bringing those three things together (Teacher Physiotherapy Male 9)

The following physiotherapy teacher thinks reflective learning is a transferable skill that students would need that as future practitioners:

We have moved away from transferring lots and lots of knowledge to giving them life long learning skills. (Teacher Physiotherapy Female 6)

Another teacher echoed the move away from concentrating on knowledge to focusing on reflective skills. This teacher pointed out that they have been trying to equip students with reflective skills because they thought it could compensate for other skills in the future:

***Interviewee:** I think they might not be well equipped in terms of you know, their anatomy knowledge, or their knowledge of pathologies, but certainly educationally, they are well equipped in reflective practice*

***Researcher:** Do you think they can compensate for it in the future?*

***Interviewee:** Yes, I mean reflective practice is one of those skills for life it is a transferable skill. You can always crib up on anatomy you can always crib up on pathology depending on the patient. (Teacher Physiotherapy Male 17)*

Some students raised their concerns about teaching reflection at the expense of other valuable knowledge. A third year physiotherapy student described his concern:

I think it is important that you do not forget the core skills in professions whilst in a degree, so that it's good to learn about reflective practice, but not at the expense of your core skills. I think sometimes you get caught up in things of thinking and theory and neglect other things.

(Student Physiotherapy Male 11)

However, this teacher seemed to be less concerned about what students mentioned about the balance between reflective skills and other practical skills:

I guess people who manage programmes and who manage staff have to remember that opportunities for reflection are every bit as important as the works that done in the classroom or in the clinical field. (Teacher Physiotherapy Female 6)

Another rationale for using reflection, which was specific to physiotherapy in comparison to medicine, seemed to be a trend toward moving away from a pure medical model of curing to a more collaborative model of caring, or at least maintaining a balance between the two models. We can make more sense of this tendency if we examine the history of physiotherapy in general and its struggle for independence from medicine's dominance. Another female teacher thought they felt succeeded when they saw their students are getting the message of reflective learning:

They [students in their reflective essays] may talk about moving from a very medical model orientated approach to a much more client centred collaborative reasoning. (Teacher Physiotherapy Female 18)

4.1.3. Nursing

In examining "why reflective practice in nursing" the data revealed two sets of rationales. The first set of rationales seemed to be in common with physiotherapy, medicine and with what is evident in the general literature about using reflection in different professions such as professional personal development, bridging the gaps between theory and practice and life long learning. The second set of rationales seems to illustrate a need for reflection in nursing in respect to its nature as a distinct profession and its specific needs. This second rationale for using reflection in nursing is discussed here.

There was evidence that nursing teacher participants were aware of the social standing of the profession, the nature of the nursing practice and the impact of these on nurses and the way they do and understand the reality of their practice.

Nursing teachers seem to be aware that carrying out practice at a technical level does not always address or solve the uncertain and unique situations that the nurses are encountering in their daily practice. A nursing lecturer believes reflection contributes in such situations:

If you want to give what I call care and not treatment, I think there is a big difference between a medical model if you want to deliver drugs, tablets, give an injection or whatever, to my mind that is treatment. Its treatment of a disease, a disorder, whatever, it is not treatment of the person, and I think, I

really believe in holistic medicine. Holistic care, holistic health. I think it is important to have a bigger picture about what health is and quality of life is and so on.if you believe in care then I think that is what it has to be; the uniqueness of every situation, reflection helps that – that is an understanding of that (Teacher Nursing Female 10)

Some commentators have seen nursing as a natural continuation of women's domestic roles (Bowden 1997) so the care that the nurses provide has been regarded as "mundane." Nursing as a profession is now aware of this notion and its consequences such as subordination, lack of power and suppression. It seems nursing is trying to address this problem by using reflection:

So much of nursing um, is regarded as mundane and or may be regarded as something with common sense. And reflection has helped us as a profession enormously because it's made us think again about the mundane ,in inverted commas, because it's never mundane when you're interacting with another person is it – really – interacting with a patient and using care. But it's made us as professionals think again about the knowledge we need in every day interaction of people and how important that is to function most effectively. (Teacher Nursing Female 2)

To this end, nursing teachers reported that they try to reflect on a critical level to challenge the assumptions and beliefs deeply held by some members of the profession and others. By using reflection, they see the things from a different perspective. They discover new areas of knowledge and areas of no knowledge as has been explained by this nursing teacher while describing her student nurses' reflections:

It is learning about knowledge. It's learning to challenge assumptions – and that's been a lot of my experience that they say it's a different way of looking at things, it's areas of areas of no knowledge come to light more but also areas which they hadn't thought about also come out so for me reflection is that. (Teacher Nursing Female 2)

Accordingly, for nursing reflection becomes an ontological issue. It is not just about them as individual nurses rather, it is about nursing as a profession. This participant, observed nursing students trying to make sense of the perceived social standing of the profession and its impact on them:

The importance of reflection is this ontological aspect is that they are trying to cope with what image of the profession they want to be having, how they want to be, and that is just as important with them as the knowledge base. (Teacher Nursing Female 2)

They are trying to have a more comprehensible image of their profession. They seem to be aware that the nursing professional language affects the nursing discourse and they think reflection enriches the professional language:

We are reflecting together – and that is how we learn our professional language our professional roles, our rituals, what we think are important and, what are not. The professional language that we use is – is going to influence us, so I think it is really important to see reflection as a whole. (Teacher Nursing Female 19)

Nursing teachers who are involved in teaching reflection are conscious that they cannot only rely on rituals and technical levels of care if they want to deliver a safe and patient-centred care. As indicated in the example below the concept of patient safety as a rationale for using reflection was repeatedly, mention by both medicine and nursing teachers:

I think it is really, important because without a deep level of reflection we can become very ritualistic. We can become, those in the caring professions, can become very cruel I think, to people. Perhaps they do not mean to be but I think it's very dangerous. The nearer you are to patients, to clients and not reflect, I think that is extremely dangerous. (Teacher Nursing Female 10)

It was evident in the data that nursing teachers believed reflection helps nurses to develop the skills required for their unpredictable every day practice. Such skills are

perceived to be artistic, scientific, and humanistic, something beyond the scopes of biomedical model of practice:

Skill is bigger than just the science of putting a needle in or whatever, or drawing up the right drug and so forth it's about interaction with the patients and the uniqueness of the patient and the influences of the environment and - and so forth. (Teacher Nursing Female 19)

For many participants nursing care is about, facing unique situations, which are the domain of doubt and uncertainty. These unique moments seem to be hard to grasp and record but can be understood and addressed via a reflective and holistic view of the carer and the cared for. The example of “the cared for” who cares for the uncertainty and maybe clumsiness of “the carer” is an example of those many unique situations that nursing can learn a lot from if they are reflected upon appropriately. This example shows that care is not a pre-programmed one-way process rather it is a bilateral sharing of attention and caring for one another:

Yes, it is holistic, but I think it potentially goes further than that, because it is a unique situation where every interaction is unique. So it is about reflecting in and on action. You never know exactly what is going to happen, so it is about the holisticness of the carer and the cared for...

We are using incidents to reflect on, to actually explore that further, so some of the influences indicate that often the cared for, will care for the other person, by a smile or, “Is this your first time”, and “we support each other dear.” It's the uniqueness of that it's not always straightforward and that's very important – that's an example of the very important issue that's perhaps hidden or it's not written about, because the care isn't very well documented I don't think real care is. So we need to reflect on that (Teacher Nursing Female 10)

Nursing was among the first healthcare professions to embrace reflection as a fundamental learning tool. One possible reason for this may be that nursing practice is a bricoleur activity (Gobbi, 2005) in which science, artistry, rituals, and tacit knowledge, in the presence of areas of no knowledge, come together, in a humanistic

situation, to provide a unique human interaction called care. In such situations, reflection helps nurses to understand, and express what they do, and why they do that, as seen in the following examples:

A lot of what we teach, and what we do and what we practise is underpinned by theory and underpinning, underlying knowledge. But I think in nursing in particular we rely on some tacit knowledge as well, and maybe reflection is one tool to help us articulate what we've learnt. It is maybe a tool to help us apply theory to practice by relating it to higher experience. (Teacher Nursing Female 1)

I think one of the things with nursing is that we have never, as a profession been able to articulate what we do. I was trained through the old apprenticeship model. We were taught to do and not to think whereas we encourage our students now to think about what they are doing and to challenge practice in order to enhance patient care and not just to act upon ritual and habitual practice. Certainly, why reflection was accepted on a nursing curriculum was because it is one tool, which helps us articulate what we do. (Teacher Nursing Female 1)

The rationale for teaching and learning reflection is based on a perceived image of reflective practitioners. The text section examines the data in this respect.

4.2. Perceived Image of Reflective Practitioner

Introduction:

When we hear the term “reflective practitioners,” we normally think of adult professionals who are involved with some sort of professional activities. They reflect on these activities in order to make sense of them, find their strengths and weaknesses and learn from them. Schon writes about skilful and competent practitioners who are “thoughtful wise and contemplative.” He explains that the work of such professionals involves “intuition, insight, and artistry” (1983).

It seems that students' competency in reflective skills, in other word, producing reflective practitioners, is the main reason underpinning any reflective learning program in higher education.

When asked about the characteristics of reflective practitioners, most of the participants associated reflective practitioner with good practitioners but they varied in the way in which they defined the concept. I had asked them to think of reflective practitioners that they knew and talk about their characteristics. In this way, I wanted to know about the real world examples of a reflective practitioner that the participants knew about rather than talking about their supposition, or about what they had seen in the literature. Each participant used a number of attributes to describe a reflective practitioner but the following attributes were frequently used to describe a reflective practitioner that the participants knew directly and thought of as a role model of reflective practice.

4. 2.1 Self-awareness

For some participants self-awareness seems to be essential to the reflective process thus a main characteristic of reflective practitioners. This entails that the practitioners are well- informed of their own character in terms of beliefs, values assumptions, and emotional states. They are aware of their strengths and weaknesses and try to fill the gaps in their knowledge:

So it's somebody whose aware of their own strengths aware of their own deficiencies or things that they could develop and never stands still always got her eye on what's happening on academic knowledge on that's underpinning and the research that's underpinnings but not only research other aspects of things. (Teacher Nursing Female 2)

I think they are very self-aware and they accept constructive criticism and they are open to suggestion, but at the same time, this individual is quite assertive as well. (Teacher Female Nursing 1)

4. 2.2 Open -mindedness

By definition open mindedness is: “having or showing receptiveness to new and different ideas or the opinions of others” (Smith & Montilla, 2006). Most of the participants of this study used this concept to describe a reflective practitioner. As revealed from the data open-mindedness is not about what beliefs the professionals actually have rather it is about how open they are to revising them in appropriate situations based on new evidence. The participants did not view reflective practitioners as people who widely accept any viewpoint indiscriminately. Although reflective practitioners may have strong well-thought ideas, they always consider new evidence and acknowledge that new evidence could lead them to change their mind or practice:

I think it is about an open mindedness, is a wideness of thinking about issues. A level headedness that and by that I mean that they – they may well have strong opinions about certain issues but they are very good at controlling those personal opinions and thinking about the pros and cons of the evidence. Therefore, I mean, I think it is an ability to think diversely about all the options. Also, it is about their ability to respond to situations, as they occur without getting in a real flap about that, without getting panicky about that situation. There is an element of control and an element of, I guess, reflecting in action. (Teacher physiotherapy Male 9)

4. 2.3 Development

Personal and professional; development is the core principle of reflective practice. Participants thought reflective practitioners are trying to improve their personal qualities as professionals and to develop their practice:

The person I am thinking of whom I believe to be a reflective practitioner is open minded, listens to new ideas is continually trying to develop and move forwards the practice. It is a person who I enjoy having conversations with who I enjoy talking about practice find it stimulating and inspiring. (Teacher Female Physiotherapy 6)

In addition to the abovementioned traits being analytical and remaining, open to constructive criticism while remaining assertive were important qualities of reflective practitioner she identified:

They are constantly striving to improve their practice as a teacher when incidents happen positive or negative this particular person will either reflect individually or will reflect with others and will work through I suppose a cycle to say "Well what did I do well, what didn't I do well." "What could I do better, what could enhance my performance?" And has actually said to me, "Right, I've took on board that, I'm now going to do this." and again looking at the skills of that person I think they're very analytical I think they're very self-aware and they accept constructive criticism ad they're open to suggestion, but at the same time this individual is quite assertive as well .(Teacher Female Nursing 3)

4. 2 .4 Self-critique

Accepting constructive criticism and having the ability to self-critique without getting into the trap of extreme criticism of oneself seemed to be another trait that reflective practitioners have according to some of the participants:

I think the reflective approach is the ability to say, you can make mistakes and I think I have done that wrong. I can learn from that without being too self-flagellating. (Teacher Medicine Male 7)

4. 2 .5 Responsibility

Some participants related the concept of accepting criticism and self -critique quality to the concept of responsibility. For them reflective practitioner was a responsible person who not only accepted his own share of fault if some thing went wrong in the practice but someone who feels responsible to make change if the failure is related to the systems as well:

Behaviour is the most important thing because it doesn't matter what you're like inside – because that's inside, no one knows – it's what you exhibit

outside that's important so not talking about people behind their back, but not to their face, if you've something to say, then, say it to them. Being able to accept responsibility if something goes wrong. I think also a willingness not just to let things be, is an important one. If something is not right then try to change it, whether that is within your own practice, or whether it is an institutional thing. Often these things are system things when things are not going right. Taking responsibility possibly, when things are not going well it's not one single factor its system's kind of problem .So being reflective is about that. (Teacher Medicine Male 3)

4. 2 .6 Answer to the unique situations

For some teacher participants a reflective practitioner was someone who could answer to the uniqueness of the situations quickly and correctly. This involves acting in an uncertain, conflicted, and unique situation in which previous knowledge and experience cannot be readily and directly used:

Well for example we talked about cruelty if you're not reflective, it doesn't mean that maybe that health visitor didn't reflect that she might reflect on action afterwards, and if she reflected very quickly she might have gone back and said, "Sorry." Or she might have said, "Sorry," the next day or whatever so I think, the best example of a reflective practitioner is who is working very effectively when certain incidents come up. They are able to respond quite quickly, so that the level of expertise that people can work at and they can respond to the uniqueness of the situation. I would say – but that's the sort of person you rarely you do see people like that. it's not just a skill for dealing with people having heart failure or a cardiac arrest, it's actually a skill of dealing with the relatives afterwards and the patients. (Teacher Nursing Female 10)

4. 2.7 facilitate others

Participants described how they have enjoyed working with and talking to reflective practitioners because of the qualities mentioned above in general and because they facilitated and encouraged other to reflect upon their practice in particular:

That's what reflective practitioners do in their practice – they encourage others to reflect – once you become a natural reflector I believe that you then facilitate others and you see – I see that in practitioners and in students and they don't realise they're doing it. The open minded creative thinker will work with someone in that way and expect them to be the same whereas the linear thinker will behave like that in practice and assume that the person that they're with wants the $a+b=c$ formula , for whatever their problem is. (Teacher Physiotherapy Female 11)

The person I am thinking of whom I believe to be a reflective practitioner is open minded, listens to new ideas is continually trying to develop and move forward the practice. It is a person who I enjoy having conversations with who I enjoy talking about practice find it stimulating and inspiring (Teacher Physiotherapy Female 7)

She has an open mind. she's open to other people she listens well to other people so she's got all the skills of facilitating others but she draws in to herself and into her understanding and as much knowledge and information as she can. (Teacher Nursing Female 4)

4. 2.8 Professional reservation

One of the participants described a colleague whom she thought of as a reflective practitioner. It was interesting because this was the only person who talked about helplessness of the practitioner to decide what to do at the spot. Reflective practice is a slow process in essence which may lead a professional to re-explore his beliefs, values, ideas, and even basic assumptions. This may result in hesitation, doubt, and a kind of professional reservation that may in turn delay professional action, which may or may not be favourable:

One of my partners at work is very definitely very reflective. He is able to put things down on paper, but takes time to do that. He is very well liked by his patients he spends a lot of time with the patient he shares a lot of his

thinking with his patients when we have got issues that are going on at work, he comes up with discussion documents. A very reflective and has put a lot of his personality in them but he's completely hopeless at making a decision if you need a decision that afternoon, he won't make a decision that afternoon. He will try to think about it. A lot of what he does, a lot of every decision, he thinks through previous experience. He discusses things with other people; he logs many things courses, experiences, patient experiences for instance and uses them in teaching. (Teacher Medicine Female 14)

4. 2.9 nice person

Some of the participants, mostly students, associated the term reflective practitioner with good and helpful person. They described some of the teachers as reflective practitioners while they were describing kind nice people. It could be argued that reflective practitioners are good people by definition as they have some or most of those qualities that makes a person nice in the eyes of others such as open-mindedness, being considerate and seeing things from other peoples' perspective:

I think if you are a nice person, you are more open to wanting to be a reflective practitioner. I think you might see the benefits of being reflective. If you are nice, you want to help people and you want to do the usual, the good things in medicine, then of course to do that you have to realise in yourself that you have to do better and better. (Student Medicine Female 8)

The following extract is an example of what participants thought about those who do not seem to have a reflective approach:

I can also think of people who do not do that, how frustrating! I can think of a few colleagues who are actually quite frustrating people to be around, because they do not seem to have a reflective approach. They seem to have a sort of the opposite, what I call tin helmet approach, kind of, "I'm fine," and "if anything goes wrong it's somebody else's fault". "I'm absolutely fine" – "I'm a really good doctor." So if you've got a problem or if the patient's got

a problem it's your problem or it's their problem it's certainly not my problem. And I find that attitude intensely irritating, self deluding.

(Teacher Medicine Male 7)

It could be argued that reflective practitioner is a term that is being used to describe a developing self-aware open-minded contemporary professional who strives to continually improve their practice, develop self and others, upgrade knowledge and systems and make sense of professional world from different perspectives. Becoming a reflective practitioner is about a way of being, a state of conscious and unconscious mind. As mentioned by one of the participants of this study “It is an existentialist issue” (Medicine Teacher Male 3) rather than learning a set of strategies and tactics. The next section discusses the findings of this study in terms of teaching and learning reflective practice in the courses under investigation.

4. 3 Teaching and Learning Reflection

Almost all participants think that it is essential for the students to be able to reflect on their practice and reflect effectively if they are to make the best of their practice and are to become competent, constantly developing practitioners. Whether the ability to reflect is a natural capacity of human beings or it is a learnt mental habit, the participants thought it is the responsibility of the educators to help the students to become more effective reflective practitioners.

However it could be argued that if reflective practice is what we desire to happen in the context of medical and healthcare, the curricula will have to reflect that and teach students to become competent reflective practitioners. Here I endeavour to explain what participants of the study have experienced in respect of reflective learning in the curricula of medicine physiotherapy and nursing and how they teach or learn reflection. I now describe what the Newcastle medical school do to encourage reflection.

4.3.1. Reflection in the medical education curriculum

In the Newcastle Medical School, teaching reflection as an overt approach to learning seemed to be a recent movement. This seems to be consistent with medical education in general in the UK. Efforts have been made to introduce the notion to the

community of trainers and trainees. Thus, students and staffs seem to be aware of its existence, importance, and formality. In the medical school, reflection has been encouraged using different strategies, including reflective assignments, encouraging reflection on critical incidents in clinical settings, learning diary ,Structured reflection, record of family and patient visits and using portfolios and ePortfolio. Newcastle University has designed ePortfolio and has encouraged students to use it as a tool for supporting learning (Cotterill, Bradley & Hammond, 2006; Cotterill et al, 2006) Reflective writing among many other things is a part of what the portfolio can contain. In the medical school, for instance, the following parts of portfolio are mostly related to reflective learning:

- A part of the ePortfolio called “My Evidence’ which supports the annual appraisal process and includes reflective accounts
- Stage 4 SSC portfolio – setting intended outcomes, reflection on achievements & evidencing

However, for those participants who appeared to be enthusiastically involved in implementing reflective learning, in fact, there is much more to do in order to entrench a reflective approach into the medical education curriculum:

It is in the documentation around our curriculum, we talk about it with students and with our teaching staff .The importance of promoting reflection comes into everything that we do but how much it is embedded in the curriculum I think is open to question.... We are making an attempt at promoting it, but I think there's probably a lot more we could do to really embed it into the curriculum. (Teacher Medicine Male 16)

Fundamental to academic activities such as keeping diaries, portfolios and appraisals is the notion of a reflective practitioner who voluntarily participates in those activities in partnership with teachers or employers to enhance their personal and professional development. There was evidence in the data that this approach was accepted and followed among most of the participants. They thought reflection was implicit in those activities. It would appear that this implicitness is because people are now aware that reflection is *sin qua non* for those activities and to some extent they take it for granted:

It has been implicit I think in the sort of discussions we have had about introduction of portfolios and introductions of appraisals across the curriculum. (Teacher Medicine Male 13)

As mentioned above reflection as an explicit approach to teaching and learning in medicine seems to be recent relative to some other professions. This does not mean reflective practice has not been used and people have not reflected before this recent movement. Attention needs to be turned to the fact that the founders of reflective practice never claimed that they had invented this approach. On the contrary, they observed, made sense of, and articulated what “skilful, competent, wise, and contemplative practitioners” (Schon, 1983) were doing. The following quote is an example of this, which was frequently evident in the data:

I sense that this is a relatively recent improvement, a relatively recent phenomenon, and I as a medical student in the eighties was never taught about reflection. That is one of the reasons that I think some people quite natural reflectors. I believe I am a good reflector but nobody taught me how. I think that the sense in which it has become more formalised and part of the curriculum proper, rather than the hidden curriculum if you like, I think that is relatively recent phenomenon (Teacher Medicine Male 3)

It may be useful at this point to highlight briefly the issue of implicit /explicit approach to reflection in medicine. As illustrated by the last two quotations above, two levels of implicitness of reflection in medicine can be identified. The first level of implicitness is about the time when the phenomenon exists and functions but has not been named yet. It could be argued that this was the case with reflection in medicine in 1980s as it was true with reflection in general until educationalists such as Dewey and later Schon and others formally discussed it. There were many reflective practitioners who reflected upon their practice and used it in their personal and professional development. They might or might not have been familiar with the term “reflective practice,” and the way it has been formalised by different commentators. Nevertheless, they certainly have been well familiar with the concept of learning from

experience, tacit knowledge embedded in practice, and professional artistry guided by intuition in every day practice.

The second level of implicitness is concerned with the time when the phenomenon has been introduced and used explicitly for a while and has been relatively well known by the community. Therefore, it is second to a period of explicitness. In this case, in many discussions and activities, it would be assumed as accepted by everyone, as if all are aware of it and there is no need for it to be mentioned repeatedly. It remains as an underlying implicit assumption upon which other phenomena may be built. (Figure 4.1)

It would seem that after the first implicit phase of reflective learning, a phase of explicitly implementing reflective learning has commenced. Implementing reflective learning in the medical school has not been a fixed, prescheduled and well- planned educational programme rather it has been experienced as a gradually introduced, steadily recognised permeating approach, which is still in progression within academia and practice contexts of medicine. Some participants who have been introducing and teaching reflection find themselves witnessing this trend:

It will be a constantly evolving thing in the curriculum. We have only been doing it formally for five ten years or so. it's been there before but in terms of the strengthening with portfolios with getting recognition with the in the hospitals, that students are going to come and be doing this sort of stuff, and that's going to be an on going battle. (Teacher Medicine Male 10)

It certainly does appear that participants are now convinced that reflection is, and for some it should be, part for the course in medical education, where its importance is hardly negligible:

It seems fairly clear to me that certainly in Newcastle, and I believe elsewhere although I don't know so much, it's seen as an integral part of medical education. (Teacher Medicine Male 4)

The Medical School appears to be adopting its own systematic approach to teaching reflection, and activities are becoming more focused around how to get students to reflect and learn via reflection. There are various examples throughout the data of

evidence that teachers viewed themselves more prepared to teach reflection and complement one another's activities in a more harmonised way:

In the last few years – the first and second year medical students have had a much more systematic methodical teaching of reflection and that is partly because I felt before it was diffuse. (Teacher Medicine Female 15)

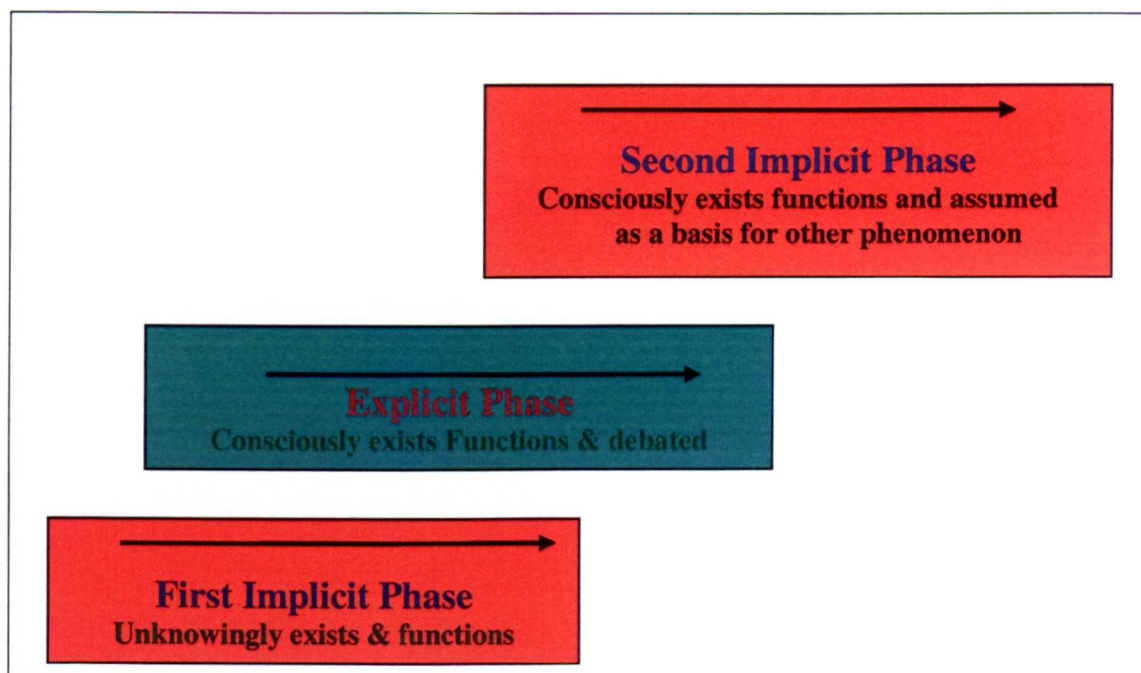


Figure 4.1 illustrates the chronological relationship between implicit-explicit phases of reflection

Medical students have experienced this trend. They seem to be aware of the purpose and philosophy behind this movement and see the potential benefits of being reflective. There was general feeling by them that they were reflective, and some associate becoming a rounded doctor with reflective practice. It seemed they were aware that becoming a good doctor is something more than learning the biomedical side of the course:

In Medicine, yes, we discuss reflective learning quite a lot, sometimes too much. But we are reflective anyway, we have something called PPD, which is personal professional development, which is a lecture course and also

seminars and it encourages you to try and be the best doctor that you can be outside of just knowing the facts (Student Medicine Female 8).

4.3. 2 Reflection in physiotherapy curriculum

Introduction

During data collection, I became increasingly aware of the differences and similarities of what I named the “curricular approach” to reflection in the three courses under investigation. By curricular approach, I mean the way reflection is being implemented which is determined by both hidden and explicit curricula. In other words what, in the real world, is experienced by students and staff rather than what is expected of them or should happen. For this reason, presentation of findings in each course may appear in different forms shaped by the different themes emerged in some places.

In this section, I will explain the themes “training for teachers regarding teaching reflection”, “importance of reflective practice” and “methods of facilitation used in physiotherapy” as experienced and expressed by the participants.

4. 3.2.1 Training for the teachers

I realised that when the participants of this study were discussing the issue of teaching and incorporating reflection they were mostly talking about the different teaching strategies such as critical incidents, reflective diaries reflective practice groups and the rest. It seemed no one was very concerned about how to teach or facilitate these very specific methods. For me, these were clearly two separate but interwoven concepts. One, strategies or methods that could potentially facilitate reflection and secondly how each of those methods or strategies could be facilitated. This raised the question of preparedness of the teachers to facilitate reflection in different methods.

The data indicated that in the three courses under investigation there was not formal training in facilitating reflective practice methods for teachers. Instead, they received some training from other sources. They mentioned various training events and venues such as professional body based training, hospital based training and training in the university. The nature of the training opportunities seemed to be voluntary, one off, spontaneous, non-obligatory and with no formal assessment of abilities obtained. In physiotherapy, participants reported that they have devised a system to compensate

for the lack of formal training of teachers. This seems to be beneficial and provides a context for sharing ideas and finding:

The school does not offer formal staff development or formal training in reflection. Individuals if they wish can use their own staff development time to go on courses to attend seminars or to read research around reflection and many of us do, but there is no formal training. What there is – is programme approach where staff get together, discuss the approach they are using. Check out whether they are understanding the same things, teaching in the same way, offering students the same opportunities. So at that level there's organisation of thought and checking out of what each others doing. (Teacher Physiotherapy Female 8)

It would be easy and straightforward for the teacher to enumerate, skills and strategies needed for facilitating reflective learning. What would seem to be problematic is that, if the teachers have not received any type of formal training about reflective practice and its methods, do they understand the same thing by the term reflection?

It is my guess, that at a broad level we all understand the same thing by reflection. However at a very specific level, in terms of how to use reflection in clinical decision making, how to use reflection in terms of promoting individual learning how to use reflection to develop new knowledge I would think we all do it differently. And that we all have our own preferred method, that would be my guess, (Teacher Physiotherapy Female 6)

The above quotation is remarkable because it clarifies that teachers think that they understand the same thing in a broad sense by the term reflection. They check and clarify what others do and think via mechanisms such as programme check. The other point is that people decide on which different methods of reflection to teach. This could be due to the minimal schools universal guidelines, lack of formal unified training for all, lack of consensus regarding the most efficient methods of facilitating reflection and of course personal tendency toward a method that the individual can understand better than other methods and feel more comfortable with.

There may be a system such as “Programme Approach” within a programme to enable people to engage in a dialogue about their practice. Nevertheless participants pointed out that in the School of Health Community and Education Studies there is little or minimal collaboration in respect of reflective learning or amalgamation of efforts in an explicit basis between the different programmes such as nursing and physiotherapy even if they are situated within one school. This lack of cooperation and consequently lack of awareness about what others are doing could be attributed to firstly, divergence of the programmes with respect to their rationales, epistemologies of practice and perhaps methods and strategies they use to promote reflection. Secondly, using reflection, (it is an integral part of the programmes) is not a new concept. Therefore, it does not seem to be a very complex issue to learn. Programmes and individuals to some extent feel self-efficient about it and tend to tailor it to meet their own specific needs:

Nothing that would unify all the courses, each programme area, physiotherapy, occupational therapy, nursing or perhaps, and social work, each programme area will be responsible for its own approach to teaching and learning (Teacher Physiotherapy Female 6)

Reflective thinking, reflective practice is a big part of what we do with our students. Particularly on the physiotherapy programme, I cannot say it for all the other programmes, but certainly, for physiotherapy it forms one of the key development threads, I guess that go through the whole programme. (Teacher Physiotherapy Male 9, my emphasis)

4.3.2.2. Weight of reflection and methods used in physiotherapy curriculum

Regardless of the level of preparedness of the teachers to facilitate reflection in students, and whether or not the issue of preparedness of teachers would have any significant impact on the outcomes of teaching reflection, reflection is considered a central component of what is taught to students in physiotherapy:

I mean there is not, a module or a formal module on reflective thinking. It is kind of, wrapped up in the development of a clinical reasoning and a

reflective practice theme right through the programme. I guess it has two key strands, one is about the role of reflective practice in developing clinical reasoning, and the other is about reflection in developing the student's own continued professional development. So we see it as a key element to those 2 activities. Both of those themes are quite clearly seen through the physiotherapy here. (Teacher Physiotherapy Male 9)

Figure 4.2 summarises the main methods of facilitating reflection in the undergraduate curriculum of physiotherapy as explained by participants. Facilitating reflection is entrenched in most of the clinical and academic activities in the curriculum. This has been achieved by developing clinical reasoning and continues personal development. The efforts begin from the early days of the pre-registration programme and continue in the second and third years. They start with an introduction to the notion of reflection and a reflective cycle is explained. The programme does not advocate a specific method therefore; it remains at the discretion of the teacher to choose a method or variety of methods. Nevertheless, it seems consistent that they use reflection to develop both clinical reasoning and personal development plans from the beginning to the end of the programme:

The physiotherapy students, as soon as they start their pre registration programme whether that is BSc or MSc level are given reflective portfolios. Therefore, they have a structure for recording their reflections. They can keep that. They can use that in their discussions with university tutors and with clinical placement tutors (Teacher Physiotherapy Female 6)

In most cases, students were confident that they were familiar with the notion, and had received enough structure and support to develop their reflective skills both in academic and practice settings. The following extract from an interview with a student in placement shows that there was a consensus among physiotherapy participants regarding the presence of an element of reflection in all physiotherapy modules:

There is an element of reflection in all the modules that we do... there's not a specific reflective module. we have a professional development folder that we

get at the beginning of the course and which we're encouraged to use to reflect as we progress and during our first placement we have sessions during and after the placement to show us how to reflect teach us, help us learn how to reflect whilst on placement. So they taught us the basic techniques such as SWOT analysis and critical incidence analysis and that sort of thing. (Student Physiotherapy Male 11)

Teachers and programme developers in physiotherapy seemed to be aware that their discipline necessitated a higher level of thinking which is assumed associated with reflective practice therefore it is regarded a big part of their curriculum:

It is something that we consider right from curriculum development through to acting things in the classroom and in the clinical sector. So it's something that we have given a lot of thought to that we incorporate into teaching and learning strategy. (Teacher Physiotherapy Female 8)

4.3.2.3. Summary

Although some have categorized physiotherapy as a semi-profession, (French & Sim, 2004) As a physiotherapist I see physiotherapy as a still emerging profession that needs to overcome the deviation between its theoretical basis and the reality of everyday practice by developing knowledge embedded in practice. Such knowledge should be identified, explicated, and added to the theory. Apparently, reflection has proved to physiotherapy educationalists that it could offer an opportunity for this. Therefore, they have given a significant weight to reflective practice in their curriculum. It seems there is a clearly identifiable systematic approach to make students to reflect spinning around two core concepts of clinical reasoning and personal development plans. Academic and clinical educators who are self-taught or have only received minimal trainings about the notion or the ways to encourage it. I found them self-made, enthused, and dedicated to the responsibility they have accepted. Thus, their enormous efforts to promote reflection should be viewed with appreciation. The only point here to be made is the level of preparedness of the facilitators and its impact on the outcomes. The participants of this research did not report many concerns about this issue and they took it for granted that those involved

in teaching or facilitating reflection are well able to do that. Yet again as a researcher who immersed himself in the phenomenon for more than 4 years, I feel a more systematic approach to teacher preparation *is* an issue and its possible impact on “educating the reflective practitioners” needs to be considered.

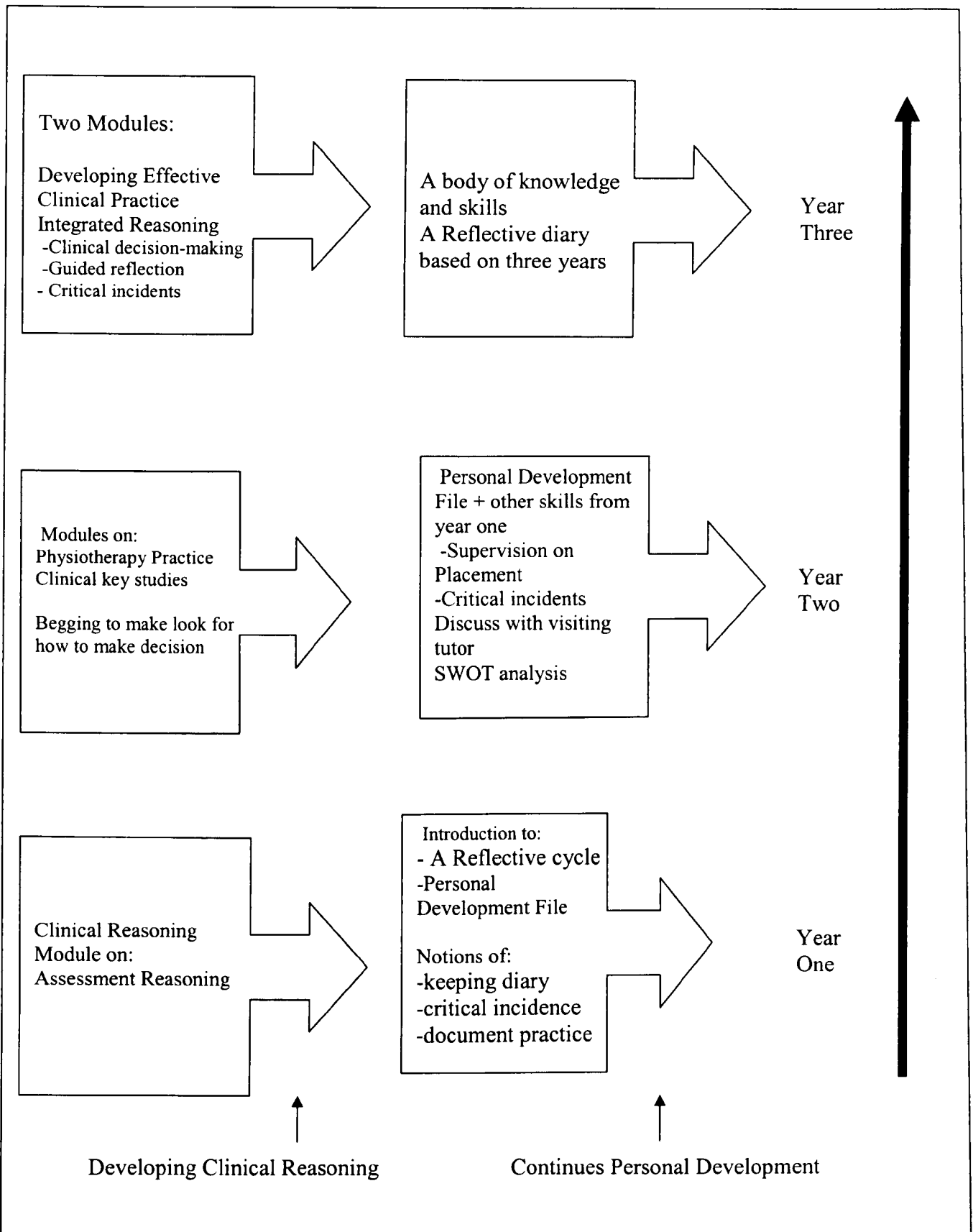


Figure 4.2 Reflective learning in physiotherapy curriculum as described by the participants

4.3. 3 Reflection in nursing curriculum

This category included many aspects of reflection within nursing curriculum. Many elements of the category such as perceived or observed functions of reflection in nursing, creation of nursing models and different methods of implementation, to mention only a few, served to define and elaborate the meanings of the category. I will now explain these elements under the two main following properties: the multifaceted function of reflection in nursing and implementing reflection.

4. 3.3.1 The multifaceted function of reflection in nursing

Although there were many people holding undergraduate or postgraduate degrees in nursing, the second trend toward a graduate profession started in the 1990s, and more universities began to offer degree courses while maintaining already running diploma courses as a minimum requirement for registration as qualified nurse. In the same years, the notion of reflective practice had obtained a significant amount of attention among healthcare educationalists:

It was in the nineties although it had been around before then; in the early nineties, it [Reflective Learning] became quite influential in Britain in Healthcare. (Teacher Nursing Female 1)

The following participant who was one of the most influential academics in setting up the nursing degree course in Northumbria University explains how they integrated reflection in the nursing degree because they thought it was very important. The new generation of nursing degree educators implemented reflective practice into the curriculum from the first days of their career:

We taught it from the very beginning as a course because it was so important. We have been doing it for about 15 years now. When the course went into university, I went in with quite early with a degree course in setting up this degree in nursing course. So I could set it up in the way in which we wanted it to be, I could influence the curriculum so we put reflection we left a space for reflection in the nursing degree curriculum all the way through. (Teacher Nursing Female 2)

The nursing profession needed to strengthen its scientific and academic side. They needed to build or rebuild nursing practice on academic knowledge required for a university graduate profession if it was going to survive in a context dominated by medical models of treatment. Reflection appeared to be a way that students could use to interpret theoretical knowledge learnt in academia into practical decisions in practice contexts. The teachers seem to have also witnessed the potential benefits of reflection in elucidating tacit knowledge embedded in practice to inform theory. This has been a two-way function of reflection in filling the gap between theory and practice in nursing each being informed by the other thus reflection served nursing to justify its trend toward a full degree profession:

We wanted to make sure that, what they were doing was using reflection in an academic way, and you can imagine with a degree in nursing, particularly people were, always off, because mostly it was a diploma in nursing at that time so people were always asking me "What's the difference between a degree nurse and a Diploma?". One of the reasons reflection was so important was because that way we could get at what they were using academic knowledge to inform practice. But it worked the other way round as well. (Teacher Nursing Female 2)

Prior to the development of nursing models nurses used to think and act based on the medical model (McKenna, 1997). According to the medical model, a patient is a set of anatomical parts and physiological systems (Aggleton & Chalmers, 2000) whose problems are caused by an underlying organic pathology for which the required solution is medical treatment and nursing care (Walker & Campbell, 1989). Nursing educationalists have been aware of the effects of this model on nursing practice. They believe that the medical model is not reflecting what they observe, and what they do, thus it is not the focus of their discourse:

The nursing model incorporates the medical model by using empirical knowledge by using scientific facts, but it also looks, in treating the patient, at the patients' surroundings, family, and psychology. I think reflection would help with that. (Teacher Nursing Female 4)

Nursing commentators and lecturers have created nursing models versus medical models and have been successful in conveying the message to their students (McKenna, 1997). However, Peplau (1987 as cited in McKenna, 1997 p. 87) asserted that “those who teach control the content of the occupation”. Now doctors are not asked to lecture about nursing to nurses in most of the universities. The content of occupation and intellectual representation of what nurses do is constructed and negotiated within nursing discourse:

I am a third year student and I can tell you what they are teaching us in school regarding the nursing model vs. medical model. I guess the medical model focuses on the diagnosis and treatment of disease. The nursing model focuses on the treatment of the human response to disease and those features, which are not sort of, covered by medical model, and incorporates the prevention of disease, which is not an aspect that the medical model emphasises. (Student Nursing third year 11)

James and Clarke (1994) maintained that the current importance and position given to the notion of reflection implies that it leads to better patient care. In response to my question regarding the difference between a reflective practitioner and a non-reflective practitioner in respect of patient care, the nursing teachers associated reflection with a holistic view of patient care in contrast to a medical model. They think care is something bigger than mere treatment. For them care encompasses all they do for the patient to have a better life or a peaceful death:

I think it should if you want to give what I call care and not treatment. I think there's a big difference between from a medical model if you want to deliver drugs, tablets, give an injection or whatever I think there to my mind that's treatment its treatment of a disease, a disorder, whatever, it's not treatment of the person, and I think I really believe in holistic medicine. Holistic care, holistic health I think it is important to have a bigger picture about what health is and quality of life is and so on. And it's the little things that sometimes make a big difference to the health of the patient as a way of

being, or to have a peaceful death and quality of that care. (Teacher Female Nursing 10)

The above quotations are the examples of the data that provided evidence for the multifaceted function of reflective practice in nursing curriculum. This has been illustrated in figure 4.3.

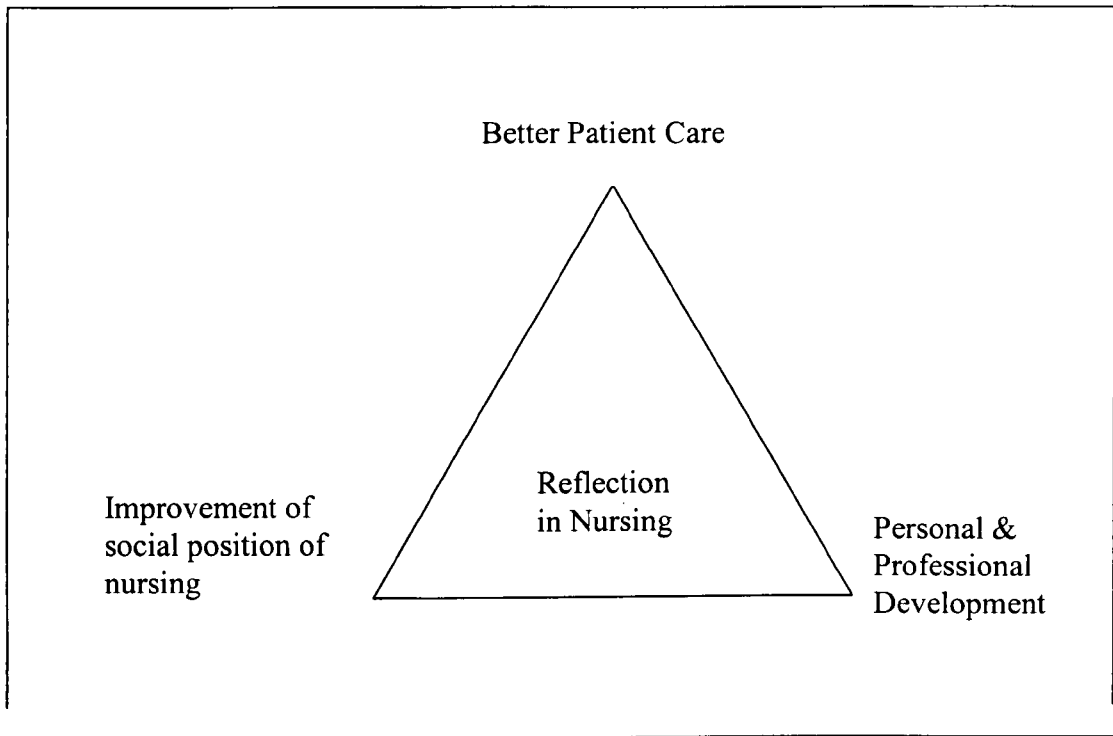


Figure 4.3 depicts three main facets of reflection in nursing curriculum

4. 3.3.2 Implementing reflection

Reflection is regarded as very important in nursing curricula. Therefore, considerable responsibility rests on nurse educators to deal with the critical issue of how reflection can be facilitated and how it can be learned. As mentioned in previous sections of this chapter, it seems, teachers have started teaching reflection in nursing and other professions without being well equipped with necessary skills and training. This type of perceived lack of efficacy was evident in the data and seemed it has been resolved in the course of time:

Particularly when we began it, we were not so skilled. I think we became more skilled as we went on. but at the beginning, there was a tendency to be just story telling which was important for the students because it got them to bring things out that they wanted out, What we found was that we could use it to get them to link the theory and the practice. (Teacher Nursing Female 2)

In fact telling a story is an important part of all models of reflection as they start with a question such as *what happened*. A large amount of information is told, retold, and constructed during a reflective storied world of practice.

The data suggests that after the early phase of just story telling reflection was facilitated by two types of tools in nursing students, writing tools (such as keeping diaries, logbooks and reflective journals and portfolios) and verbal tools such as interaction groups. Either of these tools could be organised as a specific module or integrated into the curriculum.

Figure 4.4 summarises strategies and methods frequently mentioned in the data by participants. In the nursing curriculum, both writing and verbal tools of facilitating reflection have been used. There is not a specific module for reflection but it is integrated in many different academic and clinical programmes:

I think in a formal educational programme, so either you need to do it through as we're doing it through group work or you can do it through the kind of assignments that you ask them to write and that's very important so then they will get into the habit of doing it (Teacher Nursing Female 2)

Reflection can take many forms or shapes when it comes to the individual preferences of the teachers and students. This situation is reflected in the nursing course under this investigation. What clearly is called for is a distinction that should be made between a real and a false dichotomy. In my informal conversations with teachers and students in nursing, and in the data gathered from interviews I noticed that some of the participants explained approaches and tools of implementation of reflection in the curriculum as if they were mutually exclusive. I felt reality was not constructed that way rather it seemed to me a false dichotomy, created for convenience of explaining and understanding. Reflective teaching and learning is a complex issue therefore phrases such as verbal tools vs. written tools, discrete module vs. integrated approach,

and reflector vs. non-reflector do not represent the reality of the phenomenon. For example writing an essay or a diary are not purely non-verbal as it is assumed seeing that writing and thinking are forms of dialogue with self and with an expected audience which finally will be discussed, read, and negotiated at some point. The other factor is the observed plurality of the methods, preferences, models, approaches and personal ways of reflection, which challenge any distinct dichotomy and “either-or” approaches to this phenomenon.

The following quotation explains the similarities and differences of the methods that different teachers or facilitators may choose to encourage students to reflect within the same department:

I think we all have very similar ideas, but I think the way that people use reflection and when they teach it maybe varies. I think what springs to mind is that there are a number of models available of reflective practice. I think although there are similarities in some of the models some of them are quite different and certainly our philosophy is that we do not advocate one particular model. We talk about reflection as a tool in general but we encourage the student to develop their own way of reflective thinking and if they for instance prefer a model and they want to apply it to their practice to the learning we would encourage that. If you read all of the model, I think there are commonalities that thread through and there are some that are very, very similar, but there are some that are a little bit wordier and I think it's up to the individual as to what their personal preference is. I like Gibb's model of reflection because I find that I can apply it to my area of practice. Some people like John's model of reflection. (Teacher Nursing Female 8)

Not surprisingly, participants were not able to give a definite list of strategies or methods used in nursing to teach reflection. The fact that literature fails to provide a conclusive answer to the question of what are the main methods of facilitating reflection is reflected in the real world of the courses so different individuals may choose different methods. A participant mentioned many strategies such as portfolios, internship, tripartite contracts, and enquiry based learning while others reported using critical analysis and diaries. This dispersion did not seem to be the concern of the

participants as long as one of the methods is being employed and students are familiar with the notion and understand the process:

It actually feeds through the practice portfolios that the students take out into practice. So a large part of their practical experience and developing skills hinges around reflective practice. Because their mentors assess them in practice, the practitioners have to have an understanding of reflection as well. It threads through the programmes as well in CPD in post registration, in theoretical components in the academic work. A lot of the written assignments, not all of them, but a lot of them have a reflective element where the students have to reflect upon perhaps a skill at the other end to an experience. we use, critical incidents as well. ... so it was a tool to analyse an incident but certainly when I teach it I try and get the student to think about it. It's not always to analyse critical incidents you can analyse an area of your own practice. (Teacher Nursing Female 1)

One example of the methods used in nursing was a verbal tool of group discussion sessions. The use of reflective group sessions facilitated by a nurse teacher has been advocated as a mean for developing the reflective abilities of nursing students. These sessions arguably could generate powerful insights and understandings into complex professional issues by means of sharing, support, challenge, and feedback if experts in a safe environment facilitate them. Norman (2003) believed that student achievement gains are much more influenced by a student's assigned teacher than by other factors like class size and composition. Given the fact that teachers are in more contact with the students in such sessions compared to writing methods, their role would be even more prominent. Teachers seemed to be aware of their role as the main instrument that helps the students to reflect. Some attributes for a good teacher of reflection frequently revealed in the data are seen in the following quotation:

I remember a member of staff that was helping facilitate in the learning he would have rules, ground rules that are explicit, so that for example my students have a ground rule that if anything that is personal they will not share that outside the room. So that people will speak openly, honestly, and

there will be no put-downs. And that everybody will participate if they're able, I think it's an element of trust , warm, positive regard ,coaching, perhaps you could argue from a facilitators point of view ,asking questions ,respecting, paraphrasing be another example of a skill that you'd require perhaps a sense of humour helps.(Teacher Nursing Female 10)

The above extract also implies that teacher participants acknowledged their own potential position as role models for students particularly if they were teaching and advocating reflection in academia and in practice. Teachers may use role modelling as one way to attain outcomes by revealing their own way of thinking and sharing their own experience and knowledge as they inform the decision-making during evaluation and treatment or in academic practice:

I think that students do look to their facilitators or teachers as some sort of role model. (Teacher Nursing Female 9)

Teacher participants not only rely on their own personal and professional experiences about reflection, and implementing it but also frequently referred to the vast literature about reflection within the nursing discourses to justify their faith and confidence in reflection as an important learning tool:

I think in nursing it is generally acknowledged as a valuable tool. if you look in the literature, it's used widely . You know from all sorts of levels of journals from very sophisticated research based journals, to journals that are aimed at students and so on and a lot of the textbooks and literature that we have access to often refers to reflection so I think it is acknowledged in the profession that it is a valuable tool. . (Teacher Nursing Female 1)

Finally, participants were confident that , three years of exposure and experience, in the context of nursing curriculum where reflection is regarded as an important learning tool, embedded in most activities and discussions would give the students necessary insight and skills to use reflection in their practice as future nurses:

I think the fact that reflective practice appears in the curriculum over the three-year period, the fact that it is repeated, enables students to build on their understanding. So you would expect I suppose that someone entering the programme from school in the first year, in the first trimester, might not be able to reflect as well as somebody who is just leaving the programme, having undertaken three years. So I think experience and exposure probably plays a part. I think as well as students do go through the three year speaking from my experience of taking a group through , they develop skills that they learn about themselves and I think their understanding overall just broadens so it enables them thereby to reflect on their experiences and change their practice and change their attitudes. (Teacher Nursing Female 6)

I feel that my confidence has increased during these years, reflection is a good tool, you feel more secure in the knowledge that it is acceptable to get things wrong and use reflection to learn from that. (Student Nursing Female 3)

To sum up, reflection in nursing curriculum takes varied forms and shapes. The purpose of reflection is historical and is rooted in the recent history of nursing as a profession still promoting toward professionalism, recognition and building its own knowledge base, theories and models. Moreover, it has helped with personal and professional development of nurses, as individuals, and it is assumed to be associated with a better patient care.

Many strategies for facilitating reflection are advocated but how to teach and how to integrate these into teaching and learning practice is sparse. It could be argued that the “je ne sais quoi” quality of a teacher is the main determinant of what strategies are to be used and how these strategies are to be implemented. Insight into how the teachers as qualified professionals reflect on their practice informs the way, which they frame reflective practice for students. In the dearth of unambiguous answers to how to teach certain strategies, this is the personal experience and personal favourite ways of reflection of the teacher, which is a leading light for them when teaching, or modelling reflection.

Perceived dichotomy of programme approach	Perceived dichotomy of tools	Plurality of Methods	Models more frequently mentioned
Specific discrete module/s	Writing tools	Diaries Logbooks Reflective journals Portfolios E-portfolio Reflective forums Essays Reflective assignments Problem/enquiry- based learning Internship {Tripartite contract}	Johns Gibbs Schon Boud et al
Integrated through curriculum	Verbal tools	Story telling Group interactions	

Figure 4.4 summarises the approaches, tools, methods, and models of reflection mentioned in the data.

4.4. Summary

Socialisation into reflective practice is the central social process identified in this study. In this chapter, I have discussed this central process. Universities try to introduce the concept of reflective learning to the students, provide them with a rationale behind the notion, and get them to reflect on their learning and practice. In a social interaction, students try to make sense of the concept of reflective learning, assign their own meanings to the phenomenon, act based on those meanings, and redefine that meanings as they progress in their personal and professional development. The process of data analysis revealed that the central category “socialisation into reflective practice” included the following three main dimensions:

- 1) A rationale for reflective practice
- 2) Perceived image of reflective practitioner
- 3) Teaching and learning reflection

It seems different courses have their own course specific rationales for using and teaching reflection to their students or at least they place more emphasis on certain aspects of usefulness of reflective learning based on their own courses. I compare the rationale for teaching reflection in the three different courses. Different professions use reflection for different professional purposes. This is influenced by their socio-political stance, social position, and ambitions of the profession. This, in turn affects methods, strategies, and outcomes of reflection.

The rationale for using reflective learning is based on a perceived image of reflective practitioners. The attributes of reflective practitioners is discussed.

In the last section of this chapter, I endeavour to explain what participants of the study have experienced in respect of reflective learning in the curricula of medicine, physiotherapy and nursing and how they teach or learn reflection. Methods and strategies used to facilitate reflection are discussed. I have argued that the “je ne sais quoi” quality of a teacher is the main determinant of what strategies are to be used and how these strategies are to be implemented and have examined the issue of teacher preparation in terms of teaching and facilitating reflection.

Different professions are in different stages in terms of embracing reflection. This has been explained using the concept of implicit-explicit phases of using reflection in professions.

A brief comparison of the three professions of medicine, nursing, and physiotherapy in terms of the three dimensions of socialisation into reflective practice seems to be appropriate at this point.

The rationale for using reflection:

Although all participants expressed similar grounds for using reflection it seemed different courses have also their own specific rationale for using reflection (Figure 4.5)

Comparing the above course specific rationales reveals that nursing and physiotherapy use reflection to improve the social positions, strengthen their own theories of practice and moving away from medical model of treatment as has been discussed in this chapter. For medicine, reflection is expected to help doctors to have a wider worldview, be able to change as the knowledge base changes and maintain their competencies. The main difference between the three professions seems to be the state of professionalism. Medicine has been considered one of the three learned

professions (medicine, law and theology) for as long the concept of profession has existed (Thistlethwaite & Spencer, 2008) while physiotherapy and nursing are considered emergent professions.

Profession	Rationale for reflective practice
Medicine	<p>A core component of professionalism Is a part of rhetoric of contemporary medical education Is a part of good medical practice (communication skills, patient – centeredness , development of appropriate attitudes etc) Doctors eventually encounter the need and pressure for reflective practice Patient safety A coping mechanism for doctors</p>
Nursing	<p>A tool to address uncertain and unique situations of nursing practice Improving social position of the profession as an ontological issue Making professional language and discourse explicit and strong Patient safety To address the insufficiency of relying on rituals & technical level of care Helps nurses to understand the nature of nursing as a bricoleur activity</p>
Physiotherapy	<p>As an emerging profession needs reflection to strengthen its own theory As a tool to address the scarcity of specific guidelines for practice As a tool to compare experts’ practical knowledge with published theory As a tool to help in building professions own theory and moving a way from medical model</p>
Common grounds for reflection in professions	<p>Personal and professional development Filling the gap between theory and practice Better patient care</p>

Figure 4.5 summarises common and different rationale for using reflection in different professions.

A comparison as such helps practitioners to recognise the underlying assumptions and underpinning socio-political reasons for different approaches and outcomes of reflection. This in turn helps to make more sense of reflective practice in each profession, which is, to some extent, limited within professional boundaries.

Perceived image of reflective practitioner

This study did not indicate that the perceived image of reflective practitioners differs between members of different professions rather they used generic terms to define a reflective practitioner derived from literature or their own professional and personal

experiences. Participants seemed to be clear what they understood by the term reflective practitioner but each of them used different attributes which were not profession specific.

Teaching and learning

It seems the above rationales have influenced the way teaching and learning reflection has been planned and delivered. Although the professions do not advocate a specific model of reflection, there is a more emphasis on Johns' (1994) in nursing. They have embedded reflection in all activities and discussions for a long time therefore almost all nursing professionals are at least familiar with the notion and its requirements. Reflection seems to be the culture in nursing.

Physiotherapy appears to have a more systematic approach to teaching and learning reflection. Reflection is centred around clinical reasoning and personal and professional development plans. A more guided approach to reflection is advocated.

In medicine, teaching and learning reflection is centred around making students familiar with the notions, provide some structure and framework for reflection in academia and clinical settings, and provide them with role models and assessing students' reflective accounts. Reflection is widely accepted in academia but there is still a negative culture toward reflection particularly in clinical settings.

Chapter Five

Findings: Assessing Students' Reflective Works

Introduction

In this chapter, I endeavour to explore different dimensions of assessing reflective writings produced by undergraduate medical students. The issue of assessment of reflective writings created much more data and debate in medicine when compared to nursing and physiotherapy in the course of this research. In my in-depth interviews with medical students about reflective learning, I became increasingly aware that assessment was their main concern and they were very enthusiastic to talk about it. In my informal chats with medical students, who had not participated in my research, the same themes were repeatedly mentioned. This broadened my understanding about its importance for medical students. This was not the case with the other two courses under investigation. Therefore, I explain the category of assessment in more details within the medical school.

5.1. Unresolved issues - expectations and criteria

In the context of medical education, where most or all aspects of formal learning activities are assessed, some forms of assessment for students' reflective activities, which is a formal component of the curriculum, seem inevitable. In fact, the relationship between student's attention to a subject and assessment is well-established (Newble & Jaeger, 1983). This was the view maintained by most of teachers participated in this research.

In this study, the issue of assessing reflective activities of students, particularly written forms of reflection such as reflective assignments, reflective portfolios and diaries, presented both students and teachers with a significant challenge. Although both parties seemed to have reached an agreement about the importance of reflection and, a general cultural acceptance was evident in the data, their opinions of assessment seemed to be divergent.

Teachers and the medical school in general, have been firstly, trying to make it clear that reflection is a part of curriculum and is an explicit expectation of the students not

only in their undergraduate and postgraduate studies but also in their professional life. The following quotation from one of the lecturers outlines this policy:

I think it's about highlighting from an early stage in their training the importance of reflection and enshrining that, making that explicit as an expectation of them and as part of their curriculum. Also throughout professional life enshrining it in the assessment process of what exists, and that's really what happens so appraisal personal education, plans, all these things require you to reflect so it highlights the importance of it. It also disciplines if people in to that way of conducting themselves. (Teacher Medicine Male 7)

5.1.1. Criteria for assessment

Teachers have also overtly asserted that reflective activity is assessed, and it should be assessed based on a set of criteria. The criteria for assessing reflection is based on the definition of reflection that is generally accepted within the discipline (if any), methods adopted and the emphasis they as a profession have in respect of reflection. There are different definitions of reflection within literature, which share some core components. The works of Kolb (1984), Mezirow (1981), and Schon (1987) were frequently referred to in the data but none of these methods was specifically advocated. In the context of this research, the following criteria for assessment of students' reflective works were identified.

5.1.1.1 Making connections and delve a deeper level of reflection

The finding revealed that each profession (nursing, physiotherapy, and medicine) had their own emphasis. While the nursing data showed that they put the "self" in the centre of reflection and relate all other components to self, in physiotherapy they tend to focus on critical inquiry, problem solving, and clinical reasoning. In medicine, the data revealed that making a connection between four components of *context, self, past* and *future* in relation to a specific subject is considered the focus of reflective activities expected from students (Figure 5.1). The evidence for this emphasis can be found in most of the quotations from teachers in this section. For example in the following extract the teacher expects to see the evidence that the student can give a

detailed account of a specific experience, be aware of any emotional response and explain the outcomes of reflection on that experience in an analytical manner:

I would expect to see a description of a situation that is deeper than just a report of what happened and at its most superficial, that is sometimes what we get in students reflective pieces, it is just a very superficial. Let me think of an example in the patient study which they do in second year where they follow the patient over several months” I’m very, spending time with Mrs Smith was very moving and humbling because I realised that she coped with huge infirmity in a very brave way”. I would consider that a very superficial reflection. there’s not very much gone on there as reported, there may actually have been a lot going on in reality but as written down, it’s pretty superficial so I would expect certainly a lot deeper reflection from a student in that context. I would expect more of a why were they touched and impressed by Mrs Smith’s ability to cope .what they thought about it, what they felt about it, how they think it would change their approach to patients in the future so a deeper level of analysis and synthesis.(Teacher Medicine Male 16)

5.1.1.2 Authenticity of reflections

One of the issues that were evident was the authenticity of the reflective accounts of students. The following teacher, who was one of the people who marked students’ reflective assignments, was concerned with the authenticity of the reflections and whether or not it was related to what had actually happened. I will discuss the issue of authenticity of students’ reflection, which requires a safe environment to happen in this section:

I want to see something that is authentic but I can’t prove it’s authentic. I want to see them engaging with the real life situation that matters to a patient. I want to see them thinking about and relating to themselves. I want to see them connecting with their emotions, with their inner life, their thoughts, their background because they do not just leave that at the door, when they come into medical school. That’s part of what makes them who

they are. I want to see them thinking and feeling and I want to see them applying it to the future, so its about connecting, I want to see them connect themselves with what they see with other people .(Teacher Medicine Female 15)

5.1.1.3 Documentation of competence to reflect

Clinical journal and reflective assignments as the main assessment tools utilised within medical school were considered as a document of students' ability to reflect upon their practice:

We wish them to prove that they can do it and that it's a requirement then they do need some form of documentation. (Teacher Medicine Female 14)

The following summarises the above policy and strategies:

I mean first of all teaching students the basics of what we actually mean by reflection, and getting them to exhibit that in assessments, is a good place to start. (Teacher Medicine Male 7)

Moving on from the criteria for assessment, I now explore student's concerns and perceptions of assessment.

5.2. Students' concerns about assessing and marking reflective accounts

As a part of the curriculum, students are taught about reflection and are asked to submit their reflective writings to be assessed and marked. Here I will give an account of the concerns that students have in respect of assessing and marking their reflective writings.

5.2.1. Lack of explicit criteria

As illustrated by quotations above, there are certain criteria outlined by teachers for assessing reflection but students did not report agreement that they have been well

informed about the criteria. In fact, lack of explanation of the skills necessary to be reflective was revealed to be an important deficit in medical school. Some students expressed difficulty in engaging in the reflective process either because they were not clear about the criteria of assessment and expectations of them or because they were not comfortable with the notion of reflective accounts to be assessed as they perceived them to be of personal in nature:

I found it hard probably because it is a thing I have not done before, but I also found, knowing what was required, with me in terms of being reflective thinking, very sort of nebulous, it is very hard looking down. It is very hard to know what the examiners expecting you to write. I also think because of the nature of reflective learning, it is quite a personal thing so I think it is very hard in some ways illegitimate marking it. Sitting there with a mark sheet, you're supposed to fit all 350 students in a medical year, saying you've ticked various boxes you're an effective learner, . I am not sure that's a legitimate assessment method. And so it's quite hard to know what you're supposed to write to fulfil those criteria. (Student Medicine Male 5)

When I shared this concern with one of the teachers who had a pivotal role in delivering reflective learning within the school he maintained:

It should be clear to them from the feedback that they get that but maybe your right maybe we're not telling explicitly that we're looking to mark that the process has taken place, rather than what their actual content is and that we don't really mind what they say, as long as they completed the cycle. (Teacher Medicine Male 13)

5.2.2. Marking the content not the process

This quotation shows that the issue of explicitness of criteria and expectations among students, to some extent, has been undervalued. From a symbolic interactionism point of view, people act toward things based on the meaning they assign to those things (Blumer, 1969). Proper communication takes place when there is a consensus about the meanings assigned to the same thing. The meaning of a thing is understood in

relation to the action that it produces or leads to. When analysing the data about the very same subjects from students and teachers I realised that I could make more sense of the data in the light of this symbolic interaction principle. It seemed that the teachers and students did not necessarily share the same meanings about assessment of reflection. For teachers assessment was a way to make sure that students were aware of reflection, its importance, and were equipped with skills and strategies required for a reflective practitioner. Implicit in this meaning is students' personal and professional development, and they assumed that students were aware of expectations and criteria of assessment. For students, assessing reflection was based on vague criteria, personal opinion of teachers, their preference, and subjective interests leading to unfair judgment of students' personal reflections, which, in essence, should not be assessed as good or bad. The data also revealed another unshared meaning or interpretation of action. While teachers thought they were assessing students' reflection looking for evidence that they have completed the process of reflection, students maintained that their reflective assignments were assessed looking for the content and the quality of reflection:

Reflective writing is really marked not for the content but for the process. I think students may think that we are marking what they say, but really, we are marking that they have actually done, the whole cycle. Most students who fail in that have failed to produce a plan at the end or have not considered why they felt the way they did. They just write descriptive pieces and say this happened and then often write just a single line, which will then say, and I will try to do better next time, which does not fulfil the requirements of proper reflections. So generally those we don't mark them on the depth of their feeling or whether we felt they were emotional enough or anything like that. It's, we're asking have they completed all of the stages and if they have whatever they've said then that will be marked satisfactory. (Teacher Medicine Male 13)

The following female student was not well- informed about the issue of marking in relation to process not content. This was the typical idea among student participants:

But if that's their personal opinion then why should it be good enough or bad enough you know whose, whose got a right to say that your reflection is any better than my reflection? (Student Female Medicine 8)

Obviously above teacher and student do not share the same meaning about the intention and process of assessment of reflective accounts. This represents a gap in this regard. The following extract from my research diary, might help the reader to make more sense of the gap between the most perceived reflective students and teachers about the basic concepts of reflective learning. I wrote the following paragraph after the interview with this very student participant:

This participant was very informative about reflection. She was interested in the notion of reflection. She was more mature and seemed to be very reflective indeed. She thought she was reflective and she has already completed a degree in a non-medical subject, and she is keeping a reflective diary that she is happy for me to look at.

5.2.3. Subjectivity of some teachers

Students also had concerns about the consistency of assessment criteria and impacts of factors such as interests in different methods or styles of writing, and some teachers' skills in relation to reflection:

I thought, okay, that's obviously the right style to write in , they don't want it as academic, they want it more informal so the next time I wrote the chronic patient in exactly the same format .I made the whole piece of work more approachable, and I got it slammed. This is too unacademic. All because a different person has marked it. And then when I got it remarked, somebody else said, oh no, this is brilliant, because it all comes down to their own personal style and I think unfortunately when that starts happening students then get very despondent about reflection. (Student Medicine Female 8)

There are other teachers who find you very reflective and I think different people find it kind of mixed signals from the different lecturers. (Student Medicine Female 9)

5.2.4. Managing emotions and subtleties of reflective teaching

This study highlighted the issue of managing the emotional and judgmental aspects of teaching reflective practice within the medical school as more apparent when compared with other two courses under investigation. This showed itself in the divergence of opinions and meanings in relation to reflection in general and assessing reflective accounts in particular. It could be argued that in the disciplines, which have just newly introduced reflective learning to their curriculum, ensuring a certain level of preparedness of teachers and facilitators to teach and facilitate reflection and manage different aspects of it, is of paramount importance. In fact, mere interest in reflection, being an experienced professional and having an acquaintance with the notion of reflection are necessary but it might not be enough to handle such a complex emotional and cognitive phenomenon:

I have had people that have written stuff in reflective learning saying they have found it quite stressful. Then when it comes to being marked and their tutor has looked at their portfolio they get marked negatively, saying, "oh you're a very stressy person. You haven't found it easy, we thought you were very meritorious, but now looking at this, you obviously don't deal with stress very well, that's something you need to look at. Which is fine, but then being marked down on something that you reflect in is quite dangerous, because then people just go, "Fine, I'm not going to bother reflecting properly," (Student Medicine Female 8)

Students seemed to be reluctant about documenting some of their true feelings and emotions. It seems writing, for students, is difficult in general and it might be even more difficult to write a reflective account. They might not be able to write very well therefore they fear causing misunderstandings and being judged for their thoughts and feelings. As is evident in the following quotation they need a safe environment without the fear of being judged when they are not there to explain and clarify the things, which is the case with marking written reflections. They generally asserted that they would like to talk about such issues rather than writing and submitting them. Arguably, they preferred a verbal environment of reflection where they had more control over the consequences of their reflections. They felt that in such environments

they would be more able to safely reflect, check the listeners' understandings, and make appropriate clarifications and corrections:

I prefer not to write it down, because you can't get all your feelings on paper, and it can be misleading to actually how you do feel. I prefer just to think about it and then, quite often I'll like chat to someone, one of my colleagues or one of my peers or chat to the teacher, or chat to my family or something.you can make yourself out to be not very nice person, if you write down exactly what you think sometimes. Even though at the end you did the right thing, some of your initial thoughts might not be very nice.
(Student Medicine Female 4)

It did not seem that all teachers were always empathetic and were very prepared to address these concerns. This arguably can be attributed to lack of time and resources, lack of training about the subtleties of facilitation of reflection (which is a finding of this study) and in some cases taking reflection at its face value. The following teacher seemed to be aware of the need for a controlled and safe environment for reflection but in the same time appeared to be ready to ask students to make some sacrifice for the sake of their professional development, regardless of their concerns:

I think I would defend the university and say that it is useful not something that you necessarily have to broadcast to the world. Or in your innermost feelings, but in a confidential and controlled setting, that that's not, you know, it's not being widely circulated. It is just going, you know, in their first year, they write reports about pregnant mums. And they ask them all sorts of personal questions and then put them down on paper, and be prepared to do the same themselves. It is about professional development.
(Teacher Medicine Female 14)

5.2.5. Simplification

In fact, a tendency or attempt to explain reflective practice, which in essence is a complex phenomenon, by a simpler definition was not rare, and justifying its

unresolved concerns and questions by means of some types of simplification of the issue (as seen in above quotation) seemed to originate from this tendency. That is, instead of dealing with an issue reducing it to an unimportant and negligible matter.

The following teacher may not be wrong in simplifying reflection, or some forms of personal reflection, to be exact, as mulling over the things but, undoubtedly, this is not the only activity that we expect professionals to do to enhance practice and secure self-development:

Just shows them hopefully that it's not some magic complicated thing, and it is actually I think what many of us do in inside our own heads at some level, all be it, in the shower,(Teacher Medicine Female 15)

Some participants of the study were concerned about this approach and found it just ruminating about the events of the day that was less likely to lead anywhere:

*I have concerns about reflective practice that isn't guided, isn't structured, and doesn't lead to the development of new or reorganised knowledge and I think too many people believe we're practising reflectively by just sitting having a cup of tea with someone mulling over the events of the day.
(Teacher Physiotherapy Female 6)*

5.2.6. Fairness of marking

However, some students felt that they were reflective anyway, but the issue of marking reflection did not seem fair to them because they thought there were people who can write accounts that are more expressive without actually reflecting and can get a better mark:

I think half the point about reflection is that it's for your own personal use and just for somebody else to be checking that you'd reflected almost feels like you're at school and a teacher's come along and checking you've done your sums correctly. Whereas you cannot always prove how much you have grown from an incident or not, and some people are better at writing down their thoughts than other people, and yet that doesn't mean they've reflected

any less. But of course for people that are more eloquent, that are more able to write something down might get a better mark and that just seems a bit to me it seems a bit unfair. (Student Medicine Female 8)

5.2.7. Potential impacts of unfair marking on future career of the students

Fifth year students were more concerned about the potential negative impact of unfair marking of their reflection on their future career:

The most annoying thing is that they say, you have to do a piece of work, and they say, of course you must reflect, that your reflection is going to bring you marks and have you're marked up or marked down. Now, in fifth year, we are going to be ranked, and wherever you rank is might affect you getting a job so of course, your reflection becomes very important, but then what happens if your reflection isn't good enough? . (Student Medicine Female 8)

5.2.8. A unique assertion by a teacher

Finally, the following point which was made by only one participant, made me think about undiscovered aspects of marking in general, and marking reflective writings in particular. As a lecturer reflecting on my own practice in marking students' exams, I felt I share the experience expressed here. Certainly, there are ethical and moral issues to be considered if a fair and unbiased marking is to be performed:

The more I do reflective marking, the more I realise that there is an element, if you're the first one in the pile, or the last one in the pile, it may make a difference to how the marker marks your piece of work and it very hard for it not to make a small difference. (Teacher Medicine Female 15)

In the following section, I am going to explain how student participants addressed these conflicted issues via adopting a strategy called going through the motions.

5.3. Going through the Motions

Above quotations show that marking reflective accounts as with any form of assessment, is a real subject of interest and concern for students. I approached data collection and analysis using a grounded theory methodology informed by symbolic interactionism. Polit and Beck (2007) defined a grounded theory approach to the main concern of participants as follow:

“Grounded theory tries to account for actions in a substantive area from the perspective of those involved. Grounded theory researcher seeks to understand the actions by focusing on the main concern or problem that the individuals’ is designed to resolve (Glaser 1998).The manner in which people resolve this main concern is called core variable. One type of core variable is called basic social problem (BSP).The goal of grounded theory is to discover this main concern and the BSP that explains how people continually resolve it. The main concern or problem must be discovered from the data” (p. 230)

This was exactly the approach I took to discover the main concerns of participants and the ways they resolved their problems. Figure 5.2 illustrates the core category of assessment of reflective accounts and its properties, dimensions and associations.

5.3.1 Importance and different meanings of assessment

From a symbolic interactionist’s point of view, students associate reflection with marks (the meaning they assign to reflective writing is getting a good mark). That is, getting a good mark becomes more important than actually reflecting and benefiting from reflection for their personal and professional growth. When a subject is being marked and the mark they get is influential in their progress they are likely to provide the quality of work that they believe the assessors want to see. This leads students; regardless they like or dislike reflection, to adopt the strategy of going through the motions. Constant comparison of the data from students and teachers showed that going through the motions is the main strategy that most students select to address the unresolved issue such as not well-comprehended expectations, inexplicit criteria perceived or experienced by them and the importance they place on getting a good

mark. Students and teachers were aware of the presence of such strategy. Although not explicitly discussed going through the motion seemed to be working for both parties. The aim of this strategy is that the students secure passing the exam and getting a good mark. In order to be able to do this students try to realize what is expected and how it can be achieved. For teachers going through the motions, although not desirable when compared to true reflection, shows that some thing is going on,(the aims are partially achieved) there is a cognitive thinking element in it thus it is perceived as a form of practicing reflection.

5.3.2. Student dilemmas

Students reported encountering a dilemma whenever they had to submit a piece of reflective writing for assessment. For some this dilemma was related to submitting true reflections, [containing their innermost feelings -sometimes unpleasant, embarrassing- evidence of clumsiness and confusions in relating theory and practice or in respect of reflection] versus the need to impress the assessors by proving competence, being reflective and showing that they are able to see out of the box. For others the actual dilemma was between not being able to understand the notion of reflection and the actual need to do something to prove so.

Both groups seemed to have adopted the strategy of going through the motions to reach a common goal, which seemed to be getting a good mark:

I am writing it because I have to produce a piece of work, which is going to be marked eventually, I like it but to be honest writing is just because you have to do it, you know ,and you learnt what you have to do.(Student Medicine Male Overseas 17)

5.3.3. Self-censorship

A mild type of self-censorship was evident in the data provided by students who felt they were reflective. These students either were not sure that the assessors would value their true reflection if submitted or, as mentioned above, they did not feel safe to submit their entire actual reflections. Not always very nice feelings follow, as might be the case with any form of self-censorship:

I am not too sure what I submitted was what I had actually reflected on. I suppose it's the case of just looking through and seeing what is needed at the end I think, but it doesn't feel very nice any way (Student Medicine Female 18)

5.3.4. Making artificial connections

It seemed that students were honest about not being honest enough when producing their reflective accounts for assessment. Lecturers have devised a method (this will be discussed elsewhere) asking students to make connections between self, context, future and past (figure 5.1). Making artificial connections by tailoring their reflections was a component of going through the motions. Students seemed to have contrived connections that they see between the components or they did not see them the way they illustrated:

This is the third year I hear they are talking about it but I am still struggling what it is really about. You think it is going to be so easy but actually, it just isn't. Making connections in that three phase reflective cycles just does not make sense to me, honestly but you can always find something to say. (Student female Medicine 18)

The ways some students can always find, if not reflecting on reflection and learning how to reflect, is playing a game as noticed by the following teacher. There was evidence that this has been a matter of concern or at least an issue to be discussed between the teachers:

I very much think it [how to play a game] can be learnt and we definitely had a discussion about students who have put the "I have learnt in the future..." and you really feel that they are just doing it and not getting the point, playing, playing a game. (Teacher Medicine Female 14)

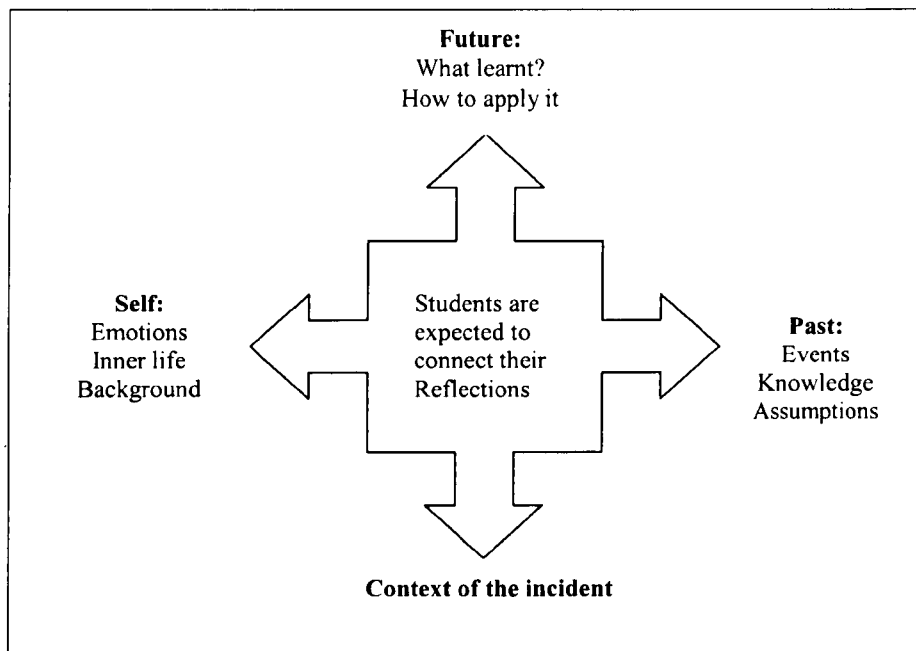


Figure 5.1 illustrates the emphasis that medical respondents put on connection

5.3.5. Using buzzwords

Other component of going through the motions appeared to be learning and using buzzwords, which are language indicators of reflective thinking. Students may use words and phrases such as “reflecting back I found out that ..., I felt ... this incident made me reflect ...it was very impressing when...What I have learnt is...I will try to do better in future”, .Certainly learning the terminology of a subject matter of study is a part of actual learning. However using terminology on its own, even correctly, nether proves nor rejects the actual learning that might have happened. Students craftily learn the catchwords and use them in good time in combination with other parts of the strategy of going through the motions to impress the lectures:

Last year, I got, I'm sure most of my colleagues are the same, I got quite adept at writing waffle to sound good. We learnt buzz words, from the lectures we had that were relevant to that sort of subject and the general impression we gave – you get the hang of reflective talk and you know the sort of words that they'd like to hear. They don't necessarily mean anything and equally even if they did mean anything they're not necessarily an

accurate reflection of what we really thought, but they were an accurate reflection of what they actually wanted to hear. (Student Medicine Male 5)

The pattern of using this strategy declared by students (in the context of this research), was acknowledged by teachers, as one of their observations:

Students can be very strategic about how they approach assessment and if a student and I know that in the first and second years with the family study and the patient study, where there was a reflective element. X.Y. and colleagues put a lot of effort to explaining to the students what's required so the intelligent and strategic student can see how and what they're supposed to write to get good marks and can just reproduce that without necessarily anything going on (Teacher Medicine Male 16)

5.3.6. Writing for striking impact

The third component of going through the motions appeared to be writing for a striking impact. This involved choosing negative or difficult and sometimes unexpected cases, emotions, actions, and consequences to make their reflections more significant and striking. Using negative cases seemed to be in line with the more prevalent trend of reflection on negative rather than positive events. In fact, in the context of this research most participants started their definition of reflection with the question “what went wrong?” Instead of “what happened?” The latter obviously encompasses both negative and positive cases:

I don't know whether I am right but I think they like to hear more about negative cases, you know, about the problems. You don't always resolve the problem do you? (Student Male Medicine 12)

I think there is a tendency to think we can only learn from the negative but I think we can learn a lot from positive things too. (Teacher Medicine Male 7)

What were kind of the different parts of the situation that made you think in different ways, what were the kind of negative parts and the positive parts

and then did your mind change from the way you initially approached. I tend to write kind of negative parts of situation, you know, you can write more about it and you want it to be more appealing. (Student Medicine Female 4)

5.3.7. Reflecting on past and negative events

In the context of this research, reflection carried a negative undertone and related to past events. In other words, I was frequently witnessing a tendency among participants relating reflective activities mostly to the events that “went wrong.” *What went wrong* are the three words that indicate this approach. Nevertheless, when I asked them explicitly about this, participants acknowledged that reflection can and should relate to the present time and positive events as well. Reflection on the job at hand as termed by Schon (1987) as “reflection in action” is not an easy task, especially for novice professionals. In this type of reflection decisions have to be made swiftly, time is too short and the need for previous experience is paramount.

Nonetheless the only point I want to make here is that I got an impression that the tendency toward reflection on action (related to the past events) and on negative incidents to be more common because reflection has been associated with learning from experience and from our mistakes (negative cases).

5.3.8. Negative culture about reflection

Another factor that might have contributed to the category of going through the motions could be a negative culture in medicine about reflection. The impact of this negative culture on students approach to reflection particularly in clinical settings was evident from the data gathered from students and teachers. Both groups, for example mentioned surgeons as people who were reputedly against the notion:

I think they [surgeons] think it is an utter waste of time. I think they think its woolly nonsense its there to distract us from learning proper things we actually need to know (Student Medicine Male 5)

This clinical teacher was well aware of this culture in clinical settings. He explained how some clinical teachers thought it was a waste of time and advised students just to tick the boxes and do not waste their time on it:

Then trainee is not going to get a positive experience out of reflective learning and of course, those are quite widespread and you know attitudes within the medical profession. So there is quite a lot of negative culture within medicine towards that [reflection] (Teacher Male Medicine 3)

5.3.9. Reflection -may be not for all

There are various examples throughout the data of evidence that teachers have observed that a proportion of students do not get the idea of reflection as they are supposed to. They attributed this to factors such as personality type, maturity, and learning style. Implicit in this observation is that reflective learning is not necessarily, for all i.e. we should not expect all students to become reflective practitioners:

There will be a proportion of people, hopefully a small proportion, who will just do it because they have to and do it in a way that they hope you will just tick a box. (Teacher Medicine Male 16)

With a room of 20 students in my seminar group, I'm very aware that even by later on in second year there is a proportion of them who still haven't got it, still can't do it, still can't come up with an example, still don't think it's a useful tool. (Teacher Medicine Female 14)

The strategy of going through the motions prevents teachers from identifying dimensions of this group of students. In other words, the strategy of going through the motions is working for most of those who adopt it. The fact that teachers are not very concerned about this strategy implies that for them it is a working strategy as well. It indicates those students are at least familiar with the notion and the process:

We cannot tell how many of them are doing this in a very formulaic way, how many of them are simply going through the motions and actually did they not have this internalised way of reflection we cannot tell. We are marking them on things; we do not know who is bluffing it. however to me that matters far less because if we are teaching the steps ,if we are teaching them an approach when they are very immature if in time to come they repeat this

thinking process and it becomes at some level internalised, five years later natural, then we've done our job. So I'm not too worried if for some of them it's a bit beyond them and it is a little bit formulaic if it lays a foundation of something they can use in later years naturally. (Teacher Medicine Female 15)

Of course, teachers were fully aware of the differences among students in respect to their reflections and the depth and quality of their works. In other words, they did not believe that all students were just going through the motions and there were not qualitative differences in different examples of reflective accounts submitted for assessment. Not all student participants claimed they were not reflecting and just played a game. Teachers reported observing good examples of reflective writings:

Some of them write deep and quite meaningful stuff that you really feel that they have got the point, and they have actually learnt something and they have used the reflective model to learn. (Teacher Medicine Female 14)

5.3.10. Going through the motions seems to be working

They also maintained that even adopting the mechanism of going through the motions could be interpreted as a mental exercise for reflection. Going through the motions so craftily that a teacher would have no choice but to accept the writing as a reflective account needs some elements of mental activity and knowledge about reflective process that teachers thought was valuable in itself:

Some of the students work out that if they put, I have learnt, something not particularly meaningful, followed by in the future, this will make me a better doctor, it is hard not to give them the mark. They have put something about what they have learnt and they have put something about in the future, but you have a feeling that they have not really got the point. (Teacher Medicine Female 15)

Lecturers, course designers, and medical educators have noticed above-mentioned issues. The following section explores the trends of change in the way reflection is being perceived and treated.

5.4. Trends of change in the medical schools' perception of reflective learning

In a dynamic responding to the above concerns and awareness of unresolved issues, teachers and policy makers involved in reflective learning activities in medical school appeared to be trying to find a better approach which could address the concerns and rectifies the problems identified while introducing reflective learning initiatives. Data related to the need for a dialogue between teachers and students about reflective learning, in other words, reflecting on reflective learning was evident throughout the study. Such dialogue whether in face-to-face group discussions or on an electronic web log could help both parties identify potentials and problems and take them on board and find better solutions. Without a dialogue in a safe environment where students and teachers share their main concerns and ideas, try and error attempts and programmes coming from above would appears inevitable. In spite of increasing awareness about unresolved issues there was not evidence in the data that such dialogue do exist rather most of the quotations examined in this chapter indicate quite the opposite. Of course, there are some forms of unplanned complaint and defence culture but it has not evolved to a critical reflective forum aiming at change and enhancement.

In his answer to my question regarding such a reflective dialogue among students and teachers to enhance reflective learning, a clinical educator who was involved in teaching reflection stated:

Well can I tell you what is happening at the moment which doesn't work. And that is a top line approach, designing a portfolio without involving the students the trainees. I mean the portfolio for F1 F2 doctors there has been a deanery one and a national one and both of them have been designed with minimal impact, input from trainees, that is an example. (Teacher Medicine Male 3)

The trend of change manifested itself in the teachers' endeavours to find alternative ways of facilitation of reflection, a perceived image of reflection in curriculum as an evolving entity and trying to change the negative culture against reflection within the school. These are explained here.

5.4.1. Alternative ways of facilitation of reflection

The need for alternative ways of development of reflective activities within medical school such as forming discussion groups, or electronic forums was also suggested by teachers as a way to address unresolved issues mentioned in this section. Thinking about alternative ways of reflective teaching and learning implies that teachers are aware of the shortcomings of the current approach:

I do think that even if somebody has just gone through the motions of writing something down so it looks reflective something must've happened even a little bit must have happened in their brain. You don't write stuff down without some cognitive processing going on so I would argue that even if the students are just in their own mind doing it just to get through the assignment, there must be some reflection going on there to have actually written it down. So, I'm less concerned about that lot than the students who can't actually articulate it terribly well and maybe that's where maybe face to face or group discussions come in. (Teacher Medicine Male 16).

I guess you could see that the younger generation or generations might be more inclined to use electronic means. Chat rooms, blogs all sorts of things blogs. I suppose are good examples .They can be quite reflective but if the framework and the time that people need to have built in to their working day, if we are going to expect people to reflect systematically and effectively. (Teacher Medicine Male 2)

Maybe somehow enhancing their verbal reflections and making sure that they are being fully utilised is a better way of doing it than getting them to write stuff down on paper, which for some people works, and for a lot of people doesn't. It seems artificial to them. (Teacher Medicine Male 3)

5.4.2. Reflection in curriculum as an evolving phenomenon

Reflective learning in the medical school has never been a fixed phenomenon during recent years. It has been evolving over time, some aspects of the movement such as portfolios or some initiatives have changed. They have devised their own method of reflection; they have developed electronic portfolios to support reflective approaches. The development of ePortfolio at Newcastle University has been followed since 2003. The result of such developments, as far as I am aware, has been disseminated in two book chapters (Cotterill *et al*, 2006; Cotterill, Bradley & Hammond, 2006) and 19 conference papers. One of the purposes of developing web-based portfolios has been to support reflective approaches (Cotterill *et al*, 2004).

They seem to have been listening to the students in changing the features or the direction of their reflective activities. The following is an example of this trial and error type of initiative:

To be honest, the entire episode was quite too farcical it was like a scene out of 'The Office' literally, none of us was taking it seriously, but to be honest it was absolute, utter nonsense. I think it was farcical that was thought of as a sensible thing to do. I think that is a very good illustration of the dangers of this getting too far, that was really odd that somebody thought that was a good idea. I mean, luckily it then go, we complained about it, and it got moved from the next rotation. They did not have to do it. (Student Medicine Male 5)

5.4.3. Culture change

The following comment made by a teacher who was involved in teaching reflection, in respect of implementation and conduct of reflective strategies in the medical school indicates a trend toward a culture change in two directions. Firstly, they are changing and revising their own perception of reflection as people who delivered it in the curriculum based on feedback from students and teachers and getting more and more experienced about the subtleties of teaching reflection to students. Secondly, they are trying to change the negative culture mentioned above within the discipline:

I think our perception of that has changed over time in that, we initially when we were assessing certainly portfolios in the clinical years, we were grading them or were using them as part of the grading process. So students were presenting that at the end of a rotation and people were saying, "Yes, this is a very nice portfolio you can have a merit, now we're not grading them. We are just expecting students to have completed them. I think early on, the grading was to drive students towards using them and they would not. We felt like all things assessment drives learning and they wouldn't use their portfolios if they weren't being graded. Now I think we have changed the culture. I think there is a much bigger acceptance of portfolios across the whole years, all the people now in the clinical years are saying students do not complain as much about using their portfolios. They seem to accept it (Teacher Medicine Male 13)

It could be argued that the bigger acceptance observed by this teacher is partly related to the fact that students and teachers have now understood that reflection is becoming a part of medical education discourse, undividable from life long learning and integrated into medical professionalism. Therefore, they know that, whether or not they like it, they need it in their professional life:

I also think that future professional practice enshrines it as well with the move towards appraisal and learning portfolios that we have in General Practice, personal education plans. I think all of those sorts of things encourage a reflective approach that is about being able to analyse where your gaps are, do something about those. So that's very much the reflective approach. This is something that we also tell our students as well, that actually this whole process of reflection is something that is now an integral part of being a practising doctor. It's not just about the student progress, this is about your life long progress. (Teacher Medicine Male 7)

Reflective practice necessitates different attitudes and approaches from that of positivist approach to knowledge that has dominated medicine for a long time. Therefore, culture change takes time and effort from the side of educationalists and

pro-reflection teachers to make it happen. I saw indications of that change as discussed above.

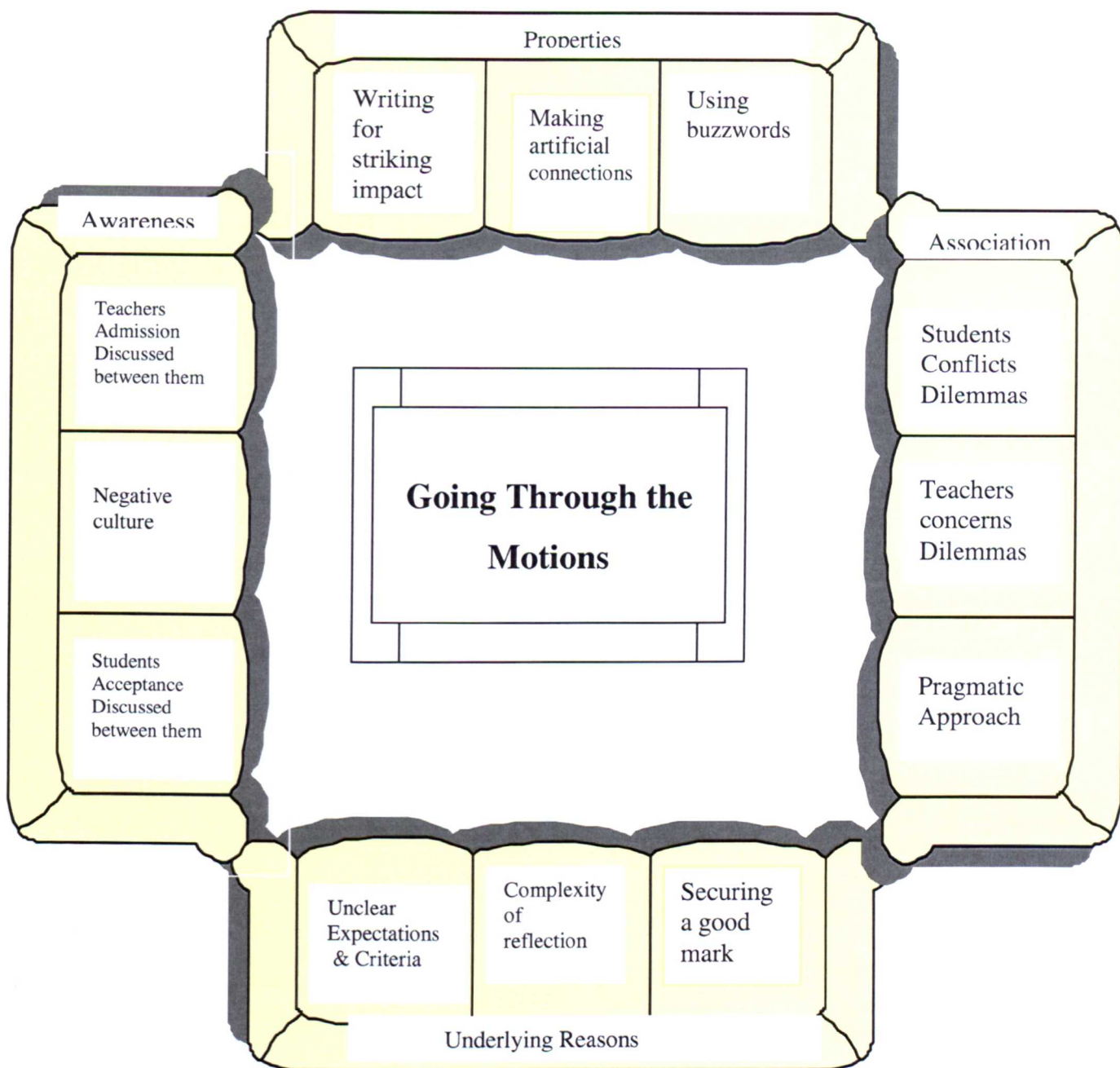


Figure 5.2 depicts the category of going through the motions, its properties, underlying reasons, and other components

5.5. Summary

The process of assessing reflective activities of students is a multifaceted complex phenomenon that affects other aspects of reflective practice within medical school. The core category *going through the motions* involves students' strategic decisions to impress assessors of their reflective works in order to secure a good mark. The category was explained and defined by its properties (writing for striking impact, making artificial connections, and using the buzzwords) and dimensions (underlying reasons, awareness, and associations).

Medical school has made it clear for the students and staff that reflective learning is a part of the curriculum and that it is assessed. The data showed that this has been widely accepted whether or not individuals like it. Medical school does not advocate a specific model of reflection. However, there is an emphasis on making connections between students' subject of reflection with past, future, self and put it in the context of real and authentic practice. That is students are required to relate their reflection to their experiences, knowledge and assumptions gained in past, self in terms of emotions feelings and background, future in respect of the implications of reflection for future practice and finally relate all these to the context of real practice.

Although there has been enormous efforts and initiatives, these expectations and criteria for judging reflective writing remains unclear for most of the students. Over and above, the students encountered dilemmas and conflicts when they wanted to submit their real reflections for someone else to read while they were not there to clarify and defend their feeling, thoughts, and decisions. They felt the criteria for judging reflective account were subjective and vague. The students felt pressurised to submit something to be assessed thus they adopted a strategy by which they could secure a good mark, fulfil the requirements and resolve the unresolved issues such as perceived unfair and illegitimate assessment, and assessing the content not the process. Both students and teachers were aware of the presence of the strategy of going through the motions. This awareness was not discussed between the two groups but certainly, it has been discussed within groups of students and among teachers and there have been some forms of complaints and defences among students and teachers. The study revealed the need for a critical reflective constructive dialogue among teachers and students.

To a greater or lesser extent, students and teachers reported that this strategy was working for them. Attention need to be turned to the point that just playing a

reflective game and going through the motions is not a policy of the medical school and is not advocated by teachers. However, in a pragmatic worldview, they acknowledged that they were aware of its presence and they felt that it indicated, even minimally, some reflective and cognitive activities and showed students familiarity with the process. Moreover, they admitted they could not tell who is just going through the motions.

In a noticeable trend to change, teachers and policy makers involved in reflective teaching appeared to be trying to overcome some of the concerns and problems investigated in this study by finding alternative ways of reflective teaching, culture change policies and revising reflective components of the curriculum.

As discussed, the issue of assessment of students' reflective accounts created more data and debate in medicine when compared with nursing and physiotherapy. This does not necessarily mean that there is not an issue about assessment in those two courses. No data about assessment in nursing and physiotherapy can be tentatively attributed to the level of maturity of undergraduate physiotherapy and nursing students in comparison with older medical students in higher stages.

The younger students are more likely to accept what is delivered without critical evaluation and questioning. Other possible reasons could be negative culture and mixed signals about reflection in medicine.

However, in this chapter I have presented the core category of going through the motions (Figure 5.2) as the basic social problem, which has direct implications for practice summarised as follows:

Firstly, practitioners may reflect on how they can address the underlying reasons for going through the motions. It seems the most important one is the unclear expectations and criteria for assessment. This variable is likely to be controlled, albeit to some extent, by making the criteria and expectations clear and explicit for students. The findings indicate that identified criteria for assessment were only found in the data collected from the teachers. This shows that although the teacher had some explicit criteria for judging reflective accounts, the students were not sure about them and never mentioned them in their interviews with me. On the contrary, they described the criteria to be vague and subjective.

Secondly, it seems important to increase students' awareness of the existence of different and conflicting attitudes within the profession in terms of reflection. It appears to be appropriate if practitioners discuss different epistemologies of

knowledge, their value for practice in different contexts and their compatibility with reflective practice. In this case, students may make more sense of the reasons why some people guard against reflective learning and why others embrace it.

Thirdly, an open and ongoing discussion and forum would contribute to practitioners to resolve the unresolved issues and students' conflicts and dilemmas by making them explicit and reflecting on them. This can be in any form or shape, but considering the young generation's tendency toward electronic means, a website appears to be the best method to nurture a constructive and reflective environment to resolve some of the conflicts and keep the lines of communication open.

Finally, nursing has integrated reflection into all or most of the modules and is using reflection in the assessment of other subjects. In addition, verbal tools of reflection (story telling, group discussions) are encouraged. Using these two strategies might be helpful in resolving unresolved issues in medicine such as students' dilemmas and self-censorship.

Chapter Six

Findings: Understanding the Complexity of Reflective Teaching and Learning

Introduction

This is the last of three chapters that explain the findings of this research. The preceding two chapters have discussed the process and outcomes of socialisations into reflective practice in the three courses under investigation

In this chapter, I explain how participants understood and tried to make sense of the multifaceted and complex nature of reflective teaching and learning in the context of academia, clinical medical and healthcare education. I endeavour to explain what participants thought about teaching and learning reflection considering the push for using reflection, the wealth of literature supporting it as an important educational tool and their own experiences and observations.

6.1. Reflection as a subject to be learnt and taught

Although many commentators maintain that reflection is a learning strategy that can be taught by means of certain tools such as clinical journals, action learning groups, diaries, and sketching (Paterson, 1995; Williamson, 1997; Heath 1998; Willis, 1999) some open a debate regarding certain people who are actually incapable of reflecting (King & Kitchener, 1994).

Most of the participants of this study, in general, felt that reflection is a skill that can be taught and learned. They believed the importance and function of reflection as an educational tool could be easily learnt. It was highlighted in the course of the study that the process of reflection that enables students to connect different components of an experience can and should be taught:

I think you can teach them[students] the function of reflection and you can teach them the process ,what you can't do is change their personality type whether they are deeply introverted and introspective, or whether they just are living for the moment and don't bother (Teacher Medicine Male 13)

As the above quote indicates, the teachers thought that the ways people perceive the world and make decisions, are determined by their personality types, which is not something that is going to be changed by reflection.

The teacher participants acknowledged that according to their own experiences with students, some students were better in terms of embracing a reflective approach than others. They confirmed that all people, regardless of whether they were perceived as reflectors or not, needed training and structure to reflect on practice:

I believe it is something that has to be taught. I believe that some people are naturally better at it than others are, but I believe that all people should be taught about it. (Teacher Medicine Male 7)

Interestingly participants of this study largely did not mention any literature about reflection to justify their own viewpoints about different aspects of reflective learning but instead, they talked frequently about their own personal experiences. This is evident in the following comments from nursing teachers about developing reflective abilities in self and others:

I think you probably can teach them , because I wasn't a reflective thinker, or I didn't perceive that I was .But I would say that I am now and it's through education that I've now taken it on board . (Teacher Nursing Female 1)

I cannot tell you how. I can only say that I think that made them [students] much better nurses than they would have been if they had not been taught to use the skills to reflect. I cannot prove that except most of them have done very well (laughs) and gone on and reported back. (Teacher Nursing Female 2)

Discussions on teaching and learning of reflective skills or encouraging the development of such skills in others was not however limited to the teachers. Student participants had also their own comments. The following medical student thought that

she had obtained the ability to reflect over time. After four years since her first encounter with the concept of reflective learning, she reported that she could make more sense of it. This could be partly related to the experience and practice with reflection that students normally get during the undergraduate years and partly due to accumulation of knowledge about their subject of study, which gives more ground to reflect on:

I am in the fourth year, maybe I can reflect on that a bit more; things that they [teachers] say will make more sense, or make different ideas in my head. I think it all builds up. I think it would be interesting to have, to continue that kind of personal education as you continue through medicine, so I think they do teach us stuff, but I don't think it's quantifiable.

(Student Medicine Female 8)

Students in other courses endorsed this observation. The following third year physiotherapy student distinguished between reflection for its own sake (sake of expectations of school or teachers) at early stages of the undergraduate course, when students are not yet well- equipped with insight and skills required for reflection on practice and purposeful reflective thinking on practice in the final years of the course:

I think when I first started doing reflective practice it was reflecting for reflection's sake. As I have gone through the years as a physiotherapy student, I learnt how to reflect purposely to help my own personal development rather than just doing it for learning's sake. (Student Physiotherapy Male 11)

On the contrary, for the following male medical student it was not necessarily the case. He maintained that reflective learning was a life skill that could not be taught. He also thought that reflection was something that only certain people with certain personality types could do properly so encouraging it in all would be a waste of time:

They are trying to teach a life skill, you are trying to teach something that I am not convinced can be taught. I understand the point of it. I understand that it is a valuable skill, in some ways. But I think the theory of us all being

lovely people who sit down after a session with a patient think, did I handle that well, could I handle that better, I think that would be great but if we are that personality type we're not going to be doing it properly regardless of what you teach us. (Student Medicine Male 5)

The above quotation shows that the medical school had not been able to convince all of the students that reflective learning is firstly some thing that could be beneficial for all practitioners regardless of personality type, and secondly the medical school did not aim to address people's personality types. This could arguably be attributed to the lack of a bilateral open discussion in terms of reflection within the medical school between students and teachers, which was discussed in previous chapter.

As is evident from the above quotations, findings of this research indicate that students' ability to articulate their thoughts, reflect on their learning strategies, and reflect on reflection *per se* had developed over time. This was reported by teachers who had been observing them throughout the courses, and by students themselves. It was also evident for me as a researcher in my formal and informal discussion with students from different courses and at different times of their undergraduate course. An extract from my research diary may help to make this observation more clear:

I have almost finished data collection now. I have interviewed students from medicine nursing and physiotherapy courses. I have been talking to them before and after the interview and have been in contact with some of them for a while to access their reflective materials such as diaries or assignment. The differences I have witnessed between those who have just started their courses and those who are in their final years are amazing. I have witnessed the effects of the magic combination of education and time, which is aiming at turning copper into gold. Final year students seem to be more mature, articulated, thoughtful and more able to consider wider context of practice. (Research Diary Extract)

Albeit there were teachers, who thought it was not an easy task to teach reflection because of its complex nature but they also maintained that it could be learnt by example, and through role modelling mostly in clinical settings. Firstly explicit in this perspective is that the university should provide students and staff with a clear

rationale for using reflection, set up appropriate facilities and structures and show them good role models of reflective practitioners. Secondly, it is implied that the students as adult learners have responsibility for their own learning and they may choose whether they want to reflect on practice authentically:

I say you cannot teach it. I think you can point the way. You can provide a framework and a rationale for reflection, why we do it? Why do we want to encourage you to be a reflective person? What do we mean by reflection and how might you go about it. But at the end of the day I think students people have to do it for themselves, to find out it's of benefit if they're to keep on doing it genuinely. That is where the role models come in. If you happen to be a learner with a tutor, a mentor, or a teacher who is reflective, and wants you to be as well and gives you some space and some encouragement to do it, then you are more likely to do it. Then either, not getting any sort of encouragement etc or even worse getting some hostility about it Oh, do not bother with all that nonsense (Teacher Medicine Male 16)

However, teachers seemed to be aware that students were different in respect of their personality type and their approach to and ability of reflection. In a pragmatic approach, they appeared to have accepted and acknowledged this divergence:

In reflection, we are not going to make everybody reflective and though some people are going to hate it but we have given them a tool that they may just go through it and some will find it more helpful than others will. I think we just have to accept that. (Teacher Medicine Male 13)

They are all going to be different and they all have different personalities and some will be naturally reflective, others will not be or will not be reflective at all. The way I view that is that, we can teach them the process like we would teach them any other skill like CPR or any other skill and you say, "These are the stages. You must go through them." (Teacher Medicine Male 13)

In my interviews with teacher participants, they reported that overseas students seemed to have more problems with the concept of reflection than home students. This was not consistent with my very limited observation with this group of students. The only overseas students that I was able to interview were a female medical student from Nigeria and a male medical student from Malaysia, both of whom appeared to be at the same level with other British students. Although my limited encounter with overseas medical students did not confirm that they were less reflective, some lecturers had implied that they were. In my research diary, I wrote:

There might be a language barrier to express the self for the overseas students whose first language is not English. In addition, it may be a cultural thing. The issue of compatibility of their cultures and values with basic assumptions of reflective practice might be an issue here. (Research Diary Extract)

My assumption was partly in agreement with what a teaching participant mentioned in his interview with me:

I think overseas doctors who come here can find it[reflection] very hard initially they do not seem to be aware of it at all ...It could be partly the language but it could also partly be because they are used to a didactic style of teaching. (Teacher Medicine Male 3)

After this interview, I realised that I had not thought enough about learning styles and their relationship with reflection at that time. However, as an overseas student it was interesting for me to know more about this because I was keen to examine the potential benefits of introducing reflection and its compatibility with Iranian culture. I envisaged that some problems might occur if any attempt is made to transfer a Western educational concept if it is not critically examined in advance and not filtered through local culture (Minnis, 1999).

The following quotation from a physiotherapy teacher indicates that some of the participants considered reflection as an inherent cultural trait of Western society. This participant was not the only person who was not sure whether reflection is a taught subject or not but he related it to the culture of questioning and seeking continuous

achievement and stated that it is to some extent learnt and built up through the educational system:

*Reflective thinking is probably a taught skill, mostly taught .I think there are probably a degree of critical thinking within everyone. That is if you like a natural ability .it is not just about university teaching, it is about how you have developed from primary school, probably it is a fundamental skill. You are always thinking of why you are doing certain things, why is this happening. and why is that happening, why did you perform like you did. Throughout school life you are taught to reflect even if you do not get the theory you are asked the questions. I mean we're in a output results driven kind of society now that we ask the question all the time, continue and improvement is a way of life for most people, how do you make better what we've just done. So I think it's there in every thing that we do so I think whether that's taught or whether it's part of kind of culture, I don't know.
(Teacher Physiotherapy Male 9)*

As indicated by most findings of this research, reflection is not very common among professionals and reflection needs learnt skills, time, commitment, and effort to take place. If so, the above observation made by the physiotherapy teacher should not lead us to think that reflective thinking is a straight product of the educational system from primary school that is instilled in people. Rather it could only be interpreted as a sign of a cultural component of reflection, which operates as essential bedrock for reflective learning.

To summarise, most participants felt, that reflection was a skill that could be learnt. Some thought it could be taught like any other skill, while others were not sure if it could be easily taught to all in the same way. All participants observed that some people are more comfortable with the concept and process of reflective learning than others are. Overall participants acknowledged that teaching and learning reflection is a multifaceted complex phenomenon, which demands careful examination and consideration of its different components. They related the issue of being reflective with culture, upbringing, previous education, personality types, and learning styles. Some of these issues will be discussed in the forthcoming sections of this chapter. They also maintained that professionals need both a framework and structure to

reflect purposely regardless they are perceived as natural reflectors or not. Those who believed reflection is not easy to teach in academia had observed that it could be facilitated by role modelling and in clinical settings if the right conditions are provided. This has been summarised in table 6.1.

Participants' perceptions	Teaching reflection	Learning reflection	Settings	Agent	People's groups
Group one	Not easy to teach	It Can be learnt	Clinical setting	Role models	Natural reflectors Not natural reflectors
Group two	It Can be taught	It Can be learnt	Academia Clinical settings	Lecturers Role models	Natural reflectors Not natural reflectors

Table 6.1 summarises teachers' perceptions of teaching, learning, and groups of students in terms of reflection.

In the next section, I give an account of findings of the research in respect of the different mentalities about implementing reflective learning and its different dimensions.

6.2. Two mentalities regarding implementation of reflective learning

The indeterminate nature of reflective practice appears to be such that different people assign different meanings to it. Therefore, from a symbolic interactionist point of view they choose to act toward reflection differently based on the meanings they have given to it (Blumer, 1969).

Two mentalities toward reflective learning were evident in the data. Participants from both groups of teachers and students in the three courses under investigation articulated their views that people are culturally divided in terms of their perspective on implementing reflective learning in the curriculum. This phenomenon was more prominent in medicine although there was evidence of its presence in the other two courses. The category of two mentalities defined by its dimensions and properties

which emerged gradually in the course of data analysis when participants talked about their own and/or others views on subjects such as learning styles, job requirements, different specialities, how people gravitated to specialties and the potential impacts of these concepts on people's responses to reflective learning.

The following clinical medical teacher, who was personally familiar with the main trends in medical education, articulated his observation that there was a cultural divide between full time educationalists and clinicians. He maintained that it was a job requirement for the full time educationalist to be familiar with the theory of reflective practice, the literature, research, and the underpinning basic assumptions of reflective learning. Whilst on the contrary most clinicians are not familiar with the theory of reflective practice, therefore, they not only are not contributing to its development but they may play a negative role and might have an adverse impact on students' perceptions of reflective learning as negative role models.

I think that you could make a big difference between people who work full time in education and general medical practitioner of some kind. I do not mean a GP, but a clinician. I suspect that most clinicians are not very familiar with much theory [of reflection] and not putting it into practice, and therefore they are not, maybe very good role models. I mean for young doctors coming through training if their models are not people who believe in reflective learning who knock them when they do or who, don't ask them about their reflective learning when they're supervising them in any way and give them generally negative feedback, then they're not really going to develop. I think there is quite a big cultural divide developing between full time clinical educators and the general professional body of medicine. (Teacher Medicine Male 3)

More data gathering from other informants was directed and "controlled by the emerging category" (Glaser, 1987 p.36) of two mentalities. The following quotations from fulltime educationalists and students echo the above observation:

I think your observation is correct. I echo it, and I come across GPs who to my surprise roll their eyes and say, "Oh, the reflective writing, we have to do

for our own GP appraisal, what a waste of time, jumping through hoops. So I recognise it. (Teacher Medicine Female 15)

A medical student in his clinical years had clearly observed this dichotomy. He and many others mentioned surgeons as a group of clinicians whom clearly thought it was a waste of time to take reflective learning seriously. This group of clinicians were reported as maintaining reflection was being taught at the expense of other things and what students should be learning was proper science and basic skills. The following student implies that most clinicians have not been trained about educational strategies and initiatives like reflective learning so they are not aware of the medical education trends, which are toward training a life long independent learner:

Some of them [clinicians] think that, it is a waste of time .I mean you try and get a surgeon, broadly speaking, for example I think they think it's an utter waste of time. I think they think its woolly nonsense its there to distract us from learning proper things we actually need to know.Whereas if you get somebody who is either within the culture, who has been indoctrinated within the culture of the medical school, where reflective learning is important it all works. They have an impression of a general trend within medical education and everything. They are going to be much more on the ball in terms of actually reading what you have said. I mean it can be quite a wide gap. (Student Medicine Male 5)

This quotation about the gap between fulltime educators mostly based in the medical school and some clinicians based in clinical settings, in terms of their perspectives on reflection, indicates that the gap must be, as stated by this student, big and easily detectable for students.

Job requirement and learning style

A female student had discussed her perception about a cultural divide between surgeons and some other clinicians and related that to differences in job requirement:

There's a very, very generalised statement, physicians and general practitioners are much more interested in reflection because they themselves

have more dealings with people in a personal level and social level in a family level. The surgeons that I come across are not bothered about the reflections at all, because maybe for them, reflecting is not part of what they do or is a coping mechanism for them. (Female Student Medicine 8)

The concept of the interrelation of job requirements and learning styles served as one of the properties of the category of two mentalities whereby people explain their observations about different perspectives regarding reflective practice. On the one hand, job requirements to some extent, determine learning style adopted and on the other hand personality type and learning style affect people's inclination toward certain jobs. In fact, these two properties and their interconnectedness appeared to have the potential of explaining the phenomenon of two mentalities. This is evident in the following quotations from a male clinician and a female educationalist. That was a view upheld by many participants:

I mean if most of what really is critical in your job is skills based in terms of practical skills, you may well learn by more the action learning model whereas if you're doing more by counselling or something like that you're going to be more reflective. And also the kind of people with that learning style go in those directions you know, people with action learning style go into surgery, people with a reflective learning style go into contemplative professional roles. (Teacher Medicine Male 3)

I am certainly saddened that (laughs) that it is that predictable, but that the different professions specialities divide that clearly, I guess I'm not surprised. I am slightly saddened, reflective learning is only a learning style, and therefore it's going to be linked to personality and different personalities, will in vague terms will be drawn to different specialities. (Teacher Medicine Female 14)

At this point, I will examine the possible relationship of personality traits and speciality choices. I hope this would help in understanding why certain people or

members of certain specialities are reluctant to take an overt reflective approach to practice.

Participants never mentioned any particular taxonomy of learning styles but in other parts of the interviews, they had mentioned Kolb's learning cycle or words such as activist, pragmatic and reflector, which is used in Honey & Mumford's (2000) version of the four Kolb's learning styles. Regardless what type of learning style different participants had in mind, it appeared that by learning styles they meant various approaches, or ways of learning that suit an individual best. That is, different people perceive and process information in different ways. This is affected by upbringing heredity and educational history and existing milieu of acting. There is not consensus in the literature on what exactly learning styles are. Similarly, in the context of this research, many participants used the words personality type and learning styles interchangeably. Santo (2009) has echoed this in her website:

“what some call learning styles, others have labelled as cognitive controls, cognitive styles, or personality.” (Santo, 2009)

The following extract from a medical lecturer exemplifies the general trend of stereotyping people's personalities with their professions. This quotation is important because it gives few concrete examples of different specialities within medicine. As a professional who has been working with people from different specialties for many years I easily recognise this typology although I acknowledge that this is not necessarily the case with everyone:

There certainly is a perception that certain personality types gravitate towards certain specialities. If you do not like dealing with people you do pathology, and yet if you are arrogant and proud, you do surgery, if you are gentle with people, you do General Practice. I think those stereotypes in professions are maintained. I do not think everybody in each of those professions fits precisely the personality types, but people do sort themselves that way, because certain jobs suit certain personalities. So people will find jobs that suit their personalities. (Teacher Medicine Male 13)

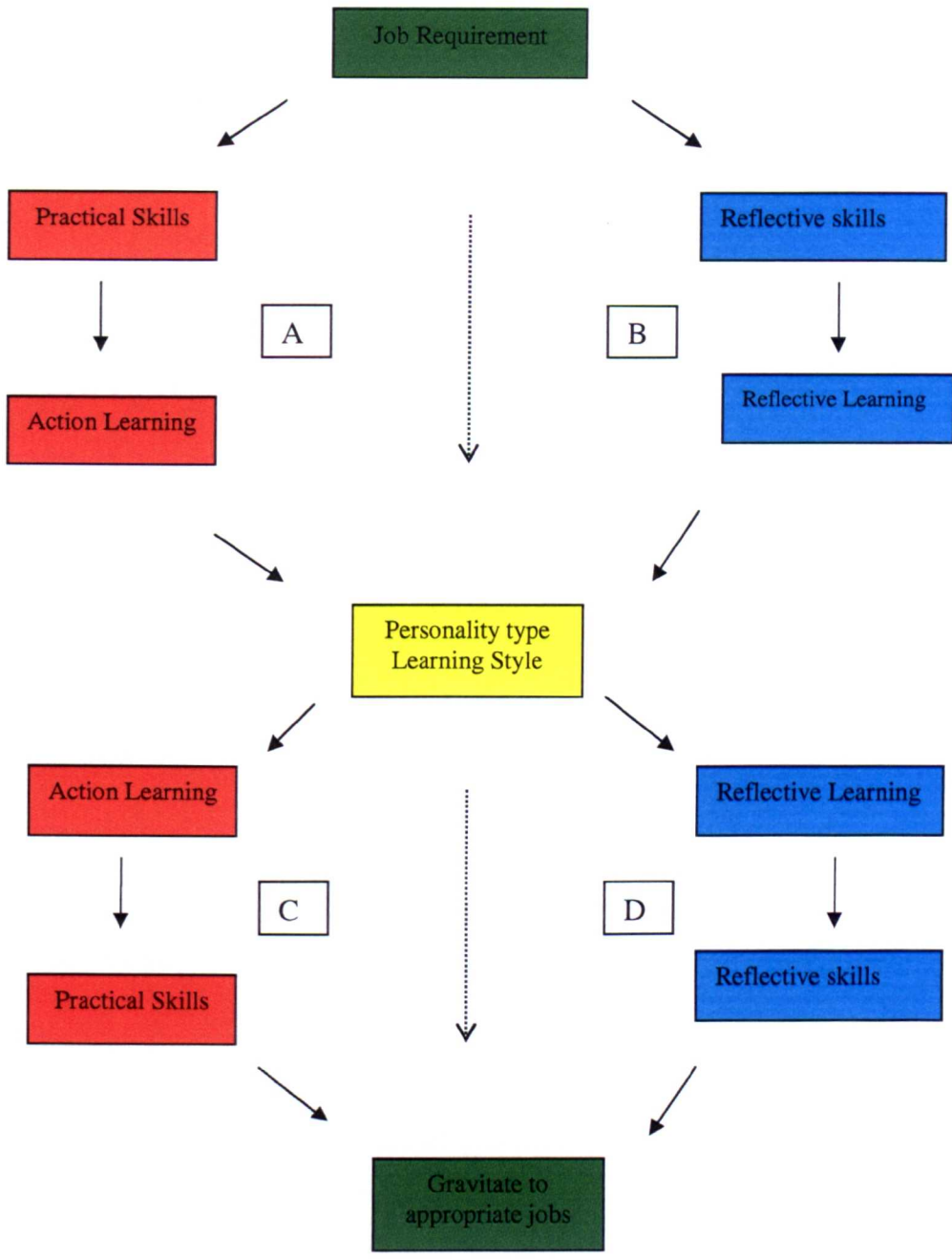
The relationship between personality types and choosing a speciality in medicine has been investigated and there are some well-established ideas about it. For example, Borges and Savickas (2002) reviewed the literature in terms of personality and medical speciality choice. They wrote:

“Following graduation, physicians enter a variety of medical specialities that differ in work settings, job duties, requisite skills, and vocational interests. In fact, these specialities differ so much that they almost constitute distinct occupations. For all practical reasons deciding to become a physician is an educational choice, one leading to medical degree. In contrast selecting a speciality closely resembles an occupational choice”
(p.362)

They concluded that personality traits play a role in those occupational choices. Similarly, in physiotherapy working with chronic diseases and disabilities requires much more holistic approach, a view that enables the professional to see the patient as a person in the community therefore needs a much more reflective approach to understand the complexity of the situation. It might be easier to deal with a knee injury in a different way and taking a non-reflective approach. The following physiotherapy lecture has observed that the students tend to be attracted to one of those branches of physiotherapy that suit their personality types and ways of learning:

I also would observe that some students who are attracted to physiotherapy because of an interest in sport, in injury , in fast track musculoskeletal type physiotherapy work sometimes are slower to stand back and reflect on the whole person and to adopt a more collaborative model . But generally the students who have an interest in long term disability and chronic conditions tend to adopt a reflective approach much more quickly. (Teacher Physiotherapy Female 6)

I have summarised the basic points of the perspective that I have explained so far in this section in the diagram 6.1.



The diagram 6.1 consists of four possible paths that relate personality types (learning styles) to the job requirements or attraction to a certain occupation.

Using diagram 6.1 I could make more sense of the following findings (table 6.2) of the research by associating them to the appropriate path/s, which had the potential power of explanation:

Some extracts of the research findings	Path/s in diagram 6.2
<ul style="list-style-type: none"> • Most surgeons are activists. They learn by doing and apparently do not advocate reflective learning 	A
<ul style="list-style-type: none"> • The nursing profession appears to have embraced reflective practice from the beginning of the movement of the notion. For most nurses and nurse educators reflection is a fundamental tool of learning. 	B
<ul style="list-style-type: none"> • Certain professionals are not comfortable with the concept and the process of reflective learning. They find it vague, imprecise, and unpractical. 	C
<ul style="list-style-type: none"> • People gravitate toward certain specialities if other conditions such as availability are provided 	C and D
<ul style="list-style-type: none"> • Physiotherapist students who like fast track subjects are more inclined toward sport injuries or musculoskeletal diseases while more reflectors tend learn more about chronic diseases and pain management. 	C and D
<ul style="list-style-type: none"> • There is a concern about the possibility of resocialisation of what has been learnt about reflective practice if the workplace is not supportive of reflective learning. People adopt other learning styles to survive. 	A
<ul style="list-style-type: none"> • For those who believe that medicine is essentially a practical subject reflection is a cultural clash with their perception of job requirement and thus learning styles adopted. 	A

Table 6.2 depicts some research findings and possible explanation path/s in diagram 6.1

Some of the participants however acknowledge that becoming too reflective for some specialists such as surgeons might not be as favourable as for other specialists. This was again a confirmation of concept of the impact of job requisites on adopting a learning style and served to define the category of two mentalities:

Some people and maybe a lot of surgeons fall into that category will always think reflection is a bit of a waste of time. you can see why a surgeon on the whole might think that because the job of a surgeon ,certainly the operating job of a surgeon, is to get on and do something to another human being that

you don't normally do which is cut them open, and remove something, or chop something off or whatever. So to be too reflective, to be too turned in on yourself and too analytical about that might not actually be very good. (Teacher Medicine Male 16)

On the other hand, another medical lecturer argued that reflection was something that its time had come for everyone even for surgeons. He also mentioned the political agenda of change was behind the movement of reflection on practice to prevent danger and increase patient safety. Relating adverse events like Bristol heart scandal to lack of reflection among some specialities was another feature of this comment:

I would hope even surgeons if they make a mistake would reflect on it, think about it, and see what they are going to do next time. that's certainly a change that that the government are trying to make with league tables and so on, that performance counts and you can't just blindly go ahead and just cut and kill your patients, and do surgical procedures for which you're not ready or fit. You know the whole Bristol heart scandal and other things like that have ,I think, hopefully raised the profile that even for the most hard nosed, hard edged clinical specialties that at times reflection really is needed.

(Teacher Medicine Male 13)

Indeed, the concept of “doing dangerous things if professionals are not reflecting on their practice” emerged to be another dimension, which helped to identify the mentality of those who felt reflection was an essential tool in professional practice and learning for everyone:

We can become, those in the caring professions can become very cruel to people perhaps they do not mean to be but I think it is very dangerous. The nearer you are to patients, to clients and not reflect, I think that is extremely dangerous. (Teacher Nursing Female 10)

I think the most dangerous thing in a doctor is somebody who is not self-aware not aware of their limitations as a person, as a doctor. I think that's the most dangerous thing a doctor can be so I feel quite passionately in

*medical education terms particularly about the process of reflection.
(Teacher Medicine Male 7)*

If you make a wrong diagnosis on a patient because you haven't taken into account, other things how will you ever make the right diagnosis when you see another patient like that unless you stood back from it and say that didn't go well, what didn't work? Why did I make that mistake? (Teacher Medicine Male 16)

These examples show that professionals are prone to make dangerous clinical decisions if they are not critically analysing their own practice. Many participants including educationalists, clinicians, and students specifically mentioned surgeons as a group that apparently did not reflect.

However, some of the participants were convinced that the two camps might partly reflect but that may be not in an overt way:

*When their [surgeons] cutting and the pasting goes wrong because the system, has not been in place, they presumably will have some form of meeting to discuss that. They will all think about why the system did not work on that occasion and therefore how it will be different. So perhaps they are not labelling it as reflective learning but that seems to be reflective learning.
(Teacher Medicine Female 14)*

In a pragmatic approach, most of the participants articulated their final reflections on how the two camps could reach some sort of reconciliations. They maintained that pragmatic people should not ignore the need for reflection at the same time as reflectors are expected to be pragmatic. In other words, being reflector and in the same time a pragmatic person are not mutually exclusive events. In the meantime, educationalists should consider the realities and accept that there are always protagonists and antagonists for reflective learning in academia and clinical settings. The following extract from an interview with an educationalist echoes this conclusion to some extent:

I think I would argue that in the same way that a reflective person is required to be pragmatic, however reflective they are they have to do stuff, that is the job. I think it's reasonable to expect a pragmatic person to be reflective. So I don't see a problem in building in reflection into things like portfolios and so on and expecting people to do it. but we'll have to accept that a proportion of those people will think it's a waste of time even if they are benefiting from it they may not recognise that. (Teacher Medicine Male 16)

In this section, I tried to define the category of two mentalities in terms of people's perspectives on reflective learning. I explained how participants viewed and explained their observations about the mutual effects of personality type (learning styles) and job requirements (what is critical in the job) on one another. Using a diagram about this relationship, I made it possible to make sense of some findings of the research defined in the table 6.1. Then I concluded that the participants eventually took a pragmatic stance. They argued that there are, and should be elements of reflectivity and pragmatism in every professional practice if it is supposed to be successful.

In the following section, I endeavour to examine the factors influencing a reflective or non-reflective approach to practice.

6.3. Reflective practice at graduation and beyond

In the course of data analysis, the category of "at graduation and beyond" gradually emerged. This category represented all the data which was some how related to the level of preparedness of students at graduation in terms of reflective practice. It also encompassed all identified factors that could potentially influence their choices toward a reflective or not reflective approach to practice beyond graduation. The following six conceptual elements helped me to define and explain this category:

- Personality types
- Job requirements
- Familiarity with rationale, importance, and skills of reflection
- Role modelling
- Stage of life of the practitioner
- Future workplace

The first two conceptual elements of this category (Personality types & Job requirements) were explained in the first section of this chapter serving also to define “the two mentalities” on reflective practice. In this section, I strive to explicate the rest. Diagram 6.3 illustrates these conceptual elements of the category.

Familiarity with rationale for, importance, and skills of reflection

The two preceding chapters have discussed the rationale for and importance of reflective practice, in addition to insight, and skills required for reflective practitioners in the context of medical and healthcare education. I have also examined the strategies used by universities in their endeavour to convey those concepts to the students. The outstanding issue to be discussed at this point is the level of preparedness of students at graduation to use what they have learnt about reflection and reflective practice.

Teachers in medical school stated that the new generations of students, that have experienced reflective learning activities are at least aware of its existence, and know what to do when they are required to reflect on their practice as foundation doctors. From the overall results of this research, teacher participants from medicine maintained that reflective practice would be an important element of what medical students will be required to do as doctors in their future careers. Therefore, they have been trying to make sure that all students are familiar with the notion of reflection and the basic skills of reflective practice:

Now they will be the ones who have gone through with the portfolios and the reflective stuff they have the skills. Whether they choose to use them is up to them. I think that they are aware and certainly as they go into F1 there will be no shocks when they come to do their or have to reflect on their practice. When they are F1 or F2 doctors, they are not going to say, “Oh God, what’s all this stuff” They’ll say, “Okay, I know what you want.” And whether they do because they really want to or because they know, what the steps are and they think I’ll write down what they want to hear. At least they engaged at some level with the process, so whether they are committed to it is another matter. They have been acquainted with the techniques. (Teacher Medicine Male 13)

However, teacher participants were not confident that all students were equipped efficiently. The following teacher was not the only person who predicted that students would need the skills of reflective practice and they will face situations that will make them to take a reflective approach to solve the problems. She, in line with some other teachers, used the term “exposed” instead of equipped when tried to explain the extent to which she thought students were familiar with reflection. Exposed in a sense means that students know what reflection is about and how it can be used in practice. I would argue that by using the term *exposed* teachers showed their own uncertainty about the level of competence and commitment of students:

I am sure that they are not all equipped. I would really hope they had been exposed to it. I would hope that they would all reflect on whether it's important to them or not you know, and they will have made decisions as to whether it's something that will work for them or not. I would hope that (sighs) if in their first year of qualification they found themselves struggling and not functioning as part of their team or some difficulties, they may have some notes in a folder that they could go back to, and some structure that they could hang it on. Somebody once taught them said something that made sense. I'm very much sure that we don't teach them all and they do not all end up doing it for a range of reasons. (Teacher Medicine Female 14)

One participant however focussed on what the medical school could do to make more students equipped with insight and skills of reflection:

I think at graduation probably those who are always innately reflective, still are, and probably do it quite usefully. Those who were not maybe a few of them now reflect but a lot them still will not. I think we could do a lot more. (Teacher Medicine Male 16)

I will conclude that the reason why many students do not appear to be reflecting on practice at graduation, as is evident from above quotations, is more about their insights and personality types rather than the level of familiarity with skills and techniques of reflective practice.

On the contrary to medicine most of the participants from physiotherapy strongly felt that physiotherapy students were equipped with insight and skills required for them to start a reflective practice in physiotherapy:

I think they definitely are, from this school. I think they are very insightful. I think they have the skills to be reflective practitioners they have the knowledge and skills to know where to look to know, what tools to use to know, what, to how to search for best evidence and to reflect on the decisions that they make. I think they might not be well equipped in terms of their anatomy knowledge, or their knowledge of pathologies, but certainly educationally; they are well equipped in reflective practice. (Teacher Physiotherapy Male 9)

The following physiotherapy student echoed above quotation and compared new generations of physiotherapists with current physiotherapy practitioners who apparently are less familiar with the notion and skills of reflective practice. This was one of the concerns of some participant as it might have an adverse impact on new graduates who enter the practice:

I think we are more equipped than a lot of current practitioners, because obviously they've not done reflection at university. On the other hand, I think reflection throughout the course is left up to you to do. So you can put as little or as much as you like into it .I think by putting a lot in you'll be prepared for reflective practice but if you didn't if you could get away with not doing reflection doing your degree you're therefore maybe not be prepared for reflective practice on graduation. (Student Physiotherapy Female 12)

The following two quotations from two nursing teachers indicated that they were more certain about the level of preparedness of their students for reflective practice. They articulated that practice assessment and assessing academic works in nursing, both required a degree of reflectivity to go through. This indicated the reflective learning had been embedded in curriculum of nursing so that if students qualified it could be concluded that they are well familiar with reflective practice:

You would hope after they've gone through the three years if they've qualified and they've graduated they must have been able to reflect to an extent or else they wouldn't have got through because the practice assessment requires reflection and so does some of their academic work. (Teacher Nursing Female 1)

I think they are equipped with the ability to reflect but of course, their knowledge base just begins .the way in which they are then going to become more critical and it is after I think. if they've qualified and they've graduated they must have been able to reflect to an extent or else they wouldn't have got through because the practice assessment requires reflection and so does some of their academic work again, to what level they can apply reflection I suppose depends on the individual. (Teacher Nursing Female 1)

To summarise, it could be argued that in all three courses under investigation all students have been exposed to the concept of reflection, thus they are familiar with required skills for reflective practice but this is only the instrumental aspect of reflective practice, that is using activities such reflective diaries, reflecting on critical incidents and so on. Nevertheless, whether they apply it in practice is determined by many factors such as attitudinal and organisational factors, which are the focus of this chapter.

Role modelling

According to Holton (2004), the term “role model” coined by Robert Merton first appeared in his research on the socialisation of medical students. Merton maintained that students compare themselves with reference groups of people who reside in the social role, which they desire to occupy in future (Holton 2004). Role modelling is a powerful teaching method (Kenny et al, 2003; Hafferty, 1998).Role modelling could be effective in teaching reflection.

Participants of the study generally perceived role modelling as one of the influential factors on students' perceptions of reflective practice. They acknowledged that students were receiving mixed messages from different people within academia and in clinical settings. In exploring the category of two mentalities about reflection, I outlined negative impacts of certain specialities on forming students' attitudes

towards reflection. The following quotations clearly confirm that teachers were aware of the impact and importance of role modelling in terms of reflective learning:

A lot of reflection was actually proactive as well.I saw a health professional working in this particular way – will I be like that or what I can do to be like that because I want to be or to avoid it. (Teacher Nursing Female 10)

*I think they [students] see what it [reflection] is about and a lot of that has to come from the clinicians from the role models out in clinical practice. Where clinicians are encouraging them to complete the portfolios and do the reflection then they will engage more. Where clinicians say, “I don’t know why you’re wasting your time with that, they don’t know what they’re doing in medical school, you just want to get on and you know do the job, then it just doesn’t help so I think they **still** are getting conflicting messages. (Teacher Medicine Male 13 my emphasis)*

The negative role model phenomenon in respect of reflective practice was evident in the data collected from medicine while I could not find any data in physiotherapy and nursing in this regard. This is not to make the point that there might not be any negative attitudes about reflective practice in nursing and physiotherapy but to highlight the prominence of this finding in medicine. In the last sentence of the above quotation from a medical teacher, we can conclude that he hopes that in future reflection would become a part of the accepted culture, resistance toward reflection would reduce and he would not witness conflicting messages, arguably, a state that nursing and to some extent physiotherapy are apparently enjoying.

Stage of life of the practitioners

The concept of the “stage of life” emerged when teachers participated in the research talked about their own observations with students in general and specifically related to students’ ability to reflect in different stages of their courses. Burrows (1995) states that according to research students under the age of 25 may lack both cognitive readiness and the experience needed to carry out mature critical reflection. She continues to suggest that teachers should think about this issue and address it by using

simpler models. Teachers participated in this research seemed to be in agreement with Burrows (1995) that life experience and maturity played a role in students ability to reflect at deep levels. A teacher in physiotherapy articulated her own experience with students in this way:

In my experience after nearly 16 years in physiotherapy education the more mature student in terms of life experience not in terms of years, but in terms of life experience and maturity tends to become natural reflective practitioners. The younger students straight from school tend to need much more support and guidance to develop reflective thinking skills. (Teacher Physiotherapy Female 6)

Her male colleague who had observed the development of students' ability in critically evaluating the underpinning knowledge base of their course echoed her observation. He, in line with other teachers, suggested that accumulation of knowledge base overtime would give a platform to students to reflect on and argued that maturity required for critically evaluating expertise develops through the years of the undergraduate course:

They tend to want to be given everything in the first year and just to accept everything what is told to them. By second year, they are much more challenging. I think as they go through second year, they learn about the different physiotherapy skills, and the evidence based underpins physiotherapy and how fragile some of that evidence is. Therefore they're looking for something else by third year about okay if it's not in the evidence, it's not in the literature why are we still using it? or we've got this other body of evidence that is clinical expertise if you like and they're very becoming more critical of expertise versus knowledge and evidence and mixing that up so there is a maturity develops there. (Teacher Physiotherapy Male 9)

Participants in medicine also articulated that they thought mature students themselves came into the profession with the life skills and probably most of them had the ability to reflect. Therefore, they come in with an advantage of having developed a different

kind of questioning mind than an 18 year old. This observation comes from their experience with medical students from both the five- year programme and accelerated programme as is evident from following quotations:

An interesting thing is the same material we use with first or second years that may just get a completely blank response say, talking about diversity, prejudice, or something like that[what], the first and second years who are 18 – 19 Sometimes quite black and white concrete thinkers, think all this is a load of waffle. A few years older, the graduates actually engage with the same material in a much more mature and reflective sort of way, so think there is something to do with maturity that influences reflection. (Teacher Medicine Male 16)

The accelerated programme students who have more life experience, have much more to draw on, they have had more hard knocks, they've had more simple day to day working and patient relationship experiences and personal experiences that mean that they more naturally can do the self questioning. (Teacher Medicine Female 15)

It is worth mentioning, “Accelerated programme is open only to graduates or practising healthcare professionals with post-registration qualifications. Only ‘home/EU’ students are eligible to apply.” (MBBS Admissions Policy in Newcastle University for Entry 2008)

The following nursing teacher had done a longitudinal research with her nursing students to examine their ability of reflection during their undergraduate course and one year after that. She explained how amazed she was with the results showing the change in the way the students viewed themselves, practice and others in the course of time:

I followed a group of students through I was able to see in the first stages they were looking for right answers. I found that as they went through they asked many more questions .they questioned more everything .they were more likely to accept that there was not always one answer that there may be several. But it was very interesting to have watched that .because in my

research I asked them to write incidents while they were students and afterwards, for the first year after they graduated. It was quite interesting in seeing the change in the sorts of things and the sort of attitudes they had to other professions. (Teacher Nursing Female 2)

However, one nursing teacher pointed out that although she would agree that some mature students were more comfortable with the concept of reflection for some the maturity in terms of life and work experience, may actually act as a barrier for reflective questioning of self and practice. If this is the case, this will add another facet to the complexity of teaching and learning reflective practice:

It is probably more mature students are able, better to reflect. but I don't think that's necessarily so it depends. because there's a lot of barriers formed so for example I know , that it's more difficult for mature students who've been in health care to reflect on issues that require teasing out, because they've got like a self protect mechanism, that are going to stop that.(Teacher Nursing Female 10)

Has this perceived defence mechanism any thing to do with mature students previous experiences in a non-supportive workplace in terms of reflection? In the next section, I will examine the potential influence of workplace on resocialisation or reinforcement of learnt reflective insight and skills.

Organisational culture /future workplace

The issue of organisational culture and its impact on individuals' reflective approach after they have been socialised into the concept of reflection in their pre-registration education seemed to be one of the concerns of participants in this research. As explained in “the category of two mentalities” there are negative perceptions about reflection that may prevent new graduates recently entered into the workplace adopting a reflective approach to the practice. In addition, the issues of power, politics, and management should be considered when we think about the relationship of reflective practice and workplace environment, which the new graduates enter. Mantzoukas and Jasper (2004) in their research about reflective practice in the reality of hospital wards outline that:

“Little consideration appears to be given to the impact that the organizational culture and the politics of power may exert on the implementation of reflective practices within daily ward reality.”(p.925)

They conclude that the concept of reflection seems to be in practices within daily ward reality validated by the organizational hierarchy of the wards because of a covert power struggle game. (Mantzoukas & Jasper, 2004)

Nursing participants quite strongly and in some cases with great emotions spoke about power relations in the reality of healthcare and its impact on nurses’ reflective activities:

I think they have the potential to be developed further, I really think, believe if it is not continued or whatever I think things can go wrong almost immediately when they qualify. So it’s about the perception but also about being in an organisation supportive of that. I think arguably it is actually detrimental that people are reflecting and recognising things and aren’t able to say and do anything. They feel powerlessness, when they go out into the arena and cannot do anything about their insights that they are able to generate. Can be detrimental to the person, themselves, for example in nursing I think that they feel frustrated and we have burn out and start becoming like the people around them. (Teacher Nursing Female 10)

Although power relations may not be the case everywhere, this highlights, the point that environment can operate as a barrier for reflection. While in physiotherapy the issue of power did not appear to be the main issue, the impact of the workplace environment on the outcome of what students have learnt in terms of reflection remained a source of concern:

I think we do a good job with our pre-registration students but the worry is often dependant on where they go and work they can often very quickly unlearn and become resocialised into different ways of learning to fit in and survive and cope in whatever environment they find themselves. That is a constant battle and challenge in professional education anyway, proving

good role models, good facilitation, and ideal standards and then knowing that a lot of that is unlearned out in the clinical situation if those values, attitudes are not shared by people that they work with. (Teacher Physiotherapy Female 6)

Medical teachers participated in this research did not demonstrate the concerns about power relations. One of the reasons might be, I assume, being in power. As stated above their main concern was the negative attitude toward reflection in clinical situations. In the meantime, they were more optimistic that future practice would open more rooms for reflective approaches in medicine:

I think that future professional practice enshrines it as well with the move towards appraisal and learning portfolios that we have in General Practice personal education plans. I think all of those sorts of things encourage a reflective approach (Teacher Medicine Male 7)

As indicated in the above discussions students are exposed to and more or less socialised into reflective practice in their pre-registration courses. They learn about the rationale, insight, and skills of reflection. They practise reflection using various means such as reflective assignment, critical incident analysis, ePortfolios and SWOT analysis to mention but just a few. The discussion of issues such as organisational culture, job requirements and negative culture toward reflection in clinical situations, however, highlight the potential of resocialisation of what has been taught and learnt in years. It has been suggested (Greenwood 1998) that reflection can only be encouraged if the circumstances for it is right. It could be argued that the organisations ruled by negative attitudes toward reflection or advocating other ways of practice are hardly likely to foster a reflective approach and create the right situations for reflective thinking and practice. On the other hand if the right circumstances are provided by organisations as has been suggested by all reflective theorists, it is more likely that individuals will put more commitment and effort to their reflections using provided facilities such as mentorship, time, and framework offered for them.

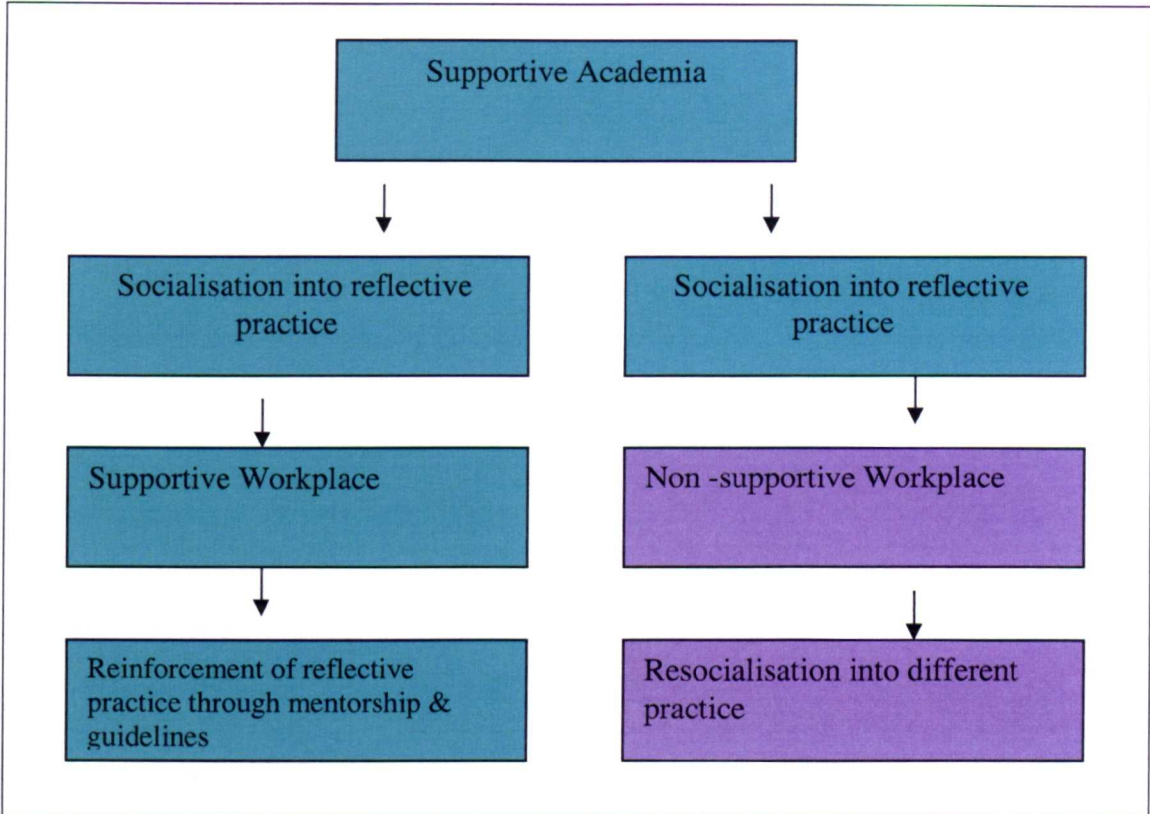


Diagram 6.2 illustrates the reinforcement or resocialisation trends in supportive or not supportive organisations in terms of reflective practice

Diagram 6.2 depicts this argument and emphasises the role of supportive and non-supportive workplaces in reinforcement or resocialisation of reflective practice.

To summarise at this point, I have discussed all the six identified major factors influencing individuals' choices of mode of practice. Considering all those factors discussed above together, in a holistic view, helps to map the multifaceted nature of the phenomenon in mind. Diagram 6.3 helps to illustrate this in a visual way. However, these factors are not the only potential determinants of whether or not a person chooses to adopt a reflective approach to practice. They are the factors that emerged in this study in the three courses under investigation.

A few participants from the medical school also mentioned gender and cultural background as influencing factors but as I was not able to gather more data about these issues from other participants and other courses, I did not include these in the diagram and in general discussions. Nevertheless, I can report that two female medical teachers felt that female students were better in reflection compared to male

students. In addition, they maintained that generally British students were better when compared with overseas students and related this to cultural barriers for self-questioning.

From the argument so far, I would suggest that choosing a reflective or non-reflective approach to practice is a complex multifaceted social behaviour influenced by many personal and social factors. Therefore, it cannot be predicted by examining single factors alone but could be better understood by examining each possible single factor and viewing them together as a whole. This was exactly what I tried to do in this section.

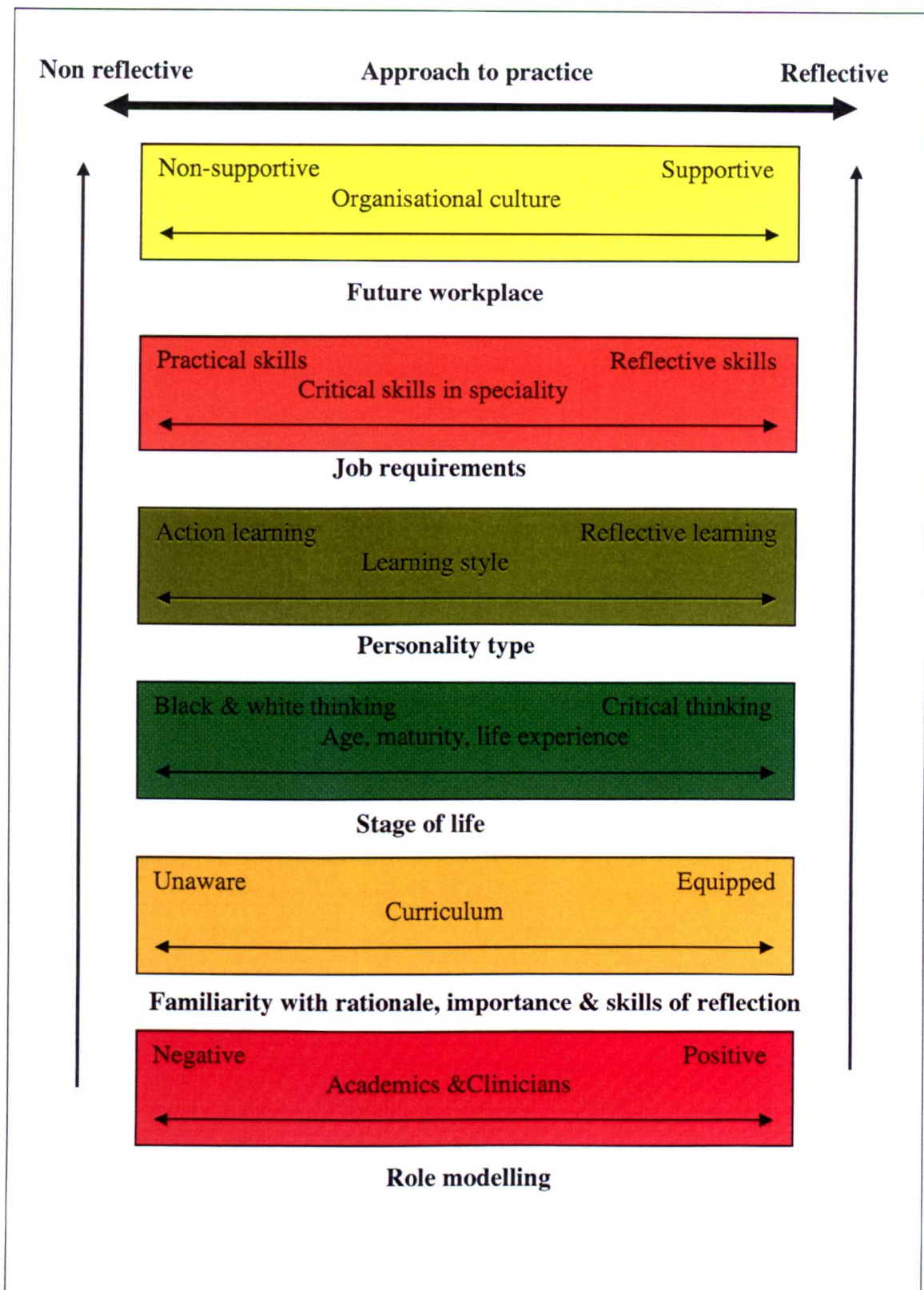


Diagram 6.3 some influential factors in predisposition of graduates toward adopting a reflective or non-reflective approach to practice

6.4. Different yet the same: Participants' Definitions of Reflection and Personal Models

In this section, I examine the definitions of reflection and the personal models of reflection that participants of this study shared with me as their own reconstruction of what they had understood about reflection.

In the course of data collection, I had asked every single participant for his /her definition of reflection. Any time I read and thought about a definition of reflection from a participant or literature and compared them, I felt they were different and at the same time the same. So I decided to call this section "different yet the same" which is the title of the fifth solo album by the Christian singer-songwriter Paul Field (1986). I hope this tells more than just a title to the reader.

I identified the following five characteristics of participants' definitions of reflection:

- Personal and in their own words and phrases
- Each person emphasised one aspect or element of reflection
- Not in the contrary with formal definitions in the literature
- Similar to one of the definitions in literature but not necessarily the same
- Not specific to the discipline but to the individual

Only two academics in medicine and nursing mentioned formal definitions and names of Kolb and Mezirow respectively.

The above characteristics led me to conclude that they were different yet the same and they reflected the reality of the definition of reflection in the literature.

Reviewing the literature we can easily see that different reflective theorists have articulated their definitions of reflection emphasising different elements. We know Dewey (1933) for analysis of reflective thinking, Kolb (1984) for his work on experiential learning, Mezirow (1981) for his perspective transformation and Schon (1987) for his seminal works on reflection in and on action. We can also find researchers who have given their own definition of reflection among them are Boud et al (1985), Boyd and Fales (1983) and Bolton (2001).

I also add to my conclusion that people choose to have their own personal definitions because there is confusion and ambiguity in the definition of reflection in literature. The main function of these personal definitions is to articulate what people intuitively know about reflection and to make sense of that in a personal way. We might recall at this point that one of the findings of this research stated in chapter four was that the three courses under investigation did not advocate a specific model of reflection. As

we know models of reflection are based on the definitions of reflection articulated by the theorists. In the context of this research, teachers mentioned that they felt free to teach any formal model of reflection which they opted or they could teach their own models if they had one. I will discuss this in this section.

Analysing the contents of the definitions that were provided by participants I could identify the following five main elements:

- **Deliberate thinking** - Deliberate thinking distinguishes reflection from everyday activity of mind or mulling over the events of the day. In fact, it is an activity, which needs time and effort.
- **A specific source of concern** -Reflection needs to be on a specific source of concern, which for any reason is important for the professional; therefore, the source is the focus point of reflection.
- **The purpose of reflection** - The purpose of reflection is to develop new learning. Reflection in this sense is not performed for its own sake.
- **The expected outcome**- the expected outcome is the ultimate result of the reflection, which is good for self and others
- **The process of reflection**-The participants often used WH question words (why, who, when ...) to outline the process of reflection.

The following are examples of definitions provided by some participants. I have put the identified elements in { }.Of courses not all of the above five elements could be identified in all definitions:

My definition of reflective learning would be, recalling and analysing and synthesising {**deliberate thinking**} experiences {**source of concern**}, with a view to informing future experiences {**purpose**}. So partly about learning from experience ,looking at what happened how (**process**) it affected what it's impact was and what is to be learnt from it in order to further develop you know attitude, skills, knowledge,{ **expected outcome**} whatever. (Male Teacher Medicine 16)

Reflection is taking your time to go back over{**deliberate thinking**} something that's happened to you or to other people {**source of concern**}, and from your own personal and cultural background, examining that and considering how that has either helped you so that next time a similar

occasion happens you can cope better or understand it better{**purpose**}. So reflection is a way, for me, is a way of self- marking, and becoming more self- aware and making myself the best doctor that I can be. , {**expected outcome**} (Female Student Medicine 8)

Without going back to papers and quoting definitions, which I am sure, is not what you want me to do. My own definition of reflection is a structured guided activity {**deliberate thinking**} that contributes towards the development and organisation of new knowledge {**expected outcome**}. Personally, I have concerns about reflective practice that is not guided, is not structured, and does not lead to the development of new or reorganised knowledge. (Female Teacher Physiotherapy 6)

Reflective learning to me is looking back{**deliberate thinking**} on what you've learnt {**source of concern**}, to pick out key messages {**purpose**} and to look for areas of development in the future{**expected outcome**} .That's basically what I take reflective learning as through SWOT analysis and more personal diaries and assessments.(Male Student Physiotherapy 11)

Well my definition is based right back from the early days of the philosophy of reflection from Mezirow and to use your experience {**source of concern**}, and learning from ones experience {**purpose**}. and how you make sense of it. It is a knowledgeable practitioner. It is using knowledge in practice, which is much harder as the writers would say, and learning an abstract theory and applying it, {**expected outcome**}. (Female Teacher Nursing 1)

Personal Models of Reflection

In addition to their personal definition of reflection, some academics had devised their own models of reflection.

Models of reflection are representations of a cyclical stage process that occur during a reflective activity. Many models of reflection have been proposed by different writers. While some of those models are simple and straightforward, others are more complex and sophisticated. Most of the models share a variation of three basic stages of experience, analysis and new insight or knowledge. An example of the simplest model

is Gibb's (1998) reflective cycle (Plan-Do- Review). The more sophisticated is found at Atkins and Murphy (1994) which consists of six cyclic stages. Burrow (1995) argued that simple models had greater chance of success with young students under the age of 25 because they had not yet developed cognitive readiness and the experience required for mature critical analysis of situations.

Findings from nursing and medicine indicated that some of the teachers had developed their own models of reflection and taught their own model in addition to other models. They argued that they had tried to devise a model that was simple, comprehensible for students and consisted of important elements that they thought students should consider. The following two quotations outline the models devised in nursing and medicine. These extracts reveal that in both cases the model has been devised jointly by two or more colleagues in the same discipline:

We taught them models of reflection so we taught them, John's model and Gibbs very basic model, but X and I developed our own model. We tried to keep it as simple as we could, because some models are really interesting and are very useful, particularly when you're exploring the idea like John's model it is very useful but it's very, very long . So keep it in your head is quite difficult. That's' why we went for a much more simple approach. (Teacher Nursing Female 1)

What we did was devise a simple 3-step process that they [students] could use to structure their reflective thinking. It just drags from the other material so it starts with three steps, step one is what happened. Step 2 is why did you react as you did how does it relate to prior knowledge and experience. Step three, how will this be applied in the future? (Female Teacher Medicine 15)

Every individual constructs his own conceptual perspective in resolving difficulties in practice (Schon, 1987; Gould, 1989). I could argue that we can understand participants' personal models when we consider that different models in reflective practice are only suggested paths for professionals to consider. They are based on the professionals' own work and personal situations, their understanding of reflective practice and their own personal styles and preferences.

Although reflection is an important educational tool, it has its own limitations. It must not be regarded as a remedy for all educational diseases. It seems this has been the case in some occasions. The next section explores a phenomenon called reflective madness in educational settings.

6.5 Reflective madness: to worship at the altar of reflection

Another issue that might add to our understanding of the complexity of reflective teaching and learning in the courses under investigation is participants' concern about the notion of reflection or the way others treated reflection.

This research indicates that some participants were concerned with the phenomenon of "reflective madness." This term was used by Greenwood (1998) in her attempt to explore the importance of implicit learning versus the emphasis for explicit learning through reflection in nursing. In the context of this research reflective madness is used to explain some participants' concerns about the teachers and colleagues who think reflection is remedy for all educational problems, and do not recognise the limitations of reflection and all manifestations of this perspective. Interestingly the concerns were articulated by people who felt that reflection was an important educational tool and advocated implementation of reflection in curricula, but in the meanwhile, they were more realistic about its use and limitations. The comparison of the data related to reflective madness revealed that participants who had spoken about reflection with great emotion did not mention any concern as such.

However, the following elements of reflective madness in this research were identified:

Reflection as a panacea for all educational problems

The following medical teacher explained how she had observed a trend among some medical educationalists toward associating reflection with all kinds of desirable outcomes and a remedy for all educational diseases in medical education. This tendency has been observed in other professions as explained by Greenwood (1998) in nursing. The participant concluded that this trend might contribute to professionals rejecting or ignoring the whole idea of reflection:

I think it is easy for educationalists to over-elaborate what reflection is all about and to give reflection to it almost becomes a quality religion. Reflective practice is everything, and we worship at the altar of reflective practice I think there may have been a little bit of a tendency for that attitude in some areas of medical education recently. That is very likely to put people off some people anyway. (Teacher Medicine Male 16)

Too reflective to work

Another concern was about how professionals could balance the state of being reflective and doing the job at hand. As is essential in grounded theory I performed constant comparison of data. Therefore, I compare the following extracts both from participants from the medical school to demonstrate how comparison helps the researcher to interpret the data in constant comparison method:

One of my partners is very defiantly very reflective but he is completely hopeless at making a decision if you need a decision that afternoon. (Teacher Medicine Female 14)

The other thing is that in the long run if there's someone who reflects on things too much in the end they've might not be able to do their job. whereas if someone else can sit back and doesn't reflect all the time, that might enable them to carry on doing the job for years and years (Teacher Medicine Female 15)

In a lecture that I gave in my university in Iran about reflection, my colleagues talked about the issue of being too reflective to work. It was interesting because they have not formally implemented any reflective learning programme but after the lecture and discussions, they thought this might lead to not being able to work in some cases.

Reflection is not for every one

Again as explained above in discussing learning styles and personality types, although we might accept that reflection is a human capacity but we acknowledge that reflective learning is only a learning style as compared to other styles. For example in Honey & Mumford's system, there are four learning styles (activist,

reflector, theorist, and pragmatist). Some participants were concerned about colleagues who might tend to ignore other learning styles among students and take a “one size fits all” approach to reflective teaching and learning:

I think it would be wrong to push it too much further because I think it probably isn't that kind of learning for everyone and certainly documenting it, but it feels about right, the involvement I have with it in the first and second year. (Teacher Medicine Female 14)

I have mixed feelings or I have a number of feelings mixed feelings is the wrong term. I think one is that as a person who reflects which I think I do quite a lot I feel that it is the key to developing professional thinking specifically in the context of medicine. I think it applies in life actually as well but I also appreciate that it maybe at least in part personality dependant and context dependant. Quite a lot of the time, I suspect that people do not reflect on practice and certainly do not reflect in the sort of overt organised way. In other words, sit down and reflect, reflection in action probably going on all the time in a lot of people but not everybody, its not for every one. (Teacher Medicine Male 16)

Bandwagon phenomenon

Two participants in nursing used the term bandwagon effect to describe the tendency of people to devise their own models of reflection and/ or write a book about that. The bandwagon effect has been described as an observed social behaviour in which people are inclined to follow what others do or think without thinking about their own actions. The probability of a bandwagon effect is greatly increased as more and more people adopt an idea or behaviour (Smith 2009). Bandwagon is a form of social proof which is a psychological phenomenon that occurs in vague social situations when people are unable to determine the best mode of behavior. Making the assumption that surrounding people possess more knowledge about the situation, they will perceive the behaviour of others as appropriate or better informed.

Although the participants have used the term bandwagon in relation to academics or professionals' tendency toward publishing their own models of reflection, I

would argue that the term bandwagon is not appropriate here because it is commonly used to describe ordinary peoples' behaviour that follows a successful movement without thinking about what they are doing. This is almost the behaviour of a herd. In case the of writing a model for reflection on the contrary the individual is a thoughtful professional that tries to articulate what he/she has understood about a complex cognitive phenomenon. In spite of the plethora of literature and increasing models of reflection, I am not in agreement with these two participants that writing a model or a book about reflection, is jumping on a bandwagon rather I view it as an academic activity:

I've been asked to review a text book from a publisher recently and I notice that there were different models of reflection in there, which I've never heard of, and I think there is a degree of people getting on the band wagon, if you like, of 'I think I'll write a model about reflection. (Teacher Nursing Female 1)

Perhaps the writers are aware of the limitations of existing models of reflection so they try to devise a better model.

As explained in the section on two mentalities, many professionals question the usefulness and implementation of reflective practice for many overt and covert reasons such as their own personality types, learning styles, job requirements, and unfamiliarity with the notion. In addition, the trend of reflection madness appeared to have contributed to the reactive mechanism against the movement of reflection as is evident in the following quotation:

I think it's unfortunate that, because there's been so much talk about reflective practice in the last decade or so, it got itself a little bit of a bad name just that term reflection can make some people, go, "Oh God here we go ". Reflective practice has been one of these little bits of jargon that has been around for quite a long time. I think it's just got up some people's noses a little bit, and so if we could find another word well metcognition, I guess, is another word for reflection but that's even worse really that's really going to put people off. (Teacher Medicine Male 16)

6.6 Summary

This chapter has presented how the participants and the researcher understand the complexities of teaching and learning reflection in medical and healthcare education. It has shown that teaching and learning reflection is a multifaceted complex phenomenon, which requires careful consideration of all its identified components if it is going to be successful. I acknowledge that there might have been other aspects of the phenomenon, which has been out of the view of my participants, and accordingly out of the scope of the study. However, I have discussed all of the important aspects of the phenomenon under study that emerged to be of significance for participants.

I outlined that participants felt that reflection was a skill that could be taught and definitely could be learnt. However, they found issues such as culture, upbringing, previous education, personality types, and learning styles influential in the outcomes of teaching and learning programmes.

Then I defined the category of two mentalities in terms of people's perspectives on implementation of reflective learning in the curriculum. This category and its properties contributed me to understand how relationships of learning styles, personality types, job requirements, and environment culture could influence adopting a reflective or not-reflective approach to practice.

As the ultimate desired outcome of any reflective teaching and learning programme is "educating the reflective practitioner" (Schon, 1987) this study examined whether students undergoing reflective learning programmes were prepared to adopt a reflective approach to practice at graduation and beyond. This and other influential factors in graduates' inclination toward a reflective or non-reflective approach to practice were explained using a model depicted in diagram 6.3.

Participants definitions of reflection were carefully examined using a constant comparison method of analysis advocated by Glaser and Strauss (1967). Participants' personal definitions turn out to have five characteristics and five elements, which contributed to me reaching the conclusion that, they were different yet the same and they reflected the reality of the definition of reflection in the literature. I also concluded that people choose to have their own personal definitions because there is confusion and ambiguity in the definition of reflection in literature. The main function of these personal definitions is to articulate what people intuitively know about reflection and to make sense of that in a personal way. In the same vein, I explained

some participants had devised their own models of reflection to make complex formal models of reflection simple and understandable for students.

Finally this chapter has discussed participants concerns about the notion of reflection and the way it has been treated by some of its devotees. A reflective madness tendency identified by participants and its components helped to articulate these concerns.

It might be useful, at this point, to compare the professions in terms of the differences and similarities of some of the findings outlined in this chapter.

It was discussed that there are different mentalities about reflective practice in medicine. While it has been embraced by many educationalists as a useful tool, which its time has come in medicine, there are still those who have negative feelings about it. This has created a cultural clash between the two camps. On the contrary, reflective practice seems to be the dominant culture in nursing. There is a vast and ever-growing literature about reflection in nursing discourse and other forms of practice appear to be counter-cultural. Physiotherapy stands somewhere between the other two professions in this regard. These differences can be attributed to the different implicit /explicit phases of reflection in each profession and the nature of the profession and its requirements, which, to some extent, determine the ways of learning and doing. Therefore, we would not expect reflection to become the dominant culture in medicine overnight. What educationalists hope to happen is a slow but sure recognition of its importance and place in medical education and of course consideration of its limitations in nursing literature.

Another issue to compare could be the level of preparedness of students to take a reflective approach to practice at graduation and beyond in the different professions. Reflection is formal part of curriculum in the professions therefore all students are familiar with the concepts and some skills, strategies and models required for reflective practice. While nursing and physiotherapy teachers were confident that their students were equipped with skills and strategies required for reflective practice, medical teachers were not completely sure that it was the case with medical students. In general, they felt there was more room for improvement and they used the term, *exposed* instead of *equipped* to describe the level of preparedness of their students. Reflection has been integrated into most or all of the activities in nursing and physiotherapy in academia and clinical settings. Therefore, teachers are more certain that students are able to reflect and pass the exams.

Considering the above discussions about different mentalities and the level of preparedness of students to take a reflective approach to practice, it is interesting that nursing and physiotherapy teachers were more concerned about the negative impacts of the future workplace on their graduates. They felt the reality of the future workplace may prevent the professionals from adopting a reflective approach to practice and attributed this to the issue of power and policies. The issue of power struggles was not the concern of medical teachers, although they were aware of the negative impact of negative role models. They were more optimistic that the future holds more hope for reflective practice in medicine and it is a formal requirement of doctors to be reflective.

Finally, in the spirit of comparing the professions, this study suggests that although there are invaluable lessons that professions can learn from one another in terms of reflective practice, it should be noted that each profession is unique, it has its own nature, characteristics, and requirements. Therefore, transferring ideas, methods, and the ways of learning from one profession to another requires careful consideration.

Chapter Seven

Discussion

Introduction

In this chapter, I will outline some of the key findings of this research. I will discuss the most important findings in more details. Then I will talk about the substantive grounded theory that was explained in the last three preceding chapters in a discursive manner.

7.1. Some of the key findings of the research

This section summarises some of the most important findings of this study. Most of these findings will be discussed in the next section of this chapter, which is a discussion of selected issues. Each selected issue will encompass few or more key findings delineated here.

1. Participants define common and course specific rationale for implementing reflection.

Although most participants expressed similar grounds for using reflection, it seems different courses have also their own course specific rationales for using reflection or at least they place more emphasis on certain aspects of usefulness of reflective learning.

2. The rationale is based on perceived image of reflective practitioners

The rationale is based on a perceived image of the reflective practitioner. The aim of any reflective teaching and learning programmes is to train reflective practitioners. The main attributes of reflective practitioners come from literature not from peoples own experience.

3. Three implicit / explicit phases of reflection were identified

It was identified that reflective practice has been used in three consecutive and perhaps overlapping periods. I named these explicit /implicit phases of reflection in

each profession. The first level of implicitness is about the time when the phenomenon exists and functions but has not been named yet. The second level of implicitness is concerned with the time when the phenomenon has been introduced and used explicitly for a while and has been relatively well known by the community. Therefore, it follows a period of explicitness. In the second implicit phase, in many discussions and activities the phenomenon would be assumed as accepted by everyone, as if all are aware of it and has no need to be mentioned repeatedly. Therefore, it remains as an underlying implicit assumption upon which other phenomena may be built.

4. Lack of formal training for those who teach reflection is evident

The data indicated that in all three courses under investigation there was not formal training for teacher on how to facilitating reflective practice methods. Instead, they received some training from other sources such as professional body based trainings, hospital based trainings. The nature of the trainings seemed to be voluntary, one off, spontaneous, non-obligatory and with no formal assessment of abilities obtained. However, there were academics that were very knowledgeable about reflective practice and had contributed to the literature.

5. Teachers determine which strategy/ method of reflection to be taught and how

This research found the teachers are the main determinants of what strategies are to be used and how these strategies are to be implemented. The way the teachers reflect on their practice informs the way they frame reflective practice for students.

6. The courses use reflection for two sets of purposes: general and course specific

Three main functions attributed to reflection identified in this research were personal development, professional development, and better patient care. This finding is in agreement with mainstream literature advocating reflection. However, for the members of each profession, these terms seemed to have different meanings therefore reflection and its outcome seemed to be different.

7. It seems that the integration of reflection into the curriculum has been culturally accepted

The data showed that it has been culturally accepted that reflection is a part of the curriculum; it is an explicit expectation of the students in their undergraduate and postgraduate studies and in their professional life.

8. Assessment of reflective activities is a source of tension and conflict.

The process of assessing reflective activities of students is a multifaceted complex phenomenon that affects other aspects of reflective practice.

9. Reflection can be learnt and taught

Some thought reflection could be taught like any other skills, while others were not sure if it could be easily taught to all in the same way. Most participants observed that some people are more comfortable with the concept and process of reflective learning than others.

10. There are different perspectives in terms of reflection

Two mentalities toward reflective learning were evident in the data. Participants from both groups of teachers and students in the three courses under investigation articulated their views that people are culturally divided in terms of their perspectives on implementing reflective learning in the curriculum.

11. There are factors that influence people's tendency toward a reflective or non-reflective approach

Choosing a reflective or non-reflective approach to practice is a complex multifaceted social behaviour influenced by many personal and social factors. Therefore, it cannot be predicted by examining single factors alone but could be better understood by examining each possible single factor and viewing them together as a whole. Six conceptual elements were identified to be influential in professionals' choice of a reflective or non-reflective approach to practice.

12. Personal definitions and models are ways of understanding the phenomenon.

Personal definitions of the participants turn out to have five characteristics and five elements, which contributed to me reaching the conclusion that, they were different yet the same and they reflected the reality of the definition of reflection in the literature.

Professionals choose to have their own personal definitions of reflection because there is confusion and ambiguity in the definition of reflection in literature.

The main function of these personal definitions is to articulate what people intuitively know about reflection and to make sense of that in a personal way.

Some participants had devised their own models of reflection to make the complex formal models of reflection simple and understandable for students.

13- There is a trend of change based on a pragmatic approach and understanding the complexities.

In a pragmatic approach, teachers and policy makers involved in reflective teaching appeared to be trying to overcome some of the concerns and problems investigated in this study by finding alternative ways of reflective teaching, culture change, altering policies and revising the reflective component of curriculum. In the next section, I will discuss some important issues mentioned above.

7.2. Discussion of selected issues

I have selected what I believe are the most important issues raised by the findings of this research. The issues are, reflection as a subject to be taught, assessing students' reflective works, factors influencing students reflective or non reflective approach to leaning and the category of two mentalities in terms of reflection. Theses selected issues are the core categories that encompass most of the finding listed above.

7.2.1 Reflection can be learnt and taught.

Reflection is a conscious active process of directed and structured thinking which is different from free floating thoughts in general thinking or day dreaming (Gelter, 2003). Dewey (1933) considers five steps to reflection as: (1) feeling an issue (2) defining the issue (3) finding possible solutions (4) developing those solutions and (5) trying them in order to accept or reject them. Boyd and Fales (1983) identified six stages of reflection as: (a) a sense of discomfort (b) identifying that feeling (c) openness to new information about the situation (d) considering the new information (e) reconsidering the situation in the light of the new information (f) a decision in terms of acceptance or rejection of the new situation.

However, Boyd and Fales (1983) and some other commentators (Boud et al 1983, Fish and Twinn, 1997), see reflection as a mental process consisting of certain stages.

Although going through the process of reflection is considered to be the most exclusively human capability (Bandura, 1986), it does not seem to be a spontaneous activity in professional practice and every day life as people need to dedicate time and effort to make it happen (Gelter, 2003). It has been argued that reflection happens in a hierarchical manner (Cox, 1992) which is related to the learners' ability and developmental level. According to Perry (1997), the learner will find it difficult to reflect until he moves from a position of dualism to a more complex view of the uncertainty of knowledge and understanding. It seems some people are more inclined toward reflection than others. However, Dewey (1933) suggested that certain attitudes such as whole heartedness, open-mindedness, responsibility, commitment, and willingness to learn are required for reflective activity.

Whether or not these qualities are innate or learnt qualities is a matter of debate. Many contain that the answer to the question whether reflection can be taught or not is unclear and literature is not convincing (James & Clarke, 1994; Graham, 1995; Ecclestone, 1996). However, this does not minimise the importance of the answer to the question whether reflection can be taught or learnt. From a symbolic interactionist's point of view, the answer to this question (the meaning we attach to reflection) is important because it determines our consequent acts toward teaching and learning reflection. If we believe that reflection can be taught then we adopt methods and strategies to teach it. In contrast, if we think reflection cannot be taught in traditional ways then we seek appropriate methods of encouraging it in the individuals. In either case, our methods, strategies and consequently the outcomes would differ. The finding of this research highlights the importance of reflecting on our assumptions (perhaps implicit assumptions) if we want to encourage reflection in others effectively.

The research findings in terms of teaching and learning reflection similarly resonated with the literature, which is conflicting in this regard. On the one hand, the evidence in my study supports the work of Moon (1999) and Johns (1994) who maintained that reflection was an intellectual skill acquired through systematic guidance and can be learnt/ facilitated but not taught. This has been supported by others who feel that becoming a reflective practitioner is a slow developmental process, which can only be learnt, and not taught (Loughran, 1996). On the other hand there were participants who felt that reflection can be taught because it was involved in a learning strategy that exploited tools such as diaries. (Heath, 1998) has advocated this idea.

There was evidence that some participants, in line with some writers (Boyd & Fales, 1983; Ward, 1996), do not separate teaching and learning reflection but argue that the natural inclinations (Korthagen & Wubbels, 1995) and quality of intent (Boud & Walker, 1990) toward reflection are important for reflective thinking to happen. The fact that the literature acknowledges that reflective practice can be enhanced, whether by learning or teaching implies that creating framework and structure for professionals' reflective qualities is essential.

Many participants used certain terms such as “enhancing reflection”, “encouraging reflection” and “facilitating reflection” instead of teaching reflection. Confronting such terms in the interview texts I found the hermeneutic tradition of viewing the text very helpful in understanding them. I attempted to maintain a hermeneutic alertness (Van Manen, 1997) to the meaning of these terms and go beyond what participants had taken for granted and not explicitly mentioned. Although they had not explicitly mentioned whether or not they thought reflection could be learnt, or taught, I was able to gain an understanding of the terms that was deeper than participants own understanding. I ended up with an explicit understanding of their assumptions. They assumed reflection could not be taught but can be facilitated. Taking a hermeneutic stance Crotty, (1996) believed:

“Interpreters may end up with an explicit awareness of meanings and especially assumptions that the authors themselves would have been unable to articulate” (p. 91)

However, most participants observed that some people are more inclined toward the concept and process of reflective learning than others. They related the issue of being reflective with factors such as culture, upbringing, previous education, personality types, and learning styles. Boud et al (1985) proposed that the intention of the learner is the most important factor in the learning process because the willingness to learn conquers many implicit barriers and inhibitions. This view assumes the learner directs reflective activity. However, this study suggests that although most learners can benefit from a reflective programme provided the right conditions are prepared some people do not adopt a reflective approach to practice. Kolb (1984) supports the idea that the supportive element of environment is to be considered when encouraging experiential learning, which has a significant reflective element.

A better understanding of the philosophy of reflection, its process, and influential factors are essential for those who want to facilitate reflection in others. One of the interesting overall findings of this study is the fact that reflection can be better learnt by example. Student participants gave me good examples of reflective practitioners who practically, via their behaviour, had showed them how to reflect on their practices. They contrasted these reflective practitioners with non-reflectors that had negative impact on them. This clearly endorses the perspective of Goldstein (1993) who differentiates between talking about reflection and being reflective in terms of enhancing reflective activity in students:

“Reflective thinking or judgement is not something that can be taught or even enhanced by way of traditional methods”

If we want students to become reflective practitioners we must not simply preach them, or at best teach them we must treat them reflectively. We must be clear in terms of our own basic assumptions about reflection and be prepared to reflect on our practice. The meaning of this for practice is that the teachers need to show the characteristics of reflective practitioners identified in this research (see chapter four 4.2) in their everyday interactions with students, patients and colleagues in the reality of academia and clinical settings. Students learn by example and the best example of reflective practice is a reflective practitioner in real life.

As examined in chapter 5 assessing students’ reflective work is an important and controversial issue. This will be discussed in the next section.

7.2.2. Assessing Reflective Works of Students

According to The benchmark statements of the Quality Assurance Agency for Higher Education (QAA) for Medicine (2002), Nursing (2001) and Physiotherapy (2001) graduates of those professions must be able to understand and engage in reflective practice. In above documents, this expectation in medicine has been categorised under the category of “attitudes and competence” in nursing as a “professional identity and accountability” and for physiotherapy under “the generic and enabling skills.” Although this does not explicitly mean that reflection is seen, directly as a

competence that should be assessed, in reality, there is an emphasis on assessing reflective activities of students. In the context of my research reflective works of students is being assessed and this has created some unresolved issues.

Most of the data about assessment of reflective learning and issues around that was collected from students and lecturers in the medical school. In nursing and physiotherapy the issue of assessment did not appear to have a greater importance than other issues but in medicine, especially among students, it seemed to be their main concern and one of the topics that almost all wanted to speak about. This was a sign of the importance and sensitivity of assessing reflective accounts in the medical school. Analysing the data, revealed that there was a huge amount of data about assessing reflective accounts of students in the medical school that required to be presented in a separate chapter. Thus, I dealt with this in chapter five.

The question was why assessment of reflective accounts was so important for the medical students and consequently for their lecturers compared to the other two courses. A closer look into the demographic characteristics of the students in terms of age and maturity may be helpful.

Medicine is a 5-year programme with an additional two-year foundation programme of general clinical training. There is also an accelerated programme, designed for graduates of any discipline who wish to train as a doctor, and others whose prior professional experience matriculates them for entry. In the mean time, nursing and physiotherapy students normally spend three years in the university to complete their undergraduate studies. These facts had an impact on the age and maturity of the students participating in my research. In general, students from nursing and physiotherapy who participated in the study when compared with the medical students were younger. King and Kitchener (1994) argue that most students began higher education in a state of epistemological immaturity. Epistemology is the examination of the nature of knowledge and dealing with questions such as *how we know what we know* (Crotty, 2003). It seems thinking about epistemological issues requires a “double –loop learning ability. “Brockbank and McGill (2007) States:

Double –loop learning where existing paradigms are questioned, assumptions challenged etc ;sits comfortably with in level three learning of Bateson 's typology and as such is more typical of postgraduate and mature

undergraduate activity incorporated the external critique of the discipline itself, recommended as characteristics of critical reflection. (p. 51)

Therefore, I would argue that, Phase II (Stages 3, 4 and 5) and accelerated programme entry medical students are generally more mature in terms of life experience age and epistemological maturity than undergraduate physiotherapy and nursing students. The more mature students are they are more likely to be critically reflective, question the programmes, and be more self-aware and challenge assumptions and “givens” Brockbank and McGill (2007). Thus, they are more likely to pose questions about reflective learning and its assessment. This might have been a reason for more data on assessment in the medical school. Analysing further data and reviewing the literature showed that:

“Assessment plays a major role in the process of medical education and in the lives of medical students and in society by certifying competent physicians” Shumway and Harden (2003 p.569).

It seems that assessment of reflection and the marks that students get at the end of assessment counts toward their progress so it becomes an important issue for them. This could be one of the reasons of why they have talked about it in details and with enthusiasm.

Still, this research indicates that this was not the only source of concern among participants, rather in line with the literature; they had more apprehensions in terms of assessing reflection. Assessing reflection has been identified as problematic. For example Burn and Bulman (2000, p. 70) state that:

“Reflective practice and outcomes are still such intangible that attempting to assess them is a minefield of difficulties.” (p. 70)

Ixer (1999) argued that there is no theory of reflection in existence, which allows for the assessment of reflective ability. However, Boud (2006) maintains:

Assessment is a topic about which people have strong opinions, though whether those opinions are backed up by a good understanding of what it is and how it works is less certain (p. xvii)

Ixer (1999) believed that the nature of reflection is unclear in the mind of practitioners so how can its acquisition be assessed by others? Literature falls short of providing an explicit solution for the problems of assessing reflective activities. Hargreaves (2003) mentions Boud et al (1985), Schon 1987 and Ghaye and Lilliman (1997) as texts that do not explicitly tell us how we can assess what students have achieved. According to this writer, others have attempted to deal with the issue of assessment of reflection but have not been successful

Notwithstanding, the results of my research suggest that the medical school views reflection as an assessed part of the curriculum. The fact that reflective activities of students in medicine are assessed has apparently resulted from the current prevalent trend in medical education defined by Shumway & Harden (2003 p. 569). They have recognized two main closely related features of contemporary medical education as an emphasis on assessment as a tool to ensure quality and a move toward outcome-based education.

The findings of my research suggest that the medical school does not advocate a specific model of reflection. However, there is an emphasis on making connections between students' subject of reflection with past, future, self and putting it in the context of real and authentic practice. That is, students are required to relate their reflections to their experiences, knowledge and assumptions gained in past, self in terms of emotions feelings and background, future in respect of the implications of reflection for future practice and finally relate all these to the context of real practice. Making connections and the process of reflection is what lecturers are hoping to see when they assess students' reflective works.

From my study, I found that although there have been efforts and initiatives, the expectations and criteria for judging reflective writing remain unclear for most of the students. There is doubt that such criteria exists. Some commentators are reluctant to acknowledge that there are appropriate and practical criteria for judging reflection in essence Young (2004) writes:

There are no measures by which to compare standard, and no definition with which to apply to the results. The assessors are assumed to be competent in reflective practice themselves, and students are assumed to have written down all their reflective issues. In truth none of these may be the case.

However, we should note that there is a difference between reflection, which is open and may end to any conclusion and reflective practice, which is limited within the professional boundaries and is expected to lead to good and acceptable practice defined by codes of practice and public acceptance (Hargreaves, 2003). However, Bourner (2003) argued that criteria similar to what is being used to judge critical thinking in academia might be useful in judging reflective activities. He suggested:

“The core of reflective learning process is interrogating experience with searching questions and we can identify searching questions independently of the content of reflection” (p.270).

Over and above this, the students encountered dilemma and conflict when they wanted to submit their real reflections for someone else to read while they were not there to clarify and defend their feeling, thoughts, and decisions. They felt the criteria for judging reflective accounts were subjective and vague. The students felt vulnerable, in terms of revealing their true reflections that might create misunderstandings about them, being judged based on their reflective writings, which may not be exactly what they felt. Moon (2004) states:

Reflective writing is not a direct mirror of what happens in the head but it is a representation of a process within a chosen medium in this case writing.”
(p. 80)

Some students felt they were more reflective than what they had represented in their works. Hargreaves (2003), states that it is possible that assessment process is being used “to police” students’ beliefs. In such conditions, she concludes, students quickly learn to adjust their views to match the situation. Boud et al (1999) maintain that assessment exercises power and control over students. They also point out that assessment promotes forms of self-surveillance, which discipline students via their

own self-monitoring subconsciously. Studies of the relationship of assessment and students' approach to learning has revealed that inappropriate forms of assessment seem to encourage surface approach to learning Boud et al (1999). This is in contradiction with what reflective learning is designed for which is deep meaningful learning. The following extract from a journal article on reflection demonstrates this phenomenon of a strategic approach to reflection under the pressure of assessment:

“I quickly learned from my undergraduate professor that in spite of my inexperience with self-examination and my inhibitions about revealing personal thoughts to a virtual stranger, I had damned well better produce what the professor wanted to see if I wanted a good grade. In subsequent essays, I therefore resorted to strategic deception, revealing carefully contrived stories about the negative effects of sibling rivalry on my family over the generations. Uncomfortable with revealing my family's genuine faults, I constructed fairly harmless ones, which awarded me the marks I wanted without sacrificing my dignity” (Hobbs, 2007 p. 414)

However, Bryan and Clegg (2006) believe deep and surface approaches to learning are in reality approaches to assessment. They continue:

Research of the last twenty years provides evidence that students adopt strategic, cue-seeking tactics in relation to assessed works (p.1)

The evidence in my study supported these observations. The students felt obliged to submit something to be assessed thus they adopted a strategy (going through the motions) by which they could secure a good mark, fulfil the requirements and resolve the unresolved issues such as perceived unfair and illegitimate assessment, and assessing the content not the process.

The students also expressed their concerns about the fairness and legitimacy of assessment of their reflective works. The issue of fairness seems to be a sensitive and important issue as students compare themselves with peers. Flint (2005) suggests:

“There is an absence of literature on the topic of undergraduate students’ perceptions of fairness of educational assessment whilst in the same time the topic seems to be one that many educators feel knowledgeable about.”

This phenomenon is even more visible in terms of assessment of reflective accounts. In the centre of the issue of fairness of assessment is the teacher or assessor. In my research, students complained about subjectivity of teachers in assessing reflective accounts and even one of the teachers expressed her own observation on her own bias:

The more I do reflective marking, the more I realise that there is an element, if you’re the first one in the pile, or the last one in the pile, it may make a difference to how the marker marks your piece of work and it very hard for it not to make a small difference. (Teacher Medicine Female 15)

I have noticed this phenomenon when I was marking students’ exam papers especially when I was under the pressure of doing huge piles of papers in a given time years ago in Iran. Therefore, it seems the potential subjectivity of the assessors, when judging reflective works of students, is an important issue that should be considered.

Fade (2003) asserts that the assessors are the most important assessment tools. In absence of explicit criteria for assessing reflective accounts of students, the role of the teachers is even more critical. My findings indicate that the same group of lecturers both facilitate and assess the students’ reflective activities. It seems that the assessment creates a dichotomy, on the one hand, it encourages reflection by making it the focus of attention of students, and on the other hand, it discourages true reflection by undermining its goals. This dichotomy is also in the teachers’ role as facilitators and assessors. Arguing in the same line Tate (2004) refers to facilitation of reflection and assessing it as conflicting roles, which may be problematic for teachers:

“Reflective assessment can be used in two ways: to assess student reflective ability and to assess specific competencies using critical reflection as a format. Each approach will have its own particular issues but in general terms it can become a major problem for teachers of critical reflection when we adopt the apparently conflicting roles of facilitators and assessors.”
(p.15)

At this point, it is necessary to be mentioned that one of the findings of this research is that most lecturers have not been formally trained to facilitate and assess reflection. This lack of training might have added to the severity of some of the issues discussed in this section.

In the context of this research, both students and teachers were aware of the presence of the strategy of going through the motions. This awareness was not discussed between the two groups but certainly, it has been discussed within groups of students and among teachers. The study revealed the need for a critical reflective constructive dialogue among teachers and students about reflective learning.

To a greater or lesser extent, students and teachers reported that this strategy of going through the motions was useful. Playing a reflective game and going through the motions is not a policy of the medical school and is not advocated by teachers. However, in a pragmatic attitude, they acknowledged that they were aware of its presence and they felt that it indicated, even minimally, some reflective and cognitive activities and showed students familiarity with the process. Moreover, they admitted they could not tell who is just going through the motions.

This study indicates that adopting the strategy of going through the motions does not necessarily mean that students have not reflected and have just written an apparently reflective piece of work to comply with assessment criteria. Evidence from this research suggests that participants including teachers and students thought going through the motion indicates some of the following:

- Students are familiar with the process of reflection
- Some reflective and cognitive activities are required to produce an acceptable piece of reflective work
- Student must have gone through a process of mental rehearsal of the practice and apply the reflective questions to achieve this.
- Students must be familiar and recognise the professional boundaries, ethics, and ethos to discuss them in their work.

Moreover, it should be noted that there is a distinction between learning and the representation of learning (Moon, 2004). In the process of reflective learning, the representation of learning is a further source of learning (Eisner, 1982, 1991 as cited in Moon, 2004). When the students are writing a piece of reflective work, they are re-

organising their thoughts and ideas and making more sense of them. They reproduce, or rehears what they have learnt, and in some cases, what they should have learnt. Moon (2004) avers that in such occasion learners:

“Are learning more since the organisation and classification of ideas are a process of learning” (p. 14).

I am in agreement with Friesner and Hart (2005) that some strategies might force students simply to go through the motions. I also acknowledge Grant’s (2001) assertion that “If a piece of reflective work is to be assessed it is likely that students’ motivation will be to gain best marks rather than to maximise their learning “(Grant, 2001). However, from the findings of this research it is evident that the strategy of going through the motions does not mean that students have not reflected and learning from their reflections or at least learning about reflection *per se* has not occurred.

In the current education system, assessment of reflective works of students seems to be inevitable. In fact, some believe that “reflective learning will not achieve full legitimacy within the academy until the assessment of reflective learning is secure” (Bourner, 2003 p.268). They argue that reflection should be assessed if it is to be accepted as a valid subject for learning and practice (Jones & Cookson, 2001) and if it is meant to be the focus of students’ attention in relation to learning (Fade, 2003, Scouller & Prosser 1994). On the other hand, this research, in line with Hargreaves (2003) indicates that current methods of assessment of reflective works of the students are problematic and need to be revisited. Therefore, I would agree with Grant (2006):

“Methods of assessment would have to be considered carefully if reflective learning were to be embedded in the curriculum. Methods have to be selected that made the student feel that reflective learning would help them to succeed”

From an overview of the findings of the study in terms of assessing reflective accounts coupled with an examination of the literature in this regard, I suggest that reflective learning facilitators and assessors need to be competent in reflection. They need to behave reflectively, give attention to sensitive areas of reflective works of students and they need to be aware of the influence they have as facilitators and

assessors over what is learnt and the extent to which students will delve into the world of reflective practice. They need to consider innovative assessment methods (Bryan & Clegg, 2006) such as using eportfolios (Cotterill, Bradley & Hammond, 2006), peer-assessments and self-assessments. Otherwise, assessment can easily inhibit the process it is designed to enhance as has been stressed by Boud et al (1999) and Richardson & Maltby (1995).

The interpretation of these findings for teaching and learning reflection is that the teachers of reflection need to reflect on the ways they facilitate and assess reflection. Students and teachers should view assessment as another source of learning. Teaching, learning and assessing reflection are complex social concepts that require theoretical knowledge and practical competence. Therefore, teachers of reflection need to update their own theoretical knowledge and practical skills via reviewing growing empirical research report in this field. Other implications of the findings of this research in terms of assessment will be outlined in chapter eight.

The next section will explore the level of preparedness of students at graduation to embrace a reflective approach to practice.

7.2.3. Students at graduation and beyond

Findings of this study indicate that although the ultimate aim of the reflective programmes is to train reflective practitioners, the learner may or may not adopt a reflective approach to practice. Choosing a reflective or non-reflective approach to practice is a complex multifaceted social behaviour influenced by many personal and social factors.

In the course of data analysis, the category of “at graduation and beyond” gradually emerged. This category represented all the data somehow related to the level of preparedness of students at graduation in terms of reflective practice. It also encompassed all identified factors that could potentially influence their choices toward a reflective or not reflective approach to practice beyond graduation. The following six conceptual elements helped me to define and explain this category:

- Familiarity with rationale, importance, and skills of reflection
- Role modelling
- Stage of life of the practitioner (student)
- Future workplace

- Personality types & Learning Styles
- Job requirements

These elements and their relevant evidence from the data were examined in chapter six. It is likely that above identified factors are not the only influential factors in students' inclination toward adopting a reflective approach to practice. However, they are the main factors identified by this research and shall be discussed here. Adopting a reflective approach to practice cannot be predicted by examining any single factor alone rather it can be better understood by examining each possible single factor and viewing them together as a whole.

7.2.3.1 Familiarity with rationale and skills for reflective practice

Familiarity with rationale and skills for reflective practice, its importance in the concepts such as professional development, lifelong learning, experiential learning, and professionalism seem to be one of the main determinant factors in professionals' inclination toward reflective practice. Among the six identified important factors above the factor of familiarity seems to be one, which is in more control of lecturers educationalists and programme designers. As stated by participants in this research, "we make sure that all are familiar with the concept of reflection, its importance and its requirement. "

From the findings, it could be argued that in all three courses under investigation students have been exposed to the concept of reflection. Exposed in a sense means that students know what reflection is about and how it can be used in practice. Thus, they are familiar with the philosophy of reflection, its importance and required skills for reflective practice. I would argue that by using the term exposed teachers showed their own uncertainty about the level of competence and commitment of students in terms of reflection. This was more evident among medical teachers than the participants of the other two courses. However, nursing teachers stated that they were more certain about the level of preparedness of their students for reflective practice. They argued that, practice assessment and assessing academic works in nursing, both required a degree of reflectivity to go through and were indicators of students' familiarity with reflection. Physiotherapy participants were also positive that new

generation of physiotherapists, who have gone through the new curriculum with reflective elements are more familiar with the notion and skills of reflective practice. The stage of familiarity is important because students' perceptions of reflective practice are informed by various events happening in the course of familiarisation with the notion. Familiarisation is intended to include, but not exclusively, the following:

- **What is reflection?** Students go beyond the common sense approach to reflection and relate it to academic purposeful learning. Here they learn about the definition, the nature of reflection, levels of reflection and so on
- **Reflection has a role in (Moon 2005):**
 1. Academic and non-academic learning
 2. Self-development
 3. Critical review
 4. Considering process of mental functioning
 5. Decision-making
 6. Emancipation and empowerment
- **Models, methods, and structure of reflection**
- **Skills necessary for reflection**

These are identified as self-awareness description critical analysis synthesis judgement and evaluation (Bulman 2004, Atkins & Murphy 1993)
- **Reflective practice and potential contribution of reflection to professional practice**

As it is easily seen, students are supposed to get familiar with the main concepts pertinent to the notion of reflection and reflective practice in their undergraduate programme. I would argue that the quality of this familiarisation plays a major role in students approach to reflective practice at graduation and beyond. If familiarisation with reflection is not designed and implemented sensitively, it is probable that it could construct particular views about reflection, which could hinder reflection. For example, I have outlined the problems associated with assessment of reflection in this research. Moon (2004) highlighted some beliefs about reflection, which could obstruct further understanding. One of these incorrect beliefs is *some people cannot reflect*. I have identified this view in my research in some academics and students. Taking this position, implicitly or explicitly, prevents any attempt to facilitate

reflection in people that for any reason are believed not to be reflectors. The second factor closely related to the familiarisation process is role modelling which I now consider.

7.2.3.2. Role modelling

Participants of the study generally perceived role modelling as one of the influential factors on students' perceptions of reflective practice. They acknowledged that students were receiving mixed messages from different people within academia and in clinical settings in terms of reflection. Students gave me examples of reflective practitioners and it seemed they would look at those professionals as a role model for reflection. Participants also identified negative role models for reflection.

The negative role model phenomenon in respect of reflective practice was evident in the data collected from medicine while I could not find any data in physiotherapy and nursing in this regard. This is not to make the point that there might not be any negative attitudes about reflective practice in nursing and physiotherapy but to highlight the prominence of this finding in medicine. This seems to be related to the cultural acceptance of reflection in the different courses. While reflection has been culturally accepted in physiotherapy and particularly in nursing, this process in medicine is still in completion.

Holton (2004), maintains "role model" coined by Robert Merton first appeared in his research on the socialisation of medical students. Merton believed students compare themselves with reference groups of people who reside in the social role, which they desire to occupy in future (Holton, 2004). Bandura (1977) maintained that most human behaviour is learned observationally through modelling, from observing others, one forms an idea of how new behaviours are carried out, and on later instances this implicit information serves as a guide for action.

This has been supported by communication theory (Argyle, 1983; Hargie, 1994) that highlights the importance of nonverbal behaviour in conveying ideas when compared to verbal messages.

Role modelling is a powerful teaching method (Kenny et al, 2003; Hafferty 1998). Therefore I would argue that, in any attempt to teach/ facilitate reflection in students, it is necessary to consider the influence of role modelling on them. There are definitely different opposing views about reflective learning in academia and clinical

settings as is evident in my research. Therefore, different academics may send different messages to the students. Students will learn from teachers' role modelling whether or not they decisively present themselves as a role model. Two of the major features of learning accomplished through role modelling are critical thinking and professional role behaviour in practical settings.

As it was mentioned, students receive negative views from some of the teachers in terms of the usefulness and practicality of reflective learning. This may create uncertainty and hesitation about whether or not they should take reflective practice seriously. What the teachers who advocate and facilitate reflection can do is to teach students not to leave ideas and assumptions (including the notion of reflective practice) critically unexamined. By taking such a position, both conflicting perspectives may be examined critically, and students may acquire courage to cope with uncertainty. Role modelling is a crucial part of the hidden curriculum. Tate (2004) asserts:

“When incorporating critical reflection into the curriculum, it is essential to recognise the messages that wider (hidden) curriculum can give to student.”
(p.15)

Stage of life of the practitioners (students) is another factor influencing their approach toward reflective practice, which will be discussed here.

7.2.3.3. Stage of life of the practitioner (student)

The concept of the “stage of life” emerged when teachers participated in the research talked about their own observations with students in general and specifically related to students' ability to reflect in different stages of their courses. Findings suggest that life experience, age, and maturity play a role in students' ability to reflect in deeper levels. Accumulation of a knowledge base over time would give a platform to students to reflect on. It can be argued that maturity required for critically evaluating expertise develops through the years of undergraduate course

Participants in medicine also articulated that they thought mature students themselves came into the profession with the life skills and probably more of them had the ability to reflect. Therefore, they come in with an advantage of having developed a different

kind of questioning mind than younger students. This observation comes from their experience with medical students from both five- year programme and accelerated programme.

A nursing teacher had done longitudinal research with her nursing students to examine their ability of reflection during their undergraduate course and one year after that. She explained how amazed she was with the results showing the change in the way the students viewed themselves, practice and others in the course of time.

Mezirow (1990) thinks that critical reflection is the characteristic of adult learning nevertheless Burrows (1995) is concerned that most university undergraduate students are not ready for higher levels of reflection. Kitchener and King (1990) suggest a seven-stage developmental judgement model. They argue that reflection judgement begins in pre-teen years but critical reflective judgement or the seventh stage, does not develop until the late twenties or early thirties. Burrows (1995) maintains that the majority of nursing students are young; ranging from 18 to 23 years of age, therefore their cognitive readiness for reflective thinking needs to be considered.

Finding of this research suggest that younger students tend to be more or less concrete thinkers, looking for right or wrong answers. They are more black and white in their views and expect to be given the facts. Kitchener and King (1990) found that older students recognised the value of reflection and thus more systematically kept their journals while younger students commonly made excuses for not completing their reflections such as lack of time, boredom and not finding the task usefulness. This is clearly supported by the findings of this research.

Bulman (2004) distinguishes a supposition held in the reflection literature that certain cognitive and affective skills are necessary for reflection including self-awareness description critical analysis synthesis judgement and evaluation. No one expects all students start undergraduate courses with these skills. Burrows (1995) states that according to research finding students under the age of 25 may lack both cognitive readiness and the experience needed to carry out mature critical reflection. She concludes teachers should think about this issue and address it by using simpler models when facilitating reflection.

However, a nursing teacher agreed that some mature students were more comfortable with the concept of reflection but suggested for some the maturity in terms of life and work experience, may actually act as a barrier for reflective questioning of self and practice. This is apparently in contrary to the above arguments. This can perhaps be

explained by the fact that non-supportive and non-reflective organisations may inhibit or suppress reflection in professionals and people working in such organisations may suffer from distrust and a low sense of self-confidence to engage in reflection with others. It also may be because their conception of knowledge is at the stage of absolute knowing (Baxter-Magolda, 1992) in which knowledge is seen as certain or absolute. The learner at this stage believes that absolute answers exist in all fields of knowledge therefore he does not need to engage in reflection which is related to the swampy lowlands of practice where there is not a certain answer to questions (Schon, 1987). Or maybe these two explanations coincide.

However, it should be noted that “maturity is not necessarily a product of age rather the individual has sufficient resources on which to draw to be able to make sense of complexity, contradictions tensions and dilemmas” (McArdle & Coutts, 2003). The quality of these resources determines whether our responses to different situations are reflective or non-reflective.

The effects of future workplace on adopting a reflective approach to practice are the next subject to be discussed.

7.2.3.4. The effects of future workplace on adopting a reflective approach to practice

The issue of organisational culture and its impact on individuals' reflective approach after they have been socialised into the concept of reflection in their undergraduate education seemed to be one of the concerns of participants (especially teachers) in this research. Nursing participants quite strongly and in some cases with great emotions spoke about power relations in the reality of healthcare and its impact on nurses' reflective activities. They talked about scenarios when nurses reflect, recognise things, and cannot say anything about it. The participants reported a feeling of being powerless, frustrated because the organisation is not supportive. Power relations and non-supportive organisations, they believe may impede reflection and the individual eventually becomes one like others. Medical teachers participated in this research were not concerned about power relations, their main concern was the negative attitude toward reflection particularly in clinical situations. In the meantime, they were more optimistic that future practice would open more rooms for reflective approaches in medicine.

Although power relations-though not an issue everywhere-highlights, the point that environment can operate as a barrier for reflection. While in physiotherapy the issue of power did not appear to be the main case, but the impact of workplace environment on the outcome of what students have learnt in terms of reflection remained a source of concern. The findings in physiotherapy highlighted the concern over the probability of resocialisation into other approaches to practice and learning.

Participants of the three courses were concerned about a non-supportive culture and environment in students' future workplace. As reflection is culturally accepted in nursing, participants from this group related their concerns to power relations in the reality of the workplace while data from the medical school highlighted an existing negative attitude toward reflection, which is prevalent in clinical settings.

Findings of this research, with nursing group, support what Mantzoukas and Jasper (2004) outline in their research about reflective practice in the reality of hospital wards. They found that little consideration appears to be given on the impact that the organizational culture and the politics of power may exert on the implementation of reflective practices within daily ward reality. They conclude that the concept of reflection seems to be invalidated by the organizational hierarchy of the wards because of a covert power struggle game (Mantzoukas & Jasper, 2004).

Although the notion of reflective practice is increasingly dominating literature on professional practice, there is still a great deal to understand about its implementation in reality of the workplace. In fact, "It has long been recognised in organisational studies that there can be a gap between the rhetoric and reality of organisational practice" (Sparrow et al, 2005). This gap was the main concern of my participants. It has been suggested (Greenwood, 1998) that reflection can only be encouraged if the right circumstances are provided. It could be argued that in the organisations ruled by negative attitudes toward reflection, critical reflection is not acceptable. Such organisations are hardly likely to foster a reflective approach and create the right situations for critical reflective practice.

Brookfield (1998) avers that an essential element of critical reflective process is to challenge the current social, political, cultural or professional ways of acting. Harri-Augstein and Thomas (1991) feel that organisations may in times see reflective members as threats as they somehow assume that on becoming self organised previously loyal or at least unquestioning members of the organisation will suddenly begin to act irresponsibly pursuing their own unbridled purposes.

The present study is in line with what Stein (2000) notes: “The use of critical reflection has had more success in the classroom than in the practice world.” There is always a threat that what has been learnt about reflection in the period of university studies be invalidated in workplaces that do not recognise the value of reflective practice or it is not in their interests.

Thus, this study highlights the importance of investigations, which attempt to identify the features of the work situation that facilitate or impede reflective practice activities. Otherwise, the emphasis upon reflective practice within education and training may run the risk of being nullified by succeeding workplaces. Now I will give an account of the two competing mentalities identified in this study in terms of reflective practice.

7.2.4 Two mentalities

Two mentalities toward reflective learning were identified. Most participants maintained that people are culturally divided in terms of their perspective on implementing reflective learning in the curricula. Issues such as learning styles, job requirements, different specialities, how people gravitated to specialties and the potential impacts of these concepts on people’s responses to reflective learning were the main elements of the category of two mentalities toward reflection. Surgeons were mentioned as a group of clinicians who apparently do not adopt a reflective approach to practice and even proscribe it.

The category of two mentalities reveals that participants tend to divide people into two groups of reflectors/non-reflectors; those who advocate reflection/those who refuse its usefulness; educationalists / surgeons, some other clinicians and so on. This obviously creates a binary opposition system, which shows what the participants essentially think about these concepts and what is their own position. It could be argued that most participants of this research privileged being a reflector and advocating reflection over other components of the pairs. This can be better understood when we examine the function of binary oppositions in Western mind:

“Derrida states that all of Western thought forms pairs of binary opposites in which one component of the pair is privileged, arresting the play of the system and marginalizing the other component” (Fogarty, 2005).

However, it was evident that there was a cultural divide between full time educationalist and clinicians. Some participants maintained that it was a job requirement for the full time educationalist to be familiar with the theory of reflective practice, the literature, research, and the underpinning basic assumptions of reflective learning. On the contrary, most clinicians are not very familiar with the theory of reflective practice therefore they are less likely able or willing to contribute to its development and some of them may play a negative role and may have an adverse impact on students' perceptions on reflective learning as negative role models. The phenomenon of cultural divide between teachers was so obvious that it had been easily recognized by students and they seemed to have conformed themselves, to greater or lesser extent, into one of the camps; albeit based on their own natural inclinations and under the effects of role modelling.

7.2.4.1. Job requirement and learning styles

The concept of the interrelation of job requirements and learning styles served as one of the properties of the category of two mentalities whereby people explained their observations about different perspectives regarding reflective practice. On the one hand, the findings suggest that job requirements potentially determine learning styles, though to an extent. On the other hand, personality types and learning styles affect people's inclination toward certain jobs. In fact, these two properties and their interconnectedness appeared to have the potential of explaining the phenomenon of two mentalities. In chapter six, I examined the possible relationship of personality traits, learning styles, job requirements, and speciality choices (Diagram 6.1).

Participants never mentioned any particular taxonomy of learning styles but in other parts of the interviews, they had mentioned Kolb's learning cycle or words such as activist, pragmatic and reflector, which is used in Honey & Mumford's (2000) version of the Kolb's four learning styles. Regardless what type of learning styles different participants had in mind, it appeared that by learning style they meant, various approaches, or ways of learning that suit an individual best. That is, different people perceive, take in, and process information in different ways. They maintained that personality types and learning styles are affected by upbringing, heredity and educational history and existing environment of action.

The findings of this study are in line with what Savickas and Borges (2002) found in their literature review in terms of personality and medical speciality choice. They wrote:

“Following graduation, physicians enter a variety of medical specialities that differ in work settings, job duties, requisite skills, and vocational interests. In fact, these specialities differ so much that they almost constitute distinct occupations. For all practical reasons deciding to become a physician is an educational choice, one leading to medical degree. In contrast selecting a speciality closely resembles an occupational choice”

They concluded that personality traits play a role in those occupational choices. Similarly, in physiotherapy working with chronic diseases and disabilities requires a much more holistic approach, a view that enables professional to see the patient as a person in the community therefore needs a much more reflective approach to understand the complexity of the situation. It might be easier to treat an acute low back pain using a non-reflective model, but to address the problems of a patient with rheumatoid arthritis need a reflective collaborative approach to practice. Different branches of physiotherapy could be viewed, (as mentioned by one of the participants) as different specialities each of which attracts people with certain personalities and learning styles.

In the context of this research, participants used the terms learning styles and personality types interchangeably. “In fact, what some call learning styles, others have labelled as cognitive controls, cognitive styles, or personality.” (Santo, 2009) As stated above my participants frequently referred to Kolb’s model of learning styles. They used binary oppositions such as reflectors vs. pragmatist and reflectors vs. activists. By doing so, they used the terms activists and pragmatists interchangeably and in opposition to reflectors. They never mention the term “theorists” as is being used in (Kolb 1976) and Honey and Mumford’s (1986, 1992). The absence of the term theorists and presence of the binary oppositions mentioned earlier indicate that my participants put the term reflectors in contrast with all other components of the abovementioned models of learning styles. Thus, they implicitly created another binary opposition, that is, reflectors vs. all other three dimensions of the above

models. Considering most of the teacher participants in this study are educationalists and presumably are familiar with the literature, they have a broad understanding of the learning styles, and they are not very precise in using the terms. The following is my interpretation of above models of learning style which I hope helps in understanding my arguments.

Kolb and Fry (1975), influenced by Jung's (1923) personality theory, maintained successful learning requires the possession of four different abilities. They specified these abilities on each pole of their model as; concrete experience abilities, reflective observation abilities, abstract conceptualisation abilities, and active experimentation abilities. They propose every individual is inclined to develop a strength in, or orientation to, one of the poles of each dimension. That is, people have preferences for different styles of learning. Accordingly, they developed a learning style model (Kolb 1976). This was well thought-out to place people on a line between concrete experience and abstract conceptualisation and active experimentation and reflective observation. In this way, they identified four basic learning styles. They acknowledged that there were strength and weaknesses related with each learning style and adopting just one style can have adverse effects for the learner. While this model is not without its critics (Boud et al, 1983; Jervis, 1987), I intend to focus on the frequent reference made by participants of this research to this model and models such as Honey and Mumford's (1986, 1992) model, which was based on Kolb's model. The latter has also four dimensions as follow:

- Activist = Concrete Experience
- Reflector = Reflective Observation
- Theorist = Abstract Conceptualisation
- Pragmatist = Active Experimentation

The findings of this research suggest that participants associated deep approach to learning with reflection. A surface or deep style (approach) to learning implies that individuals learning styles influence learning. Entwistle and Ramsden (1983) associate these approaches to the personality of the learner, the job requirements, and the expectations of the learning. Some participants, particularly students thought people are either deep or surface learners. Light and Cox (2001) reject the idea that learners are either deep or surface learners but maintain that the learners react to the learning environment, which they are based in. Strategic-oriented students, they state ,

are attentive and responsive to the signals they find about the nature of the tasks and demands made upon them and even students who are more tending to adopt the deep approach may at times think that it is less useful than a surface approach. They stress that the key objectives of this approach is ensuring highest possible marks. Also in this vein, Marton and Saljo (1997) said that students adopt an approach that they think meets the demands of the expectations that are required of them. In a symbolic interaction perspective they attach a meaning to the subjects to be learned (such as, important, interesting, waffle and nonsense) and act based on that meaning accordingly (adopt a deep or surface approach to the subject). Biggs (1999) distinguishes between intrinsic (meaning oriented) and extrinsic (outcome oriented) motivations in students learning. Students are meaning oriented when they are interested in the subject of learning and they are outcome oriented when they attach other meanings to the learning such as qualifications or grades. The latter was discussed in students' reactions to assessment of reflective works in the context of this research. Now I return to the issue of surgeons as a stereotype of non-reflectors in the context of this research.

7.2.4.2. Surgeons and Reflective Practice

The findings of this research indicate that surgeons have been stereotyped with a non-reflective approach to practice and negative role modelling for reflection. There was also evidence that they normally deny the usefulness of the notion of reflective learning in clinical settings. Although there is a wealth of literature about reflective practice, the issue of reflection and surgeons' approach to it has not been investigated in depth. The question arose "why are the surgeons labelled as non reflectors and opponents for the notion of reflective practice." The issues of personality types, learning styles and job requirements were to some extent convincing but reviewing the literature about reflection and its nature could shed more light on this issue.

Firstly reflective practice by espousing a holistic epistemological position questions the superiority and dominance that had been given to technical-rational source of knowledge (Schon 1983, Goldstein 1990, Gould 1996, Peile 1993 Rolfe 1998). This could be perceived as threatening by any one whose knowledge base is *only* based on the positivistic notion of technical rationality and universal truths.

Secondly, Schon (1983) feels that reflective practice is significant in removing the mystery from professional practice and it would encourage us to challenge the power base of the professional through the development of reflective practice and emancipations it may engender. The following quotation from a fifth year medical student aspiring to become a surgeon is significant:

“You can’t sit there, that’s Mr X’s seat,” the scrub nurse calls out to me in the staff room as I’m poised over a chair, identical to the 10 other vacant chairs in the room. I move to another seat. “No,” the nurse stops me again, “That’s where he puts his feet.” I look up at her about to laugh, but just look dumb struck instead when I realise that she is serious.” What makes people think that surgeons deserve such reverence? He struts into the staff room with an air of superiority and sits on “his” chair, ignoring the hard working team with whom he is about to operate. I doubt he even knows our names. (Cherrington, January 2008 SBMJ)

Finally “the reflective practitioner tries to discover the limits of his expertise through reflective conversation with client” (Schon, 1983 p. 269) instead of trying to reinforce that power base. Schon does agree that this can be challenging for professionals who are used to work in an atmosphere that reinforcing Model-One type behaviour (Argyris & Schon, 1974) is widely accepted and they are benefiting from it. Assumption analysis is the first of four identified process central to critical reflection (Brookfield, 1988) the others are contextual awareness, imaginative speculation and reflective scepticism. The product of these processes is re-examining any universal truth claims or unexamined models of interaction (Stein, 2000). To summarise, reflective practice questions any unquestioned supremacy, removes mystery from practice, and encourages the professional to question the very basic assumptions of his practice thus it is not surprising if it is not embraced by those who will be dramatically challenged by its basic principles.

Some of the participants, however, acknowledge that becoming too reflective for some specialists such as surgeons might not be as favourable as for other specialists. This was again a confirmation of the concept of the impact of job requisites on

adopting a learning style and served to define the category of two mentalities. On the other hand, there was an argument that reflection was something that its time had come for everyone even for surgeons. One of the educationalists also mentioned the political agenda of change was behind the movement of reflection on practice to prevent danger and increase patient safety.

However, in a pragmatic approach, most of the participants articulated their final reflections on how the two camps could reach some sort of reconciliation. They maintained that pragmatic people should not ignore the need for reflection at the same time as reflectors are expected to be pragmatic. In other words, being a reflector and in the same time a pragmatic person are not mutually exclusive events. Meanwhile, educationalists should consider the realities and accept that there are always advocates and opponents for reflective learning in academia and clinical settings. The next section explores the development of a substantive theory in this study.

The six identified factors explained in this section influence students at graduation and beyond. These factors determine their choices toward a reflective or non-reflective approach to practice. This has some implications for teaching and learning reflection in professional courses. An overview of the six factors (figure 6.3) shows that those who are involved in planning and delivering reflective programmes have more direct control over two of these factors:

- Familiarity with rationale, importance and skills required for reflection and
- Role modelling

Therefore, they need to be aware of the importance of these two factors and make sure they have used all appropriate means and effective strategies to encourage reflection during the process of socialisation into reflective practice as explained in this thesis. Other remaining factors seem to be out of direct influence of the faculty members and educationalist. Although it is hoped that next generation of professionals would be more familiar with reflective practice and they would create a more reflective workplace.

7.3. Substantive Theory

The purpose of a grounded theory research is development of a substantive or formal theory, which would throw light on human interactions. The aim clearly is not testing a hypothesis rather is to discover a theory which is grounded in the actual data. Kerlinger (1986) defines theory as:

“A theory is a set of interrelated constructs (concepts) definitions and propositions that present a systematic view of the phenomenon by specifying relations among variables with purpose of explaining and predicting phenomena” (p9).

Glaser and Strauss (1967) accept this definition of theory. They also maintain that interrelated jobs of theory are (p3):

- (1) To enable prediction and explanation of behaviour
- (2) To be useful in theoretical advance in sociology
- (3) To be useful in practical applications –prediction and explanation should be able to give the practitioner understanding and some control of the situation
- (4) To provide a perspective on behaviour – a stance to be taken toward data and
- (5) To guide and provide a style for research on particular areas of behaviour

This study aimed to generate a systematic view of the teaching and learning reflection in three courses (medicine, nursing, and physiotherapy) in form of a substantive grounded theory. Glaser and Strauss (1967) state that substantive theory is:

“developed for a substantive, or empirical, area of sociological inquiry, such as patient care, race relations, professional education delinquency, or research organisations” (p32)

7.3.1 The Emergence of Substantive Theory

From the beginning of writing the findings of the research, I was aware that I was presenting my substantive grounded theory as it has emerged from the constant comparison of similar, and sometimes dissimilar, data. Darkenwald (2005) maintains:

“Grounded theory is seldom presented as a tightly knit set of interrelated categories, definitions, and propositions. Rather the theory is discursively developed in narrative from as categories and their relationship are defined, elaborated, and illustrated by data used to generate them” (p. 67).

Therefore, I have presented my theory in three chapters on finding, and in this chapter, in the form of an ongoing discourse. However, what has been presented, so far, suggest some tentative links between the concepts (categories and properties) identified in this research. I have presented these links in figures 7.1, 7.2 and 7.3.

Figure 7.1 demonstrates the first stage of teaching and learning reflection in a specific course. In this stage, a perceived image of reflective practitioner is forming in the conscious and subconscious mind of the educationalist, teachers, and those who design or aspire to deliver reflection. Four main sources of information and knowledge helping to form the image of reflective practitioner are:

- Seminal works and theories on reflection
- Personal knowledge and experiences with reflection
- General and professional literature on reflective practice
- Government & Professional Bodies’ documents about reflective practice

The ultimate image of reflective practitioner and usefulness of reflection creates a rationale for teaching and learning reflection. The main function of the rationale is to convince self and others to invest time, efforts, and resources in teaching and learning reflection. The rationale is the answer to two main questions:

- Why reflective practice in higher education
- Why reflective practice in a specific course (medicine, nursing or physiotherapy)

Course specific rationale possesses the potential explanation power in answering questions such as why some professional courses embraced reflective practice many years after the others (e.g. medicine after nursing) and why some course have just recently started using reflection. In addition, this implies that different professional courses may be seeking different outcomes for their professions out of reflection and each course is in a different stage of implicit explicit phases explained in chapter 4.

Another function of the rationale for reflective practice is to convince students to take reflective learning seriously. It seems that failure of the rationale leads to the

malfunction of the reflective programme. In the contrary, if the rationale is well-thought of and it is evidence based enough it may convince people that reflection is something that its time has come for the profession or the branch of the profession.

If so then the next stage starts which is depicted in Figure 7.2.

Stage 2 consists of three elements of designing, implementing and assessing reflective learning programmes.

Reflection can be designed either as a discrete module or integrated within modules on personal and professional development. Each of these two methods needs careful consideration of sensitive issues such as the amount of time that should be allocated to reflection, the volume of work generated for the students and staff and so on.

In the period of implementation, two main groups of issues are identifiable:

Decisions:

Preparations (teachers, courses, teacher training, size of classes, facilities)

Methods and Strategies of facilitation (reflective essays, diaries, learning journal, portfolio, and so on)

Actions:

Scheduling

Teaching, Encouraging Facilitating (in academia, in clinical settings)

The period of assessing reflective works of students is one of the most challenging periods of teaching and learning reflection for both students and lecturers. Although the rationale for reflective practice appears to be convincing for many, there is doubt and concerns regarding assessing students' reflective works. Assessors should consider issues such as legitimacy, fairness, and methods of assessment, which are common to any form of assessment of students' works, but it is the nature and purpose of reflection, which make assessment a problematic issue. The problems arising from assessment of reflective works of students, such as unresolved issues, the strategy of going through the motions have been discussed in detail in this chapter and chapter 5.

Figure 7.3 is visual illustration of the relationship and interrelatedness of all concepts, categories, and dimensions that have been identified and discussed in this research. All of the findings are connected in the minds of those involved in the phenomenon forming a framework that contains and relates every concept simultaneously. This creates the bigger picture, and our shared understanding of the phenomenon, which I now discuss.

7.3.2 Understanding the complexities

The combination of the internalised nature and individual features of reflection with its context and social related factors (externalising these internal and personal aspects) make reflection and resulting reflective practice a complicated concept to understand (Clarke et al, 1996; Moon, 1999). This does not mean that professionals give up their efforts to decode this multifaceted concept in their own ways.

In fact in an intellectual attempt to make sense of the complexities of reflection the participants of this study ,and alongside them the researcher, tried to blend and integrate fragments of theory, personal and professional experiences, information, feedbacks from interactions with others, professional guess and intuition into “something called understanding” (Goldstein, 1990) of the complexities of reflection. This understanding might be better explained via using the concept of bricolage. By bricoleur activity, I mean construction of a mental image of reflection from various forms of knowledge, which happen to be at hand about the phenomenon. These forms of knowledge are available to participants in their real life and in their personal and professional experiences with reflection. It was via the process of research that I could enter the world of participants and attempted to understand the complexities of teaching and learning reflection. The indicators of such a limited but still important understanding are the findings of the research described and discussed in this thesis. The aim was not to define the phenomenon and add another definition to many existing, somehow, vague definitions because many attempts have been made to define the structure of reflection (Mezirow 1981, Boud et al 1985, Gibbs 1988, Fish and Twinn 1997, Johns 1994) but it still is not easy for professionals to define it. Reflection is a complex phenomenon that escapes a precise definition. The aim is to better understand the nature of the phenomenon and act accordingly. In a symbolic interactionist view participants act (e.g. design, implement, and assess reflective learning programmes, go through the motions and so on) toward reflection based on these very personal and professional understandings of the phenomenon (making sense of and assigning meaning to reflection and to other “things”). In this vein, the finding of this study emerged to be presented in three chapters. Chapters 4 and 5 are mainly concerned with what participants actually do (actions) and chapter 6 is largely about their personal and professional constructed meanings of the phenomenon, thoughts and understanding.

Teaching and learning reflection contains numerous concepts that need to be considered. It seems that *every concept relates to and modifies every other concept*. This interactivity of the system is one of the main features of reflective teaching and learning. In a hermeneutic stand we cannot understand the whole if we have not understood the parts. Likewise, we cannot understand the parts without having a holistic view of the phenomenon. This was my way of interacting with the data.

What has been depicted in Figure 7.3 helps us to explicitly understand that participants' understandings of the phenomenon is not something that starts after a certain period or stage of thinking about, designing or implementing reflective programmes. In this perspective, understanding is an omnipresent entity, which are present everywhere and all the time. What teachers and students involved in reflective teaching and learning are trying to do is making more sense of the phenomenon, to better understand it, attach their own personal and professional meanings to it and act based on that meanings. What this research attempted to do was to develop a more collective and comprehensive understanding about those meanings via a constant comparative method. I hope this has been achieved, even minimally.

This study developed a comparative understanding of teaching and learning reflective practice in nursing, medicine and physiotherapy. Constant comparison of data from different courses enabled me to gain a better understanding of the complexities of teaching and learning reflection. Although teaching reflective practice in the three professions seemed to have common characteristics, it also had features specific to each profession. This similarities and differences have been explained in a discursive manner throughout this thesis. Here, I will try to give some examples of the comparisons made and their possible implications for practitioners:

Considering the implicit/ explicit phases of reflection identified in this research (Figure 4.1), the three courses under investigation may be in different phases of reflection. That is, nursing is in the second implicit phase and reflection is a part of the accepted culture and a rather dominant discourse. Nevertheless, medicine and physiotherapy seem to be in the explicit phase of reflection. Therefore, in medicine and to a great extent in physiotherapy reflection as an educational notion, exists, functions, and is still in the process of completion. It has not been accepted as the dominant discourse and there is still resistance and a negative culture in terms of

reflective learning. It seems awareness about this situation would help practitioners to decide about the level of generalizability or transferability of research findings from one course to another. It also enables practitioners to understand other differences between the courses, such as the negative culture toward reflection in medicine and bandwagon phenomenon in nursing and resolve these issues.

Different professions use reflection for different purposes. This is influenced by their socio-political stance, social position and professional ambitions and interests. These ambitions and interests may be conflicting. Practitioners need to consider this in interprofessional educational encounters and make it explicit that the purpose of reflection is to reduce prejudice and learn together to work together.

Reflection is used to make tacit knowledge embedded in practice explicit to inform theory and practice. However, it is neither possible nor favourable to make all implicit leaning explicit. It seems some nursing educationalists have gone too far and have not recognised the limitations of reflection. It seems the balance is kept in medicine because of the dominance of positivism in many places. Practitioners need to consider the strengths and limitations of reflective learning and make them explicit for their students.

The debate over assessment of students' reflective accounts created much more data in medicine when compared with either nursing and physiotherapy. This was an indicator of the explicit phase of reflection in medicine, medical students being more mature and critical of what is being delivered. This is also a sign of negative culture and cultural divide in medicine in comparison to the other courses. This lively situation needs to be welcomed by practitioners to nurture further reflection and discussions. If students prefer to debate over reflection and its assessment why should we not use this as a source for learning and reflection?

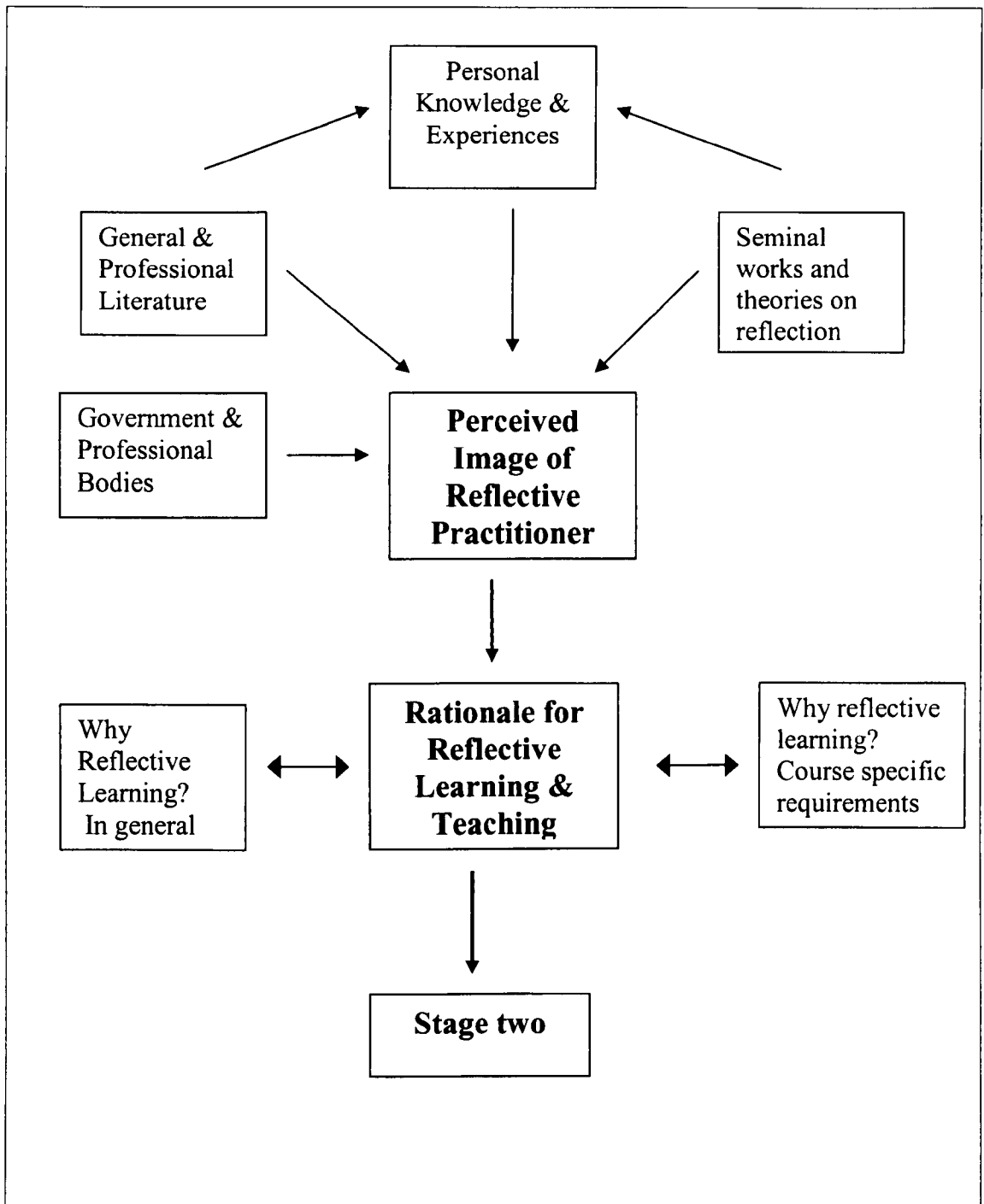


Figure 7.1 Stage one -professional courses develop a rationale for reflective teaching and learning

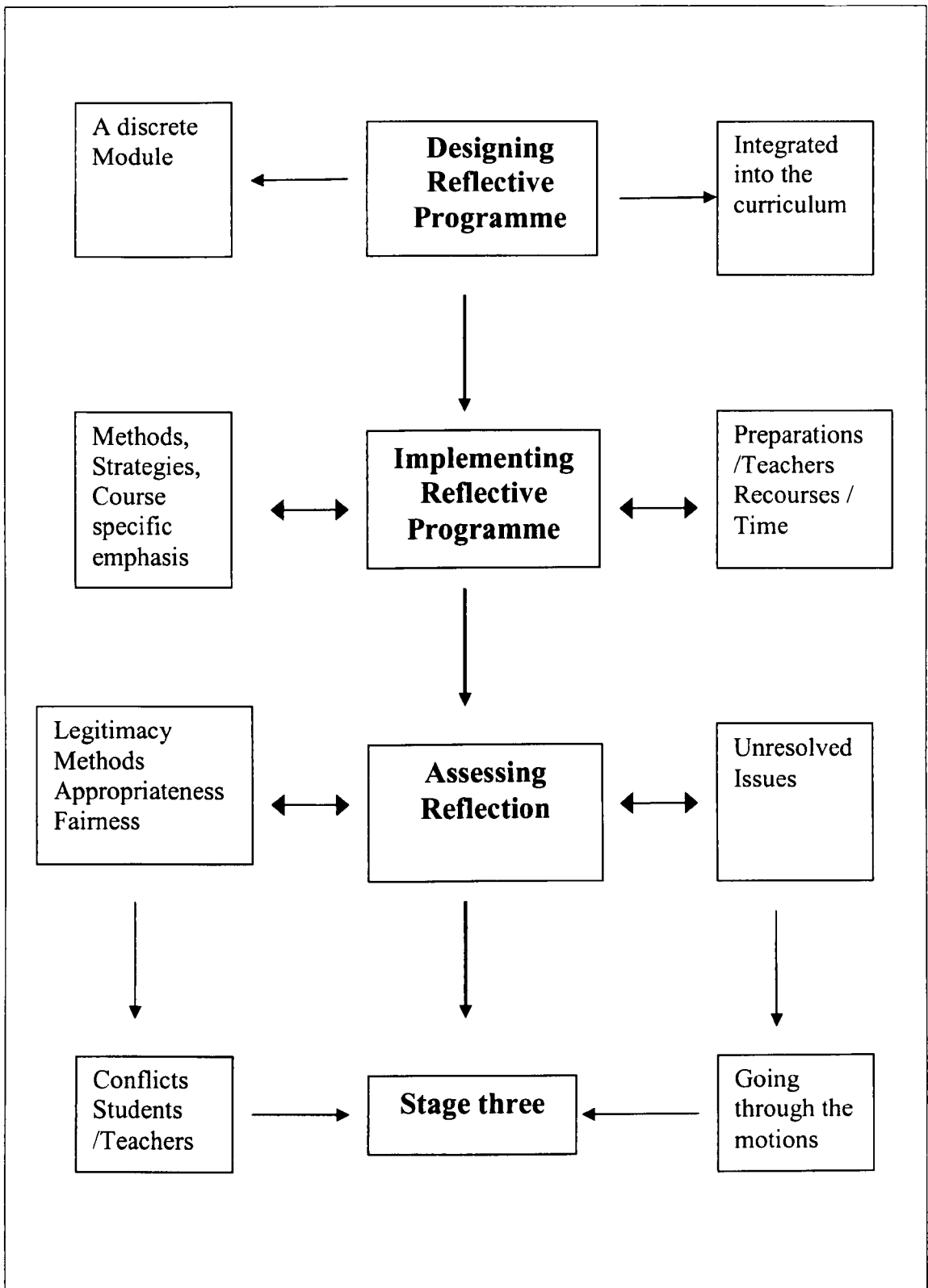


Figure 7.2 Stage two- Designing, implementing and assessing reflective programme

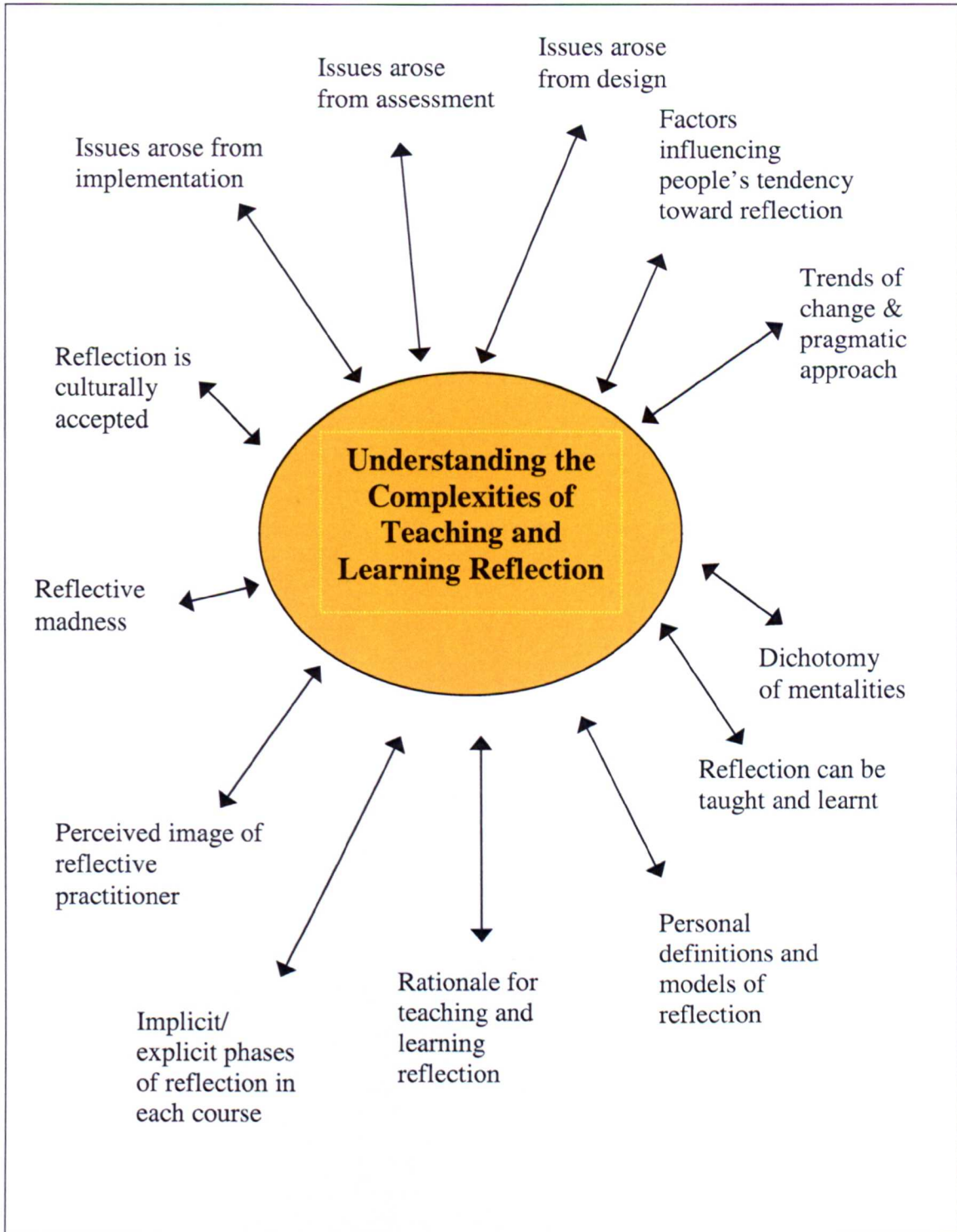


Figure 7.3 Stage three- Understanding the complexities of teaching and learning reflection results in an evolving curriculum

7.4 Summary

In this chapter, I have outlined some key findings of the research. These key findings, among many others, have been examined in the last three chapters. Then I have selected some selected findings to be discussed in the light of extant literature.

Whether or not reflection can be taught or learnt is matter of debate. I have argued that literature is not convincing in this regard. However, this does not minimise the importance of the debate. From a symbolic interactionist's point of view, the answer to this question (the meaning we attach to reflection) is important because it determines our consequent acts toward teaching and learning reflection. If we believe that reflection can be taught then we adopt methods and strategies to teach it. In contrast, if we think reflection cannot be taught in traditional ways then we seek appropriate methods of encouraging it in the individuals. In either case, our methods, strategies and consequently the outcomes would differ.

I have discussed the issue of assessing student's reflective works in chapter five and in this chapter meticulously. The findings indicate that the assessment of students' reflective work can be problematic and needs careful consideration. From an overview of the findings of the study coupled with an examination of the literature, I suggest that reflective learning facilitators and assessors need to be competent in reflection. They need to behave reflectively, give attention to sensitive areas of reflective works of students, and need to be aware of the influence they have over what is learnt and the extent to which students will delve into the world of reflective practice. Otherwise, assessment can easily inhibit the process it is designed to enhance (Boud et al, 1999; Richardson & Maltby, 1995).

Choosing a reflective or non-reflective approach to practice is a complex multifaceted social behaviour influenced by many personal and social factors. I have discussed the six identified factors influencing the level of preparedness of students at graduation in terms of reflective practice.

I have discussed the substantive theory emerged from constant comparison of data from different sources. I have explained that the theory has already been presented in a discursive manner in the three chapters on findings. However, I have presented an outline of the substantive theory in figures 7.1, 7.2 and 7.3. Finally, I have defined participants' and the researcher's understanding of the complexities of teaching and learning reflection by acknowledging that teaching and learning reflection is multifaceted and contains various concepts that need to be considered. It seems that

every concept relates to and modifies every other concept. This interactivity of the system is one of the main features of reflective teaching and learning. In a hermeneutic stand we cannot understand the whole if we have not understood the parts. Likewise, we cannot understand the parts without having a holistic view of the phenomenon. Understanding the complexities of reflection relates to a unity of meaning, that takes place when the participants' and researcher's horizons of meaning meet and combine.

Chapter Eight

An Analysis of the Intersubjective Dynamics between My “Self” and My Research

Introduction

This is the final chapter of this thesis. In this chapter, taking a reflexive approach, I reflect on the relationship between my research and myself. I will also talk about some implications of the study for teaching and learning reflection in medical and healthcare education, need for further research, and limitations of the study.

Like any other PhD student doing qualitative study, I encountered questions relating to research methods, methodology, epistemology, and ontology. I knew that I had to think about the research methods carefully and not only describe but also justify them. Then I had to think about my methodology or “plan of action” and “the rationale it provides for choices of methods.” I was aware that the researcher brings a number of assumptions and theoretical beliefs to the research methodology and I knew it was important to make these assumptions explicit for myself and accessible for the audience of my thesis (Crotty, 1998). As a novice qualitative researcher, I felt overwhelmed with all these demands.

Reflexivity helped me to regain my confidence. I was privileged that the subject matter of my study was reflection and reflective practice. That is, I became familiar with the concept of reflection and thereby reflexivity from the very beginning days of the research. My understanding of reflexivity has been always evolving. Finlay and Gough (2003, p. ix) identify different meanings of reflexivity for different people. I argue that the different meanings of reflexivity depend on the stage of the research, and the requirements of that particular stage. I now explore my own understanding of reflexivity.

8.1. My understanding of reflexivity

In the first year or two of my PhD, while I was designing, shaping and reshaping my study reflexivity was reflecting “on the way in which research was carried out and understanding how the process of doing research was shaping its outcomes.’ (Hardy

et al, 2001). When I started concurrent collecting and analysing the data I added to my understanding of the reflexivity what Alvesson & Skoldberg (2000) call ‘the interpretation of interpretation’. When I was thinking about subjectivity, and the issue of validity in flexible design, reflexivity for me was a way to identify areas of potential researcher bias (Ahern, 1999 as cited in Robson 2002, pp. 171-3). However, I was cognisant that in Glaserian grounded theory subjectivity was another variable to be considered. See table 8.1

Any reflective researcher would probably identify changes in his beliefs, assumptions, worldviews, abilities, and aspirations, in a stage of his research, as the result of his involvement with the research. I very soon realised the impacts of my research and doing a PhD on making a “new me” so reflexivity became a way of thinking about how the research may have affected and possibly changed me, as a human being and as a researcher (Willig, 2001).

Research phase /activity	My understanding of reflexivity
Designing, shaping and reshaping the research	Reflecting on the way in which research will be carried out and predicting how the process of doing research will shape its outcomes.’ (Hardy et al, 2001)
Concurrent collecting and analysing the data	‘The interpretation of interpretation’ Alvesson & Skoldberg (2000) call
Thinking about validity	A way to identify areas of potential researcher bias (Ahern, 1999)
In Glaserian grounded theory	Reflexivity is another variable to be considered Glaser 2002)
Effects of the research on the researcher	A way of thinking about how the research may have affected and possibly changed me as the researcher (Willig, 2001)
Throughout the research	Reminding the moral and ethical boundaries of research and academic conduct

Table 8.1 demonstrates my evolving understandings of reflexivity in the course of this research.

Throughout the research, reflexivity was thinking about doing the research within the ethical and moral boundaries and academic codes of conduct.

Reflecting on my own understandings of reflexivity at different stages of the research helps me to understand Gadamer’s (1989) hermeneutic circle where our

understandings are seen to be continually modified in dialectic between pre-understandings and what is being revealed. My understanding of reflexivity has been therefore, evolving and it would probably develop as my journey in the worlds of research paradigms, medical education, and professional practice continues. My understanding of reflexivity presented above encompassed both personal and epistemological reflexivity identified by Willig (2001).

I do not believe that the researcher can be completely aware of all personal and epistemological factors that might have affected his research and its outcomes. Most of these factors are implicit in nature, some seem to be irrelevant, or they might be regarded as unimportant and so on. Purposeful deliberate reflection on possible factors, using what other researchers have done, or what the literature suggests as a template, would be helpful. I try to explain the factors that I am aware of by using the metaphor of personal baggage and the issue of language. Then I will reflect on the possible impact of these factors on my research.

8.2. My personal baggage

8.2.1. My educational and social background

Researchers bring their personal baggage into the research. Knowles (2006) refers to personal baggage as:

“Emotional political and intellectual positioning aspects of a researcher’s make up and modus operandi (p.403)”

Then what is (or better to ask what was) the personal baggage I have brought with me to this research?

I am a male, Muslim, married, Iranian, physiotherapist, and a university lecturer. I started the research when I was 37 years old. I was awarded a scholarship by Iranian Ministry of Health and Medical Education in collaboration with World Bank, to do my PhD. My wife and my son have accompanied me in this journey.

I completed a B.Sc. (1992) and a M.Sc. (1996) in physiotherapy in the University of Tehran and then I completed a one-year course on electromyography and nerve conduction velocity (EMG & NCV in 1997) in the same university. It was a project to investigate the effects of an exercise programme on the NCV of sciatic nerve and

muscle strength of normal people and sciatica patients. I have been working for several years in hospitals and my private physiotherapy clinic as a clinician. After completing my M.Sc. studies in Tehran University, I was employed by Kurdistan University of Medical Sciences as a university lecturer. I was working in the Centre of Medical Education Development and teaching in medical school for 4 years before I started doing my PhD in 2004.

It was working at the Centre of Medical Education Development where I became interested in medical education and during 4 years of working there, I gradually became familiar with the literature and research in this field in Iran and worldwide.

Positivism predominates in science, in physiotherapy and medical education in Iran. Although qualitative research has been embraced in other fields, it is a recent movement in Iranian Medical Sciences Universities. Most of my colleagues in the medical school assumed that proper scientific methods of research are quantitative fixed design methods where the researcher quantitatively measures independent facts about a single phenomenon. In our research groups, the dominant paradigm was therefore positivism. It was the culture and other approaches did not have a voice. We, to greater or lesser extent, had to conform to the dominant paradigm or get ready for the consequences.

I write poems in Kurdish and Farsi. I prefer to read a book or an article related to literary criticism if I find a spare time out of busy world of academia. I have always been interested in philosophy, sociology, and looking at the bigger picture. People at my age, those who were young in 1980s, and early 1990s are called “revolutionary generation” in Iran. Under the huge influences of the revolutionary forces of all types, who always try to create big and radical changes in the society, my generation was inclined toward ideas related to macro-sociology. That is, study of the society as a whole and consequential structuralism that, in broad term, believes society shapes the individuals. Although I was not an exception, my familiarity with literary criticism helped me to look at micro-sociology and especially interpretivism and the hermeneutic tradition of interpretation of literary texts. The issue of language has been influential in this research, as we shall see in the next section.

8.2.2 The languages I speak

An important content of our personal baggage is the languages that we speak and the cultures behind them. I am not a native English speaker. All my research has been carried out in an English speaking country, and in English language. Inevitably, my level of proficiency in English and other languages has affected my research. Therefore, I try to explain about the languages I use and their relationship.

My mother language is Kurdish which belongs to the branch of Indo-Iranian languages. All my education has been through Persian language, the formal and official language in Iran (called Farsi). Persian belongs to the same language group as Kurdish. The two languages have some features in common but they are in essence different languages. It is worth mentioning that Indo-Iranian languages stem from Satem Indo-European languages, which English belongs to its Centum branch.

I had to learn Arabic language as a requirement of the Iranian educational system and a prerequisite to obtain a high school diploma and to enter higher education. I am also interested in languages and literature. I also needed Arabic to master Farsi because of its vast influences in modern Farsi. Arabic is also needed to understand Islamic religious texts. Arabic belongs to the southern branch of the Semitic family of languages. I started learning English from high school but it was mainly about grammar and structure of English.

I began to learn English on my own, using my experiences other two languages. I am still learning English in a self-directed manner. I have used all available sources to learn languages and my knowledge and experiences in one language has always informed my understandings of the other languages. I enjoy reading and interpreting written texts even if they are philosophical or complicated.

Alongside with learning a language one automatically starts learning about the culture and “another way of looking at the world” through the new language. Based on my own experiences with the four languages I mentioned here, I argue that the language you speak, in other word, the language you think with, gives you a slightly different view of the world (the same things) from others who speak other languages. Therefore, not only we see the world differently because our perspective is different but also because our language and other implicit meaning of the words we use are different.

Now I turn back to the issue of reflexivity and examine how my personal baggage and languages may have affected my research.

8.3. How my personal baggage has shaped my research

8.3.1. The effects of my educational and social background

I acknowledge that my personal experiences, beliefs, and social background I brought with myself, when I started my PhD influenced the initial design of the research. However, new experiences, observations, and my readings in the new research environment have changed my viewpoints. I have been learning and frequently shaping and reshaping my ideas in the light of new knowledge and insight.

I am a physiotherapist by background. I am an active member of Iranian Physiotherapy Association. I have always been trying to help my profession in its movement toward professionalism and independence in Iran. The roots of modern physiotherapy are to be found in nursing (Wicksteed, 1948; Pearson & Vaughan, 1986). I have observed the similarity of physiotherapy and nursing in their subordination to medicine. I have enthusiastically followed their efforts and progression along the continuum of professionalism.

I think this had an impact on my decision to include physiotherapy and nursing into my research. I could have done my research only in the medical school. It was more convenient and participants were easily accessible. I chose to include these two courses because I was interested in the professions and because I have always compared the three professions in many aspects consciously and subconsciously. I was aware that the design of the research in this way was not only for sake of triangulation of data but also was because I wanted to know more about physiotherapy and nursing in comparison to medicine in terms of reflective practice. Therefore, I acknowledge that my professional background has influenced the research design and consequently the research outcomes.

Another area of personal reflexivity is the possible impact of the researcher's wider aims of life on the research design. I aim to go back to Iran and work in Medical Education Development Centres as a researcher and lecturer. As I mentioned the dominant paradigm of research, in medical education in Iran is still a positivistic one relying on quantitative measurements. Apart from the aim of the study which was to know more about teaching and learning reflection, my wider aim was using this opportunity to learn more about qualitative methods and interpretivism. These led me to choose a grounded theory approach informed by symbolic interactionism. Although

I have chosen grounded theory and symbolic interactionism for methodological reasons explained elsewhere in this thesis (see chapter 3), I am happy that what I have learnt should be useful for my colleagues and the wider community of medical education researchers in Iran.

8.3.2. Thinking, writing, and the matter of language

Cohen (1977) interviewed several well-known psychologists and they said that the only time they think is when they write. According to Murray (1978), this is true about poets and writers. He suggested it might be true of all writing. My own experience with writing my poems, thoughts, and academic works, is that I should always have a pen and some paper with me to write any inspiration otherwise it may go forever. I write when I think and I think when I write. This habit is a part of my personal baggage and it has its own impact on my research. One of the prominent writers (unfortunately I do not remember his name) once said that one of the scariest things for him was a sheet of white blank paper because he knew he had to think and write something on it. Writing memos is an essential part of grounded theory. It is not grounded theory without memoing. The habit of thinking and writing made it easy for me to write memos and other pieces of writing. However, writing your short memos for yourself is something and writing up your thesis for others to read is something else.

I have written poems, several articles, literary pieces, and two dissertations in Farsi and Kurdish. In that time, I did not think about the language. The ability to write in one's own language is sometimes taken for granted. Yet writing in a second language is challenging for the author. Although I have problems with the term "second language" in explaining my relationship with the English language, as it is actually my fourth language, I stick to the norm.

I feel comfortable with writing in English. I am aware that always there is a room for correctness. Comparing with my writing in my first languages, I hardly can achieve the same standard of clarity and correctness. I knew that in writing up the thesis I should be aware of the impact of other languages on my English. This could be the impact of grammar, the presentations of the lines of thoughts and arguments, and sometimes a verbatim translation of the phrases and terms used in those languages into English. Sometimes the preferable styles of writing in one language are not

appropriate to be used in another language. Thinking is an internal dialogue. For a dialogue, we need a language. Reflecting back on my research I ask myself what is the language of the research. The answer, at its face value, can be English because the participants, context, the language formally used, the process, and product are all English. Nevertheless, there are some important elements missing in that argument, the researcher, and the process of thinking, the internal dialogue, and its language. Not all these are English. I think in English when I am thinking about the subjects that I have learnt through English. In fact, there are many concepts that I do not know any exact equivalent for them in other languages. For some I doubt there is one. An example is the word reflection and its derivations. There are many words for thinking but not for reflection. Nevertheless, I think in other languages normally. This is true the other way round. I was aware that in writing up the thesis I was both the author and the translator of my thoughts. This position was challenging because sometimes I was not able to find the right words, terms, idioms, or phrases in order to express my exact thoughts so I had to compromise the exact meanings for convenience and admit being not eloquent and articulate enough, albeit with a feeling of regret.

A PhD is an iceberg and the thesis is its tip. People can see the tip, its shape, and scale but cannot see the rest, which is hidden. Some examples of the hidden part of the PhD iceberg are the tacit knowledge gained, academic networking formed, research ideas generated and academic knowledge in other areas rather than the subject matter of the research. Supervision meetings, tutorials, workshops, and conferences are important parts of a PhD but they are not visible in the thesis. I played the role of interpreter for my “self” in all these years and occasions. In the course of the PhD gradually the role of the interpreter, fade away but he was never dismissed.

I used first person narration in most parts of this thesis when I thought I could do so. Using this strategy makes the writer both visible in the text and responsible for it. I am aware of my willingness to be visible and write in my voice. I have been aware that the participants’ voices have to be heard so, at times, I have lowered my voice. I believe the writer should accept responsibility for his text.

I have used the “he” (pronoun) and “his” (adjective) in a generic sense when the gender of person was unspecified in this research. I used this strategy just for sake of convenience in many places. I also wanted to prevent a sense of clumsiness associated with using both he/she as the subject of a sentence.

Research design determines its outcomes and it is to this I now turn.

8.4. The possible effects of research design and questions on the outcomes

I aimed to investigate understandings, meanings, and participants' perceptions of teaching and learning reflection. I did not have a predetermined research question. I wanted to know what is going on that is an issue and how it is handled. I identified the area of inquiry but not the research problem (Glaser, 1992; MacDonald, 2001).

I am aware that the area of inquiry, which I identified, has determined what has been found about the phenomenon. I began the study with an area of interest. I had a set of questions to ask but only as an interview guide. The interview questions did not determine the parameters of the study. It was the data collection and analysis, which determined what I should focus on and where I should go next. Therefore, the process of the research has influenced the outcomes. A different area of interest, for example what is the nature of psychological processes involved in reflection, would lead to a different focus of the study and accordingly different outcomes.

In conclusion, within this section I have tried to investigate some of the personal baggage I brought to this research including my own personal and professional background, interests, experiences and languages I speak. All of these factors and many other possible factors, which I am not aware of them, have influenced my approach to the research and its outcomes.

Any research may have some effects on the researcher as it is involved in his understanding of the world. A PhD research is a long-term involvement with a phenomenon therefore; it inevitably affects the researcher as a person. I now explain the effects of my research on my self as far as I am aware.

8.5. The effects of the research on me as the researcher

"You look at where you're going and where you are and it never makes sense, but then you look back at where you've been and a pattern begins to emerge."

Pirsig, R.M. (1974) Zen and the Art of Motorcycle Maintenance

Journey is a popular metaphor among PhD student for describing research experiences. It is easy to make sense of physical displacement from one place to another. Journey affects the entire life of the traveller at least temporarily. Thus, the analogy between research process and a journey is a powerful one because research particularly a PhD research affects entire life of the researcher. For me doing a PhD was a geographical, cultural, sociological, philosophical (in terms of the research philosophy) and a discursive journey.

Considering what I revealed about myself in my personal baggage above, I can recognise the patterns of change as described by Pirsig seen in Table 8.2

The content of table 8.2 does not mean that I have left behind what I was, depicted in the middle column, and I have dramatically transformed to the left column's contents. Rather it means I have been able to modify my assumptions, beliefs, abilities, and aspirations in the light of new insight, information, practical knowledge, and skills I have acquired during the research.

Pirsig's pattern has begun to emerge in my academic life. Now I am on the top of a hill, I can look back, see where I was, look forward, envisage where I am going. I know, after I finish my PhD, I will be a university lecturer and a realist researcher. This journey and doing a PhD has not changed my ontology. I was a realist and this research has confirmed this ontology. I believe there is a world and there are things in the world, which exist independently of human consciousness.

What I have learnt because of my engagement with this research is in the realms of epistemology, theoretical perspective, and methodology. Reflecting back on my previous researches I realise that I had not thought about the epistemology and I do not remember my colleagues and myself, as a community of researchers were concerned about that. We used to think that the meaning is inherent in the object and our role as a researcher is to go and discover it. We even did not talk about this but it was implicit in our way of looking at the research and its outcomes. Therefore, I was clearly objectivist. In the course of this research, I became more familiar with other epistemologies and found the chance, time, and motivation to think and read about them (Crotty 1998, Guba & Lincoln 1994).

Now I think meaning is created in humans' minds. It is constructed in the interplay between mind and the object. Therefore, meaning for me is not inherent in the object

as objectivists say, or imposed on it as subjectivists claim rather it is constructed so different people may construct different meanings for the same thing (Crotty, 1998).

Type of journey	From	To
Geographical	Iran -Kurdistan	The UK- Newcastle
Social position	Lecturer / Practitioner	PhD student / Researcher
Ontology	Realism	Realism
Epistemology	Objectivism	Constructivism
Theoretical perspective	Positivism	Interpretivism
Methodology	Quantitative	Qualitative
Languages	Kurdish / Persian /Arabic	English
Culture	Iranian	British/ Multiculturalism
Financial status	Independent /Saving / Investment	Dependant /Expending
Context of thinking	Physiotherapy practice / Teaching	Medical Education / Researching
Attitude toward patients / students	Paternalistic	Reflective

Table 8.2 depicts some departure points and destinations in my research journey

In the course of this research, I reread positivism; unlike some novice qualitative researchers, I did not conclude that I should reject positivism in order to be a good qualitative researcher. In few words, what I learnt was to challenge positivism's claims to objectivity, precision, and certitude (Crotty 1998). This led me to interpretivism, which states human action is meaningful and it can be understood only when its culture and history are considered.

In terms of methodology, I was aware of the qualitative quantitative debate before starting this research but what I gained during this research was a better understanding of assumptions underpinning the two methodologies and their values for pursue different research questions and settings.

The concepts of reflective practice, patients-centeredness, student-centred learning active learning, collaborative learning, liberal education, relativism, and self-deterministic views clearly challenged my previous paternalistic tendency toward my

practices. I was familiar with some of these concepts but five years immersion in them makes all the differences. However, I am aware that my journey has challenged some of my beliefs, assumptions, and conclusions and I have gained new insight to the world of research and the life itself.

Reflection and reflective practice was the subject matter of this research. As I said, there is not a specific term for reflection in my languages. This means there is little literature, and debate around it. I have learnt a lot about reflection and it has become one of my research interests. I feel I have to introduce this concept to the intellectuals and academics in my country. This is now a moral and academic obligation for me.

I was aware that I was following a grounded theory methodology, which needs a degree of creativity and freedom in order to be able to produce a theoretical account of a phenomenon. Glaser (2001) warns against being too reflexive, which he calls “reflexive paralysis.” He does not reject reflexivity in the sense of being aware about the possible impacts of his personal baggage on the research. Rather he warns against self-destructive introspective compulsion to locate the work within a particular theoretical context (McGhee et al, 2007). For Glaser subjectivity is just another variable that should be considered (2002)

The findings of this research are grounded in actual data gathered in educational settings. In the next section, I outline some possible educational implications of this study.

8.6. Educational implications of the study

- Formal assessment can only include reflection “on action.” Reflection “in action” and reflection “for action” are out of the scope of such assessment. Other forms of assessment need to be considered. The acceptance of the complexity of reflective activities has implication in respect of whether it can be measured. This study revealed that criteria against which students’ reflective activities (reflection on action) are assessed is perceived as vague and subjective by most students. Written accounts may not represent the level of reflectivity of the individual, as some people are better at writing than others are, but it does not necessarily mean they are reflecting at a deeper level. In addition, as I have shown in the strategy of going through the motions, that students are likely to provide a piece of work, which they believe

the assessors want to see. However, it can be argued that even this form of assessment can help students to practise reflection, learn to articulate their thoughts, integrate theory and practice, by rehearsing different scenarios of professional practice. While the criteria and the way these criteria is presented to the students needs to be revisited ,other forms of assessment such as self assessment and peer assessment of reflection should be considered. These may help in resolving the unresolved issues caused by assessment and enhance the quality of students' reflective activities. Methods have to be selected that ensures students that every thing is in their service to learn. Threatening or inconsiderate methods of assessment may undermine reflection.

- This study demonstrated that reflection could help student to learn at deeper levels, enhance professionalism and learning from experience. However, for these desirable outcomes to happen in the undergraduate curricula, the demands of the course and assessment need to be compatible with reflective learning. For student to engage with reflective learning they need to be able to see that it is benefiting them in the learning of other course materials. Assessment and its outcome is of central importance for students therefore students need to know that reflection helps them to pass the assessments and is associated with professional progress. This study demonstrated that this has been considered in nursing, while in medicine there are still much room for improvement.
- If curriculum organisers want to encourage deep learning via reflection among students they should note that this is not achieved when a large volume of material is to be learnt. In this case, students tend to take a surface approach to learning and even to reflective activities regardless of their own personality type and natural learning styles.
- This study showed that teaching and learning reflection in the medical school is a matter of debate. Issues such as the cultural divide between teachers, students' concerns in terms of assessment, negative role modelling, and going through the motions and so on need to be discussed in a safe and reflective

environment between students and lecturers. This can be in the form of an electronic forum where every one can post their questions concerns and comments about the ways teaching and learning reflection is or should be conducted. Issues like fairness of assessment, teachers' subjectivity, surgeons and reflection, criteria for assessing reflection, and authenticity of students' reflective accounts could be discussed openly and perhaps anonymously. This has the potential to keep the lines of communication open between students and teachers and prevent some misconceptions and misunderstandings about reflection and issues caused by them. The insight such a forum may provide can be helpful for all parties involved in teaching and learning reflection. It also will inform further research into reflective practice by surfacing real life questions.

- It seems that teaching and learning reflection programmes have put a greater emphasis on reflection *on action*. Particularly assessment of reflection, which is normally the focus of the students' attention, is mainly framed around reflection on action. There appears to be a tendency in participants to associate reflection with what has happened in the past. This is an important part of reflection but not all of it. The ability to reflect in action appears to be something that professionals obtain wordlessly through experience and overtime. We should note that expert clinicians *think on their feet* rather than *in their diaries*. Understanding on how experts reflect in the workplace can help educationalists structure reflective learning for students who are novice. There needs be a balance between reflecting on *what happened* and reflecting on *what is happening now*. Ideas such as role-play, videoing, case studies, and role modelling have been suggested but ways that are more creative can be developed. Educationalists should always remember that educationalists or philosophers such as Dewey, Schon and others did not invent reflective learning, they observed expert professionals, perhaps including themselves, and formalised the way they think, learn and practise. Clinicians and teachers always can help students to learn to reflect on their feet by exposing their own reflection in action, their reasoning processes, and their own unique experiences. Therefore, it seems logical to pay more attention to role modelling and facilitating reflection in action.

- This study highlights that most of the teachers involved in teaching /facilitating reflection are not formally trained for this job. Instead, they are enthusiastic people who receive some training from other sources. They mentioned various training events and venues such as professional body based training, hospital based training, self-study methods and training in the university. The nature of the trainings seemed to be voluntary, one off, spontaneous, non-obligatory and with no formal assessment of competencies obtained. Considering overall findings of the research, it seems that there is a need for teachers to be trained, in a formal and structured way, about the subtleties and sensitive moral, ethical, and practical issues of teaching and facilitating reflection in students. In addition, creating “communities of teachers of reflection” may help to allow collegial sharing of experiences, ideas, and what has been learnt elsewhere about teaching reflection. This may partially compensate for the scattered nature of teachers’ trainings in terms of teaching reflection.

This research has explored some aspects of teaching and learning reflection in healthcare and medical education. The conclusions and the limitations of this study develop some other aspects that need further investigation. An outline of some of these aspects is now presented.

8.7. Further research into teaching and learning reflection

- This study tentatively led me to assume that in nursing discourse reflection is considered to be the culture, consequently, any movement against reflective practice may be considered counter-cultural. On the contrary, in some parts of the medical school such as in clinical settings, particularly among surgeons, reflection is viewed as counter-cultural or at least it seems to be so. I think the latter should be investigated to find out whether or not surgeons reflect on practice. If they do, what are the characteristics of their reflections? What makes them different? Why are they so notorious for being non-reflectors? What do they think themselves?

- Six factors influencing students approach to reflective practice at graduation and beyond were identified by this study. A longitudinal study, following a cohort of students through the transitional period from university to early years of professional practice would make it possible to investigate whether university trainings on reflective practice was sustained or not. How useful have university reflective programmes about reflection been in professional practice after graduation?
- The role of reflection in interprofessional education (IPE) has not been the focus of this study. However, my own interests in IPE and reflection, made me explore the possible contributions of reflective dialogues to IPE situations, which led to a conference paper introducing a model for using reflection in three personal, professional and interprofessional interrelated levels. Further research could explore the outcomes of this model (Zarezadeh, Pearson & Dickinson, 2007) or a similar one, in an IPE situation with a group of students from different courses.

8.8. Limitations of this study

- This study was carried out with a voluntary design. The staff and students who participated in my research were somehow interested in reflection and were willing to talk about teaching and learning reflection. This was an advantage for the study because they were rich sources of information about the phenomenon. Yet the voluntary design deprived me from access to people who did have strong ideas and serious criticism about the notion of reflection. For example, I was not able to find any surgeon to talk to about reflection. This made it impossible to examine the arguments from the other side of the field.
- In –depth interviews with all participants were the main source of data gathering in this study. However, I used limited observation of teaching or facilitating of reflection, had access to medical students’ reflective assignments and two students’ reflective diaries. I also conducted some informal conversations with students who had not participated in my research. Therefore, this study is largely dependent on interview transcripts. My own

field notes about other sources (diaries, assignments, observation) were not comparable with interview transcripts in quantity though they provided valuable information about the phenomenon under investigation.

8.9 Summary

In this chapter, I explored the personal baggage I brought with myself into the research. I reflected on the impacts of my personal baggage on the research and acknowledged my subjectivity. Then I declared that I have made conscious and subconscious choices that have shaped the research and its outcomes and acknowledged that different choices would lead to different outcomes. Using the metaphor of journey, I identified how the research has challenged, modified, or changed some of my beliefs, attitudes, and assumptions and future choices.

I have also outlined some implications of the study for educationalists, lecturers, course organisers, and students involved in teaching and learning reflection. Then I suggested further research in three areas based on the finding of the present study. Finally, limitations of the research were mentioned.

In the course of this journey, I have made many different choices. It is likely that there are better alternatives for some of my choices but either I have not been able to identify them or I have not been able to select them for practical reasons. I have changed those choices, which I thought they were not taking me in the direction intended.

However, at whatever time, I think about the concept of “choice “I remember the beautiful poem of Robert Frost (1874- 1963), “The Road Not Taken. “ Research as a journey is all about the choices we make/ do not make or we are not able to make as I said, therefore it feels appropriate to close this chapter and this thesis with that poem:

"The Road Not Taken"

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.

By Robert Frost (1874- 1963)

References

Aggleton, P., & Chalmers, H (2000). Nursing Models & Nursing Practice. Hampshire, Palgrave.

Ahern, K. (1999). "Ten tips for reflexive bracketing. ." Qualitative Health Research **9**(3): 407-411.

Albert, A. (2004). Peirce's Pragmatism. The Internet Encyclopaedia of Philosophy.

Allan, G. (2003). "A critique of using grounded theory as a research method." Electronic Journal of Business Research Methods **2**(1): 1-10.

Altheide, D., & Johnson, J.M. (1994). Criteria for assessing interpretive validity in qualitative research Handbook of Qualitative Research N. Denzin, Lincoln YS. London Sage: 485-500.

Alvesson, M., & Skoldberg, K (2000). Reflexive Methodology: New Vistas for Qualitative Research. London, Sage.

Argyris, C., & Schon, D. (1974). Theory in Practice. San Francisco, Jossey-Bass.

Atkins, S., & Murphy, K (1993). " Reflection: a review of the literature." Journal of Advanced Nursing, **18**: 1188-1192. 3.

Atkins, S., & Murphy, K (1994). "Reflective Practice." Nursing Standard **8**(39): 49-56.

Aylesworth, G. (1991). Dialogue, text narrative: Confronting Gadamer and Ricoeur Routledge Gadamer and Hermeneutics H. J. Silverman. New York Routledge

Bandura, A. (1986). Social Foundations of Thought and Action: A social Cognitive Theory, Englewood Cliffs Prentice Hall

Barbour, R., S, (2001). " Checklist for the improving rigour in qualitative research: A case study of the tail wagging the dog? 1115-1117." British Medical Journal **322**(7294): 1115-1117.

Barbour, R. S. (1998). " Mixing qualitative methods: Quality assurance or qualitative quagmire? ." Qualitative Health Research **8**(3): 352-361.

Baxter-Magolda, M. (1992). knowing and reasoning in college : General related patterns in students' intellectual development San Francisco Jossey-Bass.

Becker, H., & Mccall, M. (1990). Symbolic Interaction and Cultural Studies, University of Chicago Press.

Benner, P. (1994). Interpretative Phenomenology. London, Sage.

Benoiel, J. (1996). "Grounded theory and nursing knowledge." Qualitative Health Research 6(3): 406-28.

BERA (2004). " British Educational Research Association (BERA) (2004) Revised Ethical Guidelines for Educational Research " <http://www.bera.ac.uk/publications/pdfs/ETHICA1.PDF>.

Biggs, J. (1999). Teaching for Quality Learning at University. London, Open University Press.

Bloor, M. (1997). Techniques of Validation in Qualitative Research: a Critical Commentary. Context and Method in Qualitative Research. G. Miller, & Dingwall,R. London, SAGE Publications.

Blumer, H. (1996). Symbolic Interactionism: Perspective and Model. Englewood Cliffs, NJ: Prentice-Hill.

Bolton, G. (2001). Reflective Practice. London Paul Chapman Publishing.

Borges , N., & Savickas,M. L. (2002). "Personality and medical Speciality Choice: A Literature Review and Integration " J of Career assessment 10(): 326

Borthwick, A., McPherson,K & Craddock,D (2006). " Interprofessional education in health and social care: fashion or informed practice?." Learning in Health and Social Care 5:4, 220- 5(2): 220-242.

Boud, D., Keogh, R,& Walker,D. (1985). Reflection: Turning Experience into Learning, Kogan Page New York.

Boud, D., & Walker,D. (1990). "Making the most of experience." Studies in Continuing Education 12: 61-80.

Boud, D., Cohen, R;& Sampson, J, (1999). "Peer learning and assessment." Assessment & Evaluation in Higher Education, 24(4): 413–426.

Boud, D. (2006). Foreword. Innovative assessment in higher education. C. Bryan, & Clegg, K. London, New York, Routledge.

Bourner, T. (2003). "Assessing Reflective Learning." Education and Training 45(5): 267-272.

Bourner, T., & Sipmson,Penny, (2005). "Practitioner-Centred research and the PhD." Action Learning: Research and Practice 2(2): 133-151.

Bowden, P. (1997). Caring: Gender-Sensitive Ethics. , Routledge.

- Boyd, E., & Fales, A. W. (1983). "Reflective learning: key to learning from experience." Journal of Humanistic Psychology **23**: 99-117.
- BPS (2006). " British Psychological Society (BPS) (2006) Code of Conduct: Ethical Principles and Guidelines." <http://www.bps.org.uk/about/rules5.cfm>.
- Britten, N. (2005). "Making sense of qualitative research: a new series." Medical Education **39**(1): 5-6.
- Brockbank, A., & McGill, I. (2007). Facilitating Reflective Learning in Higher Education Open University Press
- Bromley, H. (2003). Glossary of Qualitative Research Terms. The qualitative Research and Health Working group. Liverpool.
- Brookfield, S. (1998). "Critically reflective practice." Journal of Continuing Education in the Health Professions **18**(4)): 162-184. .
- Brookfield, S. (1988). Training Educators of Adults. New York, Routledge.
- Brookfield, S. D. (1995). Becoming a Critically Reflective Teacher, Jossey-Bass Higher and Adult Education Series.
- Brown, G., & Atkins, M (1988). Effective Teaching in Higher Education. London, Methuen.
- Bryan, C., & Clegg, K (2006). Innovative Assessment in Higher Education,. London and New York, Routledge.
- Bryant, I. (1996). Action Research and Reflective Practice., Understanding Educational research R. Scott, & Usher R., Routledge
- Bryman, A. (2004). Social research Methods. oxford, oxford University press.
- Bryman, A., & Bell,E (2007). Business research methods, Oxford University Press, .
- BSA (2002). "British Sociological Association (BSA) Statement of Ethical Practice.": <http://www.britisoc.org.uk/about/ethic.htm>.
- Bulman, C., & Schutz, S, (2004). Reflective practice in nursing, Wiley-Blackwell.
- Bunch, E. H. (2004). "Commentary on the application of grounded theory and symbolic interactionism " Scand J Caring Sciences **18** 441.
- Burgess, R. (1984). In the Field: An Introduction to Field Research. London, Routledge.

Burns, S. (1994). Assessing reflective learning. Reflective Practice in Nursing: The Growth of the Professional practitioner A. Palmer, Burns, S., Bulman, C. , Blackwell Scientific.

Burns, S., & Bulman, C (2000). Reflective practice in nursing. Oxford, Blackwell Science.

Burrows, D. (1995). "The nurse teacher's role in the promotion of reflective practice." Nurse Education Today **15**(5): 346-50.

Calveley, M., & Wray D. (2002). "'joe Sent Me': Some Personal Reflections on the Problems of Gaining Access (Employment studies paper) (Unknown Binding) " THE UNIVERSITY OF HERTFORDSHIRE BUSINESS SCHOOL WORKING PAPER SERIES.

Carpenter, J. (1995). "Doctors and Nurses: Stereotype and stereotype change in interprofessional education." Journal of interprofessional Care **9**: 151-62.

Carr, w., & Kemmis.s. (1986). Becoming critical: Education Knowledge and Action Research., London, The Flamer press.

Chan, A., & Schwind,Jasna, (2006). "Two nurse teachers reflect on acquiring their nursing identity " Reflective Practice **7** (3): 303 - 314

Charmaz, C. (2000). Grounded Theory: Objectivist and Constructivist Methods. Handbook of Qualitative Research. 2nd ed. N. DENZIN, and LINCOLN,Y. . London, Sage.

Charmaz, K. (1990). "Developing chronic illness: Using grounded theory " Social science and Medicine **30** 1161-1172.

Cherrington, L. (2008). "I'm a surgeon—respect me! ." Student BMJ **January 2008**.

Clarke, B., Jmes,C & Kelly J (1996). "Reflective practice: reviewing the issues and refocusing the debate " International journal of nursing studies **33**(22): 171-180.

Clift, R., Houston,J, & Pugagh, M (1990). Encouraging Reflective Practice in Education. London College

Clouder L (2002)" Reflective Practice in Physiotherapy Education: a critical conversation" Studies in Higher Education, **25**(2) 211-223

Cohen, D. (1977). Psychologists on psychology London Routledge & Kegan Paul.

Conway, J. (1994). "Reflection, the art and science of Nursing and the Theory practice gap." British Journal of Nursing **3**: 114-118.

Cotterill, S., McDonald, AM, Hammond, GR,& Bradley PM (2004). " Implementation and Evaluation of an Electronic Portfolio to Support undergraduate medicine Education Medica 7:20 "

Cotterill, S., Bradley, PM, & Hammond ,GR. (2006). ePortfolios: Supporting assessment in complex educational environments. Innovative Assessment in Higher Education,. C. Bryan, &,Clegg, K London. , Taylor and Francis Group Ltd.

Cotterill, S., Aiton,J,Bradley, *et al* (2006). A flexible component-based ePortfolio: adapting and embedding in the curriculum. Handbook of Research on ePortfolios. K. C. Jafari A. Pennsylvania, Idea Group Inc, .

Cotterill, S. J. (2003). "What are the elements of a 'reflective approach to learning' for students preparing for a career in Medicine? A Modified Delphi Approach, University of Newcastle,." from <http://www.eportfolios.ac.uk>

Cousins, C. (2002). "Getting the truth Issues in contemporary qualitative research." Australian J of Adult Learning **42** 192-204.

Cox, R. (1992). "Learning theory and professional life." Media and Technology for Human Development **4**: 217–32.

Crawford, H. K., Leybourne, Marnie L. & Arnott, Allan (2000). "How we ensured rigour in a multi-site, multi-discipline, multi-researcher study." Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, On-line Journal **1**(1).

Creswell, J. (1998). Qualitative Inquiry and Research Design; Choosing Among Five Traditions. . London, New Delhi, Thousand Oaks, Sage Publications.

Creswell, J. (2003). Research design: qualitative, quantitative, and mixed approaches. . London, Sage Publications.

Cronin, P., &Rawlings-Anderson, Karen. (2003). Knowledge for contemporary nursing practice, Elsevier Health Sciences.

Cronk, G. (2005). "George Herbert Mead (1863—1931):The Internet Encyclopaedia of Philosophy."

Crotty, M. (1996). Phenomenology and nursing research. Melbourne, Churchill Livingstone.

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

Darkenwald, G. G. (2005). "Field research and grounded theory", available at: www.distance.syr.edu/cach5.html (access 25.06.2006)."

Das, L. S. (1997). Awakening the Bhudda within London, Bantam books

Davis, M. (2003). "Barriers to reflective practice: The challenging nature of higher education." Active Learning in Higher Education **4** 243

Dench, s., Iphofen, R,& Huws U (2004). An EU Code of ethics for socioeconomic research, The institute for employment studies Brighton UK.

Denzin, N., K,& Lincoln, Y. S. (2003). The landscape of qualitative research. London, Sage.

Denzin, N. (1988). The Research Act: A Theoretical Introduction to Sociological Methods. 3rd Ed. Englewood Cliffs, NJ: Prentice-Hall.

Dewey, J. (1933). How We Think. A restatement of the Reflection or Reflective Thinking to the Educative Process.

Dilthey, W. (1976). The Rise of Hermeneutics," Critical Sociology i. P. C. Thomas Hall. New York, Penguin Books.

Dilthey, W. (1988). Introduction to the human science : an attempt to lay foundation for the study of society and history (R J Betzanos, Trans). Detroit MI, Wayne State University press

DoH (2004). "Department of Health (AL(MD)6/2000 England "

DoH (2008). "Department of Health. Mental health and ill health in doctors. London: Department of Health."

Donaghy, M., & Morss, K (2000). "Guided Reflection: A Framework to facilitate and assess reflective practice within the discipline of physiotherapy." Physiotherapy Theory and Practice. **16** 3-14.

Draper, P. (1997). Nursing perspectives on quality of life. London, Rutledge

Driessen E, Tartwijk J, Vermunt JD, & Vleuten CPM (2003) "Use of portfolios in early undergraduate medical training" Medical Education **25**:14-19

Duffy, K., & Scott, PA (1998). "Viewing an old issue through a new lens: a critical theory insight into the education--practice gap." Nurse Educ Today **18** (3): 183-9.

Eaves, Y. A. (2001). "Synthesis technique for grounded theory data analysis. J Adv Nurs. 2001 Sep;35(5):654-63." Journal of Advanced Nursing **35**(5): 654-63.

Ecclestone, K. (1996). "The Reflective Practitioner: Mantra or Model for Emancipation? ." Studies in the Education of Adults **28**(2): 146-161.

Eisner, E., & Peshkin, A (1990). Qualitative Inquiry in Education: The Continuing Debate. New York, Teachers College Press, Columbia University.

Elwell, F. (1996). "The Sociology of Max Weber, ." from <http://www.faculty.rsu.edu/~felwell/Theorists/Weber/Whome.htm>.

Entwistle, N., & Entwistle, A (1991). "Contrasting forms of understanding for degree examinations: the student experience and its implications." Higher Education **22** 205-227.

Entwistle, N., & Ramsden, P (1983). Understanding Student Learning. London Canberra, Croom Helm.

Eraut, M. (1994). Developing Professional Knowledge and competence. London Flamer

Everston, C., & Green, JL (1986). Observation as inquiry and method. Handbook of Research on Teaching. M. Wittrock. New York, McMillan Publishing Company.

Eyler, J., & Giles, DE, JR (1999). Where's she learning in service learning ? San Francisco CA Jossey-Bass.

Fade, s. (2003). "Reflection and assessment in The development of critical reflection in the health professions S Tate and M Sills LTSN Centre for health Sciences and Practice 2003. ."

Field , P. (1986). " Different yet the same Solo album: <http://www.paulfield.com/php/discography.php>."

Finlay, L., & Gough, Brendan (2003). Reflexivity: A Practical Guide For Researchers In Health And Social Wiley-blackwell.

Fish, D., Twinn, S, & Purr, B (1991). Promoting Reflection: Improving the Supervision of Practice in Health Visiting. Initial Teacher Training - How to enable students to learn through professional practice - Report No.2 West London Institute of Higher Education.

Fish, D., & Twinn, S (1997). Quality Clinical Supervision in Health care Professions – Principled Approaches to Practice. . Butterworth & Heinemann. London: 42 – 48.

- Flint, N. (2005). "Methodological conundrums: confessions of a latent grounded theorist University of South Australia at: <http://www.aare.edu.au/05pap/fli05040.pdf>."
- Fogarty, S. (2005). "Binary Oppositions. The Literary Encyclopaedia
- Fowell, S., & Bligh, JG (1998). "Recent developments in assessing medical students." Postgrad Med J.
January; **74(867)**: 18–24. .
- Freire, P. (1970). Pedagogy of the Oppressed Continuum International Publishing Group.
- French, S., & Sim, Julius (2004). Physiotherapy: a psychosocial approach, Elsevier Health Sciences.
- Friesner, T., & Hart, M (2005). "Learning Logs: Assessment or Research Method." The Electronic Journal of Business Research Methodology **3** (2): 117-122.
- Frost, R. (1916). ""The Road Not Taken" Mountain Interval."
- Gadamer, H. (1975). Truth and Method. New York Seaburv Press.
- Gadamer, H. (1981). Reason in the Age of Science, trans. by Frederick G. Lawrence. Cambridge, Mass, MIT Press.
- Gallagher, S. (1992). Hermeneutics and Education. Albany, State University of New York Press.
- Gelter, H. (2003). "Why is Reflective Thinking Uncommon" Reflective Practice." Reflective Practice **4(8)**: 337-344.
- Ghaye, A., & Ghaye, K (1998). Teaching and Learning through Critical Reflective Practice. London, David Fulton Publishers.
- Ghaye, S. L. T. (2000). How we can improve our understanding of reflective learning?, Wiltshire Quay Books.
- Ghaye, T., & Lillyman, S. (1997). Learning Journals and Critical Incidents Quay Books, a division of Mark Allen Publishing Ltd, .
- Gibbs, G. (1988). "Learning by doing: a guide to teaching and learning methods." from <http://www.chelt.ac.uk/gdn/gibbs> [accessed 07.12.04].
- Glaser (1992a). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA:, Sage.

- Glaser, B., & Strauss, A (1968). The discovery of grounded theory: strategies for qualitative research. London, Weidenfeld and Nicolson.
- Glaser, B. (1978). Theoretical sensitivity. Mill Valley, CA, Sage.
- Glaser, B. (2005). " Basic social processes.2005;4:1-27." The grounded theory review. 4: 1-27.
- Glaser, B. G. (1978). Theoretical sensitivity: advances in the methodology of grounded theory.
____. Mill Valley, Ca, Sociology Press.
- Glaser, B. G. (1994). More grounded theory methodology: a reader.
____. Mill Valley, Ca, Sociology Press.
- Glaser, B. G. (1998). Doing grounded theory: issues and discussions. Mill Valley, Ca, Sociology Press.
- Glaser, B. G. (1996). Introduction. In Gerund Grounded Theory: The Basic Social Process Dissertation, Sociology Press.
- Glaser, B. G. (2004). "Remodelling Grounded Theory." Forum Qualitative Social Research 5(2): Art -4.
- Glaser, B. S., A (1967). The discovery of Grounded theory, Chicago Aldine.
- Glaser, G. B. (1992b). Basics of Grounded Theory Analysis: Emergence vs. Forcing. Mill Valley, CA, Sociology Press.
- Glen, S., Clark, A, & Nichol, M. (1995). " Reflecting on reflection: a personal encounter." Nurse Educ Today 15: 61–8.
- GMC (1993). "General Medical Council. Tomorrow's doctors. Recommendations on undergraduate medical education. London."
- GMC (2003). "General Medical Council. Tomorrow's doctors.Recomendations on undergraduate medical education. London."
- Gobbi, M. (2005). "Nursing practice as bricoleur activity: a concept explored." Nursing Inquiry 12(2): 117-125.
- Gobbi, M. (2005). "Nursing practice as bricoleur activity: a concept explored." Nursing inquiry 12(2): 117-25.
- Goffman, E. (1971). Relations in Public: Micro-studies of the Public Order New York, Basic Books
- Goldstein, H. (1993). "Field education for reflective practice: A re-constructive proposal." Journal of. Teaching in Social Work 8(1/2): 165-182.

Goldstein, H. (1990). "The knowledge base of social work practice: Theory, wisdom, analogue or art ? Families in society." The Journal of Contemporary Human Services January pp 32-43.

Goodman, J. (1984). "Reflection and Teacher Education: A case study and theoretical analysis " Interchange **15**(3): 9-26.

Gordon, G., & Darkenwald (2005). "Field Research and Grounded Theory in Roger Hiemstra's Web Page ", from <http://www-distance.syr.edu/distancenew.html>

Gould, N. (1996). Introduction: Social Work education and the 'crisis of the professions in Gould and Taylor Reflective Learning for Social Work
Aldershot Arena

Gould, N. (1989). "Reflective learning for social practice." Social Work Education **8** (2): 9-19.

Goulding, C. (2002). Grounded Theory: A Practical Guide for Management, Business and Market Researchers, Sage.

Goulding, C. (1999). Grounded theory: Some reflections on paradigm procedures and misconceptions Working paper series University of Wolverhampton.

Grant, A. (2001). Is portfolio assessment of final year medical students valid and reliable Maastricht the Netherlands, University of Maastricht Maastricht the Netherlands. Master thesis

Green, J., & Thorogood, N. (2005). "Qualitative methods for health research. London: Sage publications; ."

Green J, T. N. (2005). Qualitative methods for health research. London, Sage.

Greenwood, J. (1998). "On nursing's reflective madness." Contemporary Nurse **7** (1): 1-3.

Greenwood, J. (1993). "Reflective practice: A critique of the work of Argyris and Schon." Journal of Advanced Nursing **18**: 1183-1187.

Griffin, E. (1997). The first look at communication theory. New York, McGraw-Hill.

Guba, E., & Lincoln, YS. (1994). Competing paradigms in qualitative research. Handbook of qualitative research. N. K. D. Y. S. Lincoln. London, Sage: 105-117

Guba, E., & Lincoln, Y (1994). Competing Paradigms in Qualitative Research. The Handbook of Qualitative Research. N. D. a. Y. Lincoln. Thousand Oaks, CA, , Sage Publications: 105-117.

Guba, E., & Lincoln, YS (1985). Effective Evaluation Jossey Bass publishers (table 6 p 104).

Guba, E., & Lincoln, YS. (1989). Fourth generation evaluation. California, Sage Publications.

Habermas, J. (1971). Knowledge and Human Interests, . J. J. Shapiro (trans.). Boston: Beacon. [German, 1968b].

Habermas, J. (1974). Theory and Practice. London Heinemann Educational Books.

Habermas, J. (1991). Communication and the evaluation of society Cambridge Polity Press.

Hafferty, F. (1998). "Beyond curriculum reform: confronting medicine's hidden curriculum." Acad Med **73** 403–7.

Hahnemann, B. (1986). "A key to promoting critical thinking in nursing students." Journal of Nursing Education **25**(2): 213-215.

Haig, B. (1995). "Grounded Theory as Scientific Method, Philosophy of Education Society Illinois, ." from <http://www.ed.uiuc.edu/EPS/PES->

Hall, P., & Callery. W. A. (2001). "Enhancing the rigor of grounded theory: Incorporating reflexivity and rationality " Qualitative Health Research **11**(2): 257-272.

Hardy, C., Phillips, N & Clegg, S (2001). "Reflexivity in organization and management theory." Human Relations **54** (5): 531-60

Hargreaves , J. (2004). "So how do you feel about that? Assessing reflective practice." Nurse Education Today **24**(3): 196-201

Harri-Augstein, E., & Thomas, L. (1991). Learning conversations: The self-organized learning way to personal and organizational growth. London, Routledge & Kegan Paul.

Harwood, I. (2002). Developing Scenarios for Post-Merger and Acquisition Integration: A Grounded Theory of Risk Bartering. , School of Management. Southampton, University of Southampton.

Hatton, N., & Smith, D. (1994). "Facilitating reflection: Issues and research Australia: New South Wales. Retrieved January 8, 2007, from the ERIC database."

Hatton, N., & Smith D. (1995). "Towards Critical Reflection in Teacher Education." Teaching and Teacher Education **11**(1): 33-49.

Headrick, L., & Wilcock, PM (2000). "Continuing quality improvement in health professions education." Journal of interprofessional Care **14**(2 Special issue).

Healey, M., & Rawlinson, MB (1994). Interviewing in business and management research Principles and practice in business management research V. Wass, & Wells, PE. Aldershot Dartmouth.

Healy, M., & Perry, C (2000). "Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm." Qualitative Market Research An International Journal **3**(3): 118-126.

Heath, H., & Cowley, S. (2004). "Developing a grounded theory approach: A comparison of Glaser and Strauss 141-150." International Journal of Nursing Studies **41** (2): 141-150.

Heath, H. (1998). "Keeping a Reflective Practice Diary: A Practical Guide." Nurse Education Today **18**(7): 592-598.

Heath, H. (1998). "Reflections and Patterns of knowing In Nursing." Journal of Academic Nursing **27**: 1054-1059.

Heel, D., Sparrow, J, & Ashford, R (2006). "Workplace interactions that facilitate or impede reflective practice." J Health Management **8**(1).

Heidegger, M. (1962). Time and being Oxford, Blackwell oxford.

Hewitt, J. (1988). Self and Society: A symbolic interactionist social psychology Boston, Ally and Bacon

Higgs, J. (2001). Charting standpoints in qualitative research. Critical moments in qualitative research H. Byrne-Armstrong, Higgs, J, & Horsfall, D. . Oxford, Butterworth-Heinemann.: 44-67

Hilton, S., & Slotnick HB (2005). "Proto-professionalism: How professionalism occurs across the continuum of medical education " Medical Education **39**: 58-65.

Hobbs , V. (2007). "Faking it or hating it: can reflective practice be forced? ." Reflective Practice **8** I(3): 405 - 417

Holland, R. (1999). " Reflexivity." Human Relations **52**: 463-483.

Holton, G. (2004). The rise of a scholar : Robert .K. Merton Proceedings of the American Philosophical Society 148 (4): 506–517. <http://www.aps-pub.com/proceedings/1484/480411.pdf>.

Honey, P., & Mumford, A (1986). Using your learning styles. Maidenhead, Peter Honey

Honey, P., & Mumford, A. (1992). The manual of learning styles. Maidenhead, Peter Honey. .

Honey, P., & Mumford, A (2000). The Learning Styles Helper's Guide. Maidenhead, Peter Honey Publications Ltd.

Husserl, E. (1965). Phenomenology and the crisis of philosophy New York Harper Trochbooks

Hussey, J., & Hussey, R (1997). Business Research : A practical guide for undergraduate and postgraduate students. London, MacMillan Press Ltd.

Hutchinson, S. (2001). "The development of qualitative health research: taking stock. ." Qual Health Res 11(4): 505-21.

Ixer, G. (1999). "There is no such thing as reflection " British Journal of Social Work 29 513-527.

Ixer, G. (2000). "Assessing Reflective Practice: New Research Findings." Journal of Practice Teaching 2(3): 19-27.

James, C. R., & Clarke, B.A (1994). "Reflective practice in nursing: Issues and implications for nursing education." Nursing Education Today 14(): 82-90.

Jarvis, P. (1987). Adult learning in the social context, New York: Croom Helm.

Jasper, M. (1995). The use of a portfolio in assessing professional education. Improving Student Learning Through Assessment and evaluation G. Gibbs. Oxford, Oxford centre o staff development

Jasper, M. A. (1999). "Nurses perceptions of the value of written reflection." Nurse Education Today 19: 452–463.

Jay, J., & Johnson, K L. (2002). "Capturing complexity: a typology of reflective practice for teacher education " Teaching and Teacher Education 18(1): 73-85

Jeon, Y. (2004). " The application of grounded theory and symbolic interactionism." Scandinavian Journal of Caring Sciences 18(3): 249-56.

Jeon, Y. (2004). "The application of grounded theory and symbolic interactionism." Scand J Caring Sci 18(3): 249-56.

Jindal-Snape, D., & Holmes, E, A. (2009). "A longitudinal study exploring perspectives of participants regarding reflective practice during their transition from higher education to professional practice " Reflective Practice 10 (2): 219 - 232

Johns, C. (1995). " Framing learning through reflection within Carper's fundamental ways of knowing in nursing. ." Journal of Advanced Nursing 22(2): 229-234.

Johns, C. (2005). "Balancing the winds " Reflective Practice 6 (1): 67-84.

Johns, C. (1998). Opening the doors of perception. Transforming Nursing through Reflective Practice C. Johns, & Freshwater, D. Oxford, Blackwell Science.

Johns, C., & Graham,J. (1996). " Using a Reflective Model of Nursing and Guided Reflection. ." Nursing Standard 11 (2): 34-38.

Jones, I., & Cookson,J. (2000). " The case for structured reflection in the paramedic curriculum." Pre-Hospital Immediate Care 4(3): 150-152.

Jones, I., & Cookson,J. (2001). "Computer assisted learning design for reflective practice supporting multiple learning styles for education and training in pre-hospital care." International journal of Training and Development 5(1): 74–80.

Jung, C., (1923), Psychological Types, Routledge and Kegan Paul, London.

Kearney, M. (1998). "Ready-to-wear: discovering grounded formal theory." Res Nurs Health 21(2): 179-186.

Kearney, M. (1998). " Ready-to-wear: discovering grounded formal theory. . Apr;21(2):179-86." Res Nurs Health 21(2): 179-86.

Kelly, J. (1994). "On reflection." Practice Nurse 1: 188 -192.

Kelsey, K. (2003). "Grounded Theory Designs Powerpoint presentation." from <http://www.okstate.edu/ag/agedcm4h/academic/aged5980/power/598314.ppt>

Kenny, N., Mann, KV,& MacLeod, H. (2003). " Role modelling in physicians' professional formation: reconsidering an essential but untapped educational strategy." Acad Med 78: 1203–10.

Kerlineger, F. (1986). Foundations of behavioural research New York, CBC College Publishing

King, P., & Kitchener, K,S (1994). Developing Reflective Judgement. San Francisco, Jossey-Bass Publishers.

Kinnersley, P. (2004). Does curriculum affect students' reflective learning abilities: a comparative study between medical schools Cardiff, the Higher Education Academy

Kirkpatrick, D. L. (1994). Evaluating training programs: the four levels Berrett-Koehler San Francisco, CA

Kitson, A. (1999). "The essence of nursing" Nursing Standard **13** (23): 42-46.

Klein, D. B. (1970). A history of scientific psychology: its origins and philosophical backgrounds, Taylor & Francis.

Knowles, C. (2006). "Handling your Baggage in the Field Reflections on research relationships1. Authors: ." International Journal of Social Research Methodology **9** (5): 393-404.

Koch, T. (1994). " Establishing rigour in qualitative research: the decision trail " Journal of Advanced Nursing **19** (5): 976-986

Koch, T. (1999). " An interpretive research process: revisiting phenomenological and hermeneutics approaches." Nurse Researcher **6**(3): 20-34.

Kolb, A,&Fry, R (1975). Toward an applied theory of experiential learning. Theories of Group Process. C. Cooper. London, John Wiley.

Kolb, D., A (1976). The Learning Style Inventory: Technical Manual, . Boston, Ma, McBer.

Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development., Prentice Hall, New Jersey

Korthagen, F., AJ, & Wubbels,T. (1995). "Characteristics of reflective practitioners: Towards an operationalisation of the concept of reflection." Teachers and Teaching: Theory and Practice **1**(1): 51-72.

Kremer, J. W. (1992). "The Dark Night of the Scholar: Reflections on Culture and Ways of Knowing." Re-vision, **14**.

Kvale, S. (1996). Interviews: An Introduction to Qualitative Research Interviewing. London, Sage Publications.

Kylmä, J., et al (1999). "Ethical Considerations in a Grounded Theory Study on the Dynamics of Hope in HIV-Positive Adults and Their Significant others " Nursing Ethics **6**: 2224-239.

Lauder.W (1994). " Beyond reflection: practical wisdom and the practical syllogism." Nurse Educ Today **14**(2): 91-98.

Lidz, C., & Roth, L (1983). The Signed Form - Informed Consent? Solutions to Ethical and Legal Problems in Social Research R. F. Boruch, And J.S.Cecil New York, London, Academic Press: 145-157.

Light, G., & Cox, R. (2001). Learning & Teaching in Higher Education: The Reflective Professional Sage Publications Ltd

Lincoln, Y., & Guba, EG. (1985). Naturalistic inquiry., Beverly Hills, CA: Sage Publications, Inc.

Lipp, A. (2007). "Developing the reflexive dimension of reflection: A framework for debate." International Journal of Multiple Research Approaches 1(1): 18-26.

Loughran, J. J. (1996). Developing Reflective Practice: Learning about Teaching and Learning through Modelling. London, Falmer Press.

MacDonald, M. (2001). Finding a critical perspective in grounded theory in using grounded theory. Nursing education R. Schreiber, & Stern, PN New York, Springer 113-157.

MacIsaac, D. (1996). "An Introduction into Action Research." Retrieved 15 June, 2009, from (<http://www.physics.nau.edu/~danmac>).

MacKendrick, K., & MacKendrick, Kenneth (2007). Discourse, Desire, and Fantasy in Jürgen Habermas' Critical Theory, Routledge.

Mackintosh, C. (1998). "Reflection: a flawed strategy for the nursing profession." Nurse Education Today 18 553–557.

Mallik, M. (1998). "The Role of Nurse Educators in the Development of Reflective Practitioners. A Selective Study of the Australian and UK Experiences." Nurse Education Today 18(1): 52-63.

Maltby, H., & Andrusyszyn, MA, (1997). "Perspective transformation: challenging the resocialization concept of degree-seeking registered nurses. ." Nurse Educ 22(2): 9-11.

Manis, J., & Meltzer BN (1987). Symbolic Interaction: A reader in social psychology Boston, Allyn and Bacon

Mantzoukas, S., & Jasper, MA. (2004). "Reflective practice and daily ward reality: a covert power game." J Clin Nurs 13(8): 925-33.

Marton, F., & Saljo, R. (1997). Approaches to learning. The experience of learning. F. Marton, et al Edinburgh, Scottish Academic Press.

Mason, J. (1996). Qualitative Researching. London, Routledge.

- Maxwell, J. (1992). "Understanding and validity in qualitative research." Harvard Educational Review **62**(3): 279-300.
- May, K. (1996). "Diffusion, dilution, or distillation?: The case of grounded theory method." Qualitative Health Research **6**(3): 309-11.
- Mays, N., & Pope C. (2000). "Qualitative research in health care, Assessing quality in qualitative research." BMJ **320**: 50–2.
- MBBS (2008). " Newcastle University Admission Policy Entry https://mbbs.ncl.ac.uk/admissions/docs/admissions_policy_2008.pdf."
- MBBS (2009). "Newcastle University Learning Support Environment <https://mbbs.ncl.ac.uk/admissions>."
- McArdle, K., & Coutts N, (2003). "A strong core of qualities –a model of the professional educator that moves beyond reflection." Studies in Continuing Education **25**(2): 225-37.
- McCallin, A., M (2003). "Designing a grounded theory study: some practicalities." Nursing in Critical Care **8** (5): 203 - 208.
- McGhee, G., Marland, Glenn, & Atkinson, Jacqueline (2007). "Grounded theory research: literature reviewing and reflexivity." Journal of Advanced Nursing **60**(3): 334 - 342.
- McKenna, H., P (1997). Nursing Theories and Models: Routledge essentials for nurses Routledge.
- Melia, K. (1987). " 'Tell it as it is'—qualitative methodology and nursing research: understanding the student nurse's world ." J Advanced nursing **7** 327-35.
- Mezirow, J. (1981). "A critical theory of adult learning and education" Adult Education **32**(1): 3-24.
- Mezirow, J. (1978). Education for perspective transformation; Women's re-entry programs in community colleges., New York: Teacher's College, Columbia University.
- Mezirow, J. (1990). Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning., San Francisco: Jossey-Bass.
- Mezirow, J. (2000). Learning as transformation: Critical perspectives on a theory in progress, San Francisco: Jossey-Bass.
- Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass., San Francisco: Jossey-Bass. .

- Minnis, J. R. (1999). "Is reflective practice compatible with Malay-Islamic values? Some thoughts on teacher education in Brunei Darussalam." Australian Journal of Education **43**(2): 172-185.
- Moon, J. (2005). Guide for Busy Academics No. 4 Learning through reflection The Higher Education Academy.
- Moon, J. (2004). A handbook of reflective and experiential learning: theory and practice London, RoutledgeFalmer.
- Moon, J. A. (1999). Learning Journals: A Handbook for Academics, Students, and Professional Development. London, Kogan Page.
- Moon, J. A. (2000). Reflection in learning and professional development: theory and practice, Routledge.
- Morrison, K. (1995). "Dewey, Habermas and reflective practice." Curriculum **16**(2): 82-94.
- Morrow, R. A., & Torres, C. A. (2002). Reading Freire and Habermas: critical pedagogy and transformative social change, Teachers College Press.
- Morse, J., M (2000). "Determining sample size " Qual Health Res **10**(1): 3-5.
- Morse, J. M. (1994). Emerging from the data: the cognitive process of analysis in qualitative enquiry. Critical Issues in Qualitative Research Methods, J. M. Morse. Thousand Oaks, CA Sage Publications, .
- Murphy, S. A. (1989). " Multiple triangulation: applications in a program of nursing research." Nursing Research **38**: 294 298.
- Murray, D., Cooper, C, & Oddell, L. (1978). Internal revision: a process of discovery. Research on composing. Urbana NCTE.
- Newble, D., & Jaeger, K (1993). "The effects of assessment and examination on the learning of medical students " Medical Education **17**: 25-31.
- Newman, D., & Brown, R D (1996). Applied Ethics for Programme Evaluation Thousand Oaks CA, Sage
- Newman, D. L., & Brown R D, . (1996). A Framework for Making Ethical Decisions. Applied Ethics for Program Evaluation. Thousand Oaks, Sage.
- Nicholson, R. A. (1926). The Mathnawí of Jaláluddín Rúmi, edition and translation London:, E.J.W. Gibb Memorial Trust, .
- Noerager, S. P. (1994). Eroding Grounded Theory. Critical Issues in Qualitative Research Methods. J. M. Morse, Sage: 210-223.

- Noori, K., K (1994). "A Constructivist/Reflective Paradigm: A Model for the Early Childhood Program at Tuskegee University."
- Norman, G. (2003). "RCT=results confounded and Trial : the perils of grand educational experiments " Medical Education **37**: 582-584.
- Nuremberg, C. (1996). "NUREMBERG DOCTORS' TRIAL The Nuremberg Code (1947) " BMJ **1996;313:1448 (7 December)**
- Osterman, K., & Kottkamp, R.B. (1993). Reflective practice for educators: Improving school through professional development. . Newbury Park, Corwin Press Inc.
- Osterman, K. F. (1998). Using Constructivism and Reflective Practice To Bridge the Theory/Practice Gap. Annual Meeting of the American Educational Research Association San Diego, CA, .
- Packer, M. (1985). "Hermeneutic inquiry in the study of human conduct." American Psychologist ".
- Parker, L., & Roffey,BH (1997). "Back to the drawing board: revisiting grounded theory and the everyday accountant's and manager's reality " Accounting, Auditing and Accountability Journal **10** (2): 212-247.
- Paterson, B. L. (1995). "Developing and Maintaining Reflection in Clinical Journals." NURSE EDUCATION TODAY **15**(3): 211-220.
- Patton, M. (1990). Qualitative evaluation and research methods. Newbury Park, CA, Sage Publications.
- Pearson, A., & Vaughan, B (1986). Nursing Models for Practice __ London, Heinemann Nursing.
- Peile, C. (1993). "Determinism vs creativity: which way for social work." Social Work Education **38**(2): 127-34.
- Piercy, J. (1979). "Physiotherapy education. What is the future? Piercy " Physiotherapy **65**(6): 186-7
- Pirsig, R. M. (1974). Zen and the Art of Motorcycle Maintenance :An inquiry into values New York Bantam books.
- Platze, H., Blake D, & Ashford, D. (2001). "Barriers to learning from reflection: a study of the use of group work with post-registration nurses." Journal of Advanced Nursing **31** (5): 1001 - 1008.
- Polgar, S., &Thomas, S. (2000). Introduction to Research in the Health Sciences. Melbourne, Australia, Churchill Livingstone.

Polit, D., & Hungler, B.P. (1997). Nursing Research Principles and Methods. Philadelphia, New York, Hagerstown, Lippincott Company.

Polit, D., & Beck, C.T. (2007). Nursing research: generating and assessing evidence for nursing practice, Lippincott Williams & Wilkins.

Powell, J. P. (1985). Autobiographical Learning Turning experience into learning D. Boud, Keogh, R and Walker, D. London Kogan Page

Powney, J., & Watts, M. (1987). Interviewing in Educational Research. London, Routledge & Kegan Paul.

QAA (2001). "Quality Assurance Agency for Higher Education Healthcare programmes Benchmark Statement".

QAA (2001). "Quality Assurance Agency for Higher Education Physiotherapy Benchmark Statement".

QAA (2002). Quality Assurance Agency for Higher Education Medicine Benchmark Statement

Reynolds, M. (1998). "Reflection and Critical Reflection in Management Learning" Management Learning 29(2): 183-200.

Richardson, G., & Maltby, H. (1995). "Reflection on Practice: Enhancing student learning. Journal of Advanced Nursing, 22, 235-242."

Richardson, R. (1995). "Humpty Dumpty: reflection and reflective nursing practice." Journal of Advanced Nursing 2: 1044-1050.

Ricoeur, P. (1974 [1969]). The Conflict of Interpretations: Essays in Hermeneutics Evanston, North-western University Press.

Rideout, E. (2001). Transforming nursing education through problem-based learning, Jones & Bartlett Publishers,.

Ritchie, J. (2003). The Applications of Qualitative Methods to Social Research. Qualitative Research Practice: A Guide for Social Science Students and Researchers. J. Ritchie, & Lewis, J., London, Sage.

Robson, C. (1993). Real world research : a resource for social scientists and practitioner-researchers. Cambridge Blackwell.

Rolfe, G. (1998). Expanding Nursing Knowledge: Understanding and Researching your own Practice. Oxford Butterworth- Heinemann.

Rorty, A. (1992). Essays on Aristotle's Poetics, Princeton University Press.

Rorty, A. (1992). Essays on Aristotle's Poetics, Princeton University Press.

Rúmi, J. The Mathnawí

Russell, C. K., & Gregory, DM (1993). "Issues for consideration when choosing a qualitative data management system." Journal of Advanced Nursing **18**(11): 1806.

Samik, I., & Rahmat, M. (2000). "Grounded Theory Methodology as the Research Strategy for a Developing Country" Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, On-line Journal **1Art**(19).

Sandelowski, M. (1995). "Focus on qualitative methods: Sample sizes in qualitative research." Research in Nursing & Health **18**: 179-183.

Santo, S. A. (2009). from <http://people.usd.edu/~ssanto/styles.html>.

Sarantakos, S. (1998). Social Research China Macmillan Publishers. China Macmillan Publishers.

Savickas, M., L,&Borges,Nicole J. (2002). "Personality and Medical Specialty Choice: A Literature Review and Integration " Journal of Career Assessment **10**(3): 362-380

Scanlan J.M.& Chernomas W .M., S. (1997). "Developing the Reflective Teacher." Journal of Advanced Nursing . **25**: 1138-1143.

Schatzman (1991). Dimensional analysis: notes on an alternative approach to the grounding of theory in qualitative research. Aldine De Gruyter, New York.

Schleiermacher, F. (1977). Hermeneutics: The handwritten manuscripts. Trans J Duke and J Forstmann Missoula MT Scholar Press

Schon.D.A (1987). Educating the Reflective Practitioner, . CA, Jossey Sanfrancisco.

Schon.D.A. (1983). The Reflective Practitioner: How Practitioners Think In Action: , Avebury Press, Aldershot.

Schreiber, R., & Stern,P. (2001). Using Grounded Theory in Nursing. New York, , Springer.

Schreiber, R. S., & Stern, Phyllis Noerager (2001). Using grounded theory in nursing, Springer Publishing Company, 2001.

Schwandt, T. (1990). Paths to inquiry in the social disciplines: Scientific, constructivist and critical theory methodologies. The Paradigm Dialog. E. Guba, Sage Publications.

Schwandt, T. (1994). Constructivist, Interpretivist Approaches to human inquiry. Hand Book of qualitative Research. D. N. K. L. Y. S. eds. Thousand Oaks, CA, Sage Publications: 118-137.

Scott, D., & Ushe,R. (1996). Understanding Educational Research Routledge.

Scouller, K., & Prosser,M. (1994). "Students' experiences in studying for multiple choice question examinations." Studies in Higher Education **19**: 267–279.

Shumway, J., & Harden, RM (2003). "AMEE Guide No. 25: The assessment of learning outcomes for the competent and reflective physician Association for Medical Education in Europe." Med Teach **25**(6): 569-84.

Silverman, D. (1997). Qualitative research. Theory, method and practice. London, Sage Publications.

Silverman, D. (2000). Doing Qualitative Research: A Practical Handbook. London, Sage.

Smith, A. (1998). "learning about Reflection." Advanced Nursing **28**(4): 891-898.

Smith , M. K. (2001, 18 June 2009). "John Dewey (1859 - 1952)." infed Retrieved 26.08.09, 2009.

Smith, R. L., & Montilla,R. Esteban (2005). Counselling and family therapy with Latino populations: strategies that work. The family therapy and counselling series. R.-L. Smith, &Montilla,R. Esteban Routledge

Smyth, J. (1992). "Teachers' work and the Polotics of Reflection." American Education Research Journal **29**: 267-300.

Smyth, W. J. (1986). Reflection-in-Action. Victoria, Australia Deakin University.

Sparrow, J., Robert, A,& Heel,D (2005). "A methodology to identify workplace features that can facilitate or impede reflective practice: a National Health Service UK study " Reflective Practice **6**(2): 189 - 197

Star, J. (2000). Rumi: In the Arms of the Beloved. New York, Penguin Putnam.

Stein, D. (2000). Teaching critical reflection Columbus, OH, ERIC Clearinghouse on Adult, Career, and Vocational Education. .

Stern, P. N. (1994). Eroding grounded theory. Critical Issues in Qualitative Research Methods. J. Morse. Newbury Park, California, Sage.

Stewart, I. (1929). "The science and art of nursing (editorial)." Nursing Education Bulletin 2(1): 1.

Strauss, A., & Corbin, J. (1990). Basics Of Qualitative Research: Grounded Theory Procedures And Techniques. London, Sage.

Strauss, A., & Corbin,J. (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. London, Sage.

Strauss, A., & Corbin,J. (1994). Competing paradigms in qualitative research. . Handbook of Qualitative Research. N. Denzin, &Lincoln,Y. Thousand Oaks California Sage: 273-285.

Strauss, A., & Corbin, J. (1998). Grounded Theory Methodology: An Overview. (Eds.) Strategies of Qualitative Inquiry. N. Denzin, Lincoln, Y. . London, Sage.

Strauss, A. (1987). Qualitative analysis for social scientists. New York: , Cambridge University Press.

Tann, S. (1993). Eliciting student teacher's personal theories. Conceptualizing reflection in teacher development J. Calderhead. & P. Gates London, Falmer.

Tate, S., & Sills, M (2003). "Reflective Practice in The Health Professions Occasional Paper 4, London LTSN Centre for Health Science and Practice."

Tate , S. (2004). "Using critical reflection as a teaching tool, in Tate and Sills The development of Critical Reflection in the Health Professions LTSN occasional papers ".

Taylo, S., & Bogdan,R. (1984). Introduction to qualitative research methods The search for meaning. New York, John Wiley.

Taylor, B. (2004). "Technical, Practical, and Emancipatory Reflection for Practicing Holistically " Journal of Holistic Nursing 22(1): 73-84.

Taylor, C., & White, S. (2006). "Knowledge and Reasoning in Social Work: Educating for Humane Judgement." Br. J. Soc. Work 36(6): 937 - 954.

Taylor, P., & Wallace,J. (2007). "Contemporary Qualitative Research Exemplars for Science and Mathematics Educators Series." Contemporary Trends and Issues in Science Education , 33

Thistlethwaite, J., & Spencer,J, (2008). Professionalism in Medicine Abingdon Radcliffe Publishing Ltd.

Thompson, K. L. (1990). Hermeneutic inquiry Advancing Nursing Science Through Research. M. L. Newbury Park Ca, Sage 2: 223-226.

- Trust, N. (2003). "Portfolio management and reflective practice: Introductory guidelines."
- Tsang, N. M. (2007). "Reflection as Dialogue." Br. J. Soc. Work **37**(4): 681 - 694.
- Usher, R. (1996). A critique of the neglected epistemological assumptions of educational research. D. R. Scott.
- Usher, R. (1996). Understanding educational research. New York & London, Routledge.
- VanManen, M. (1990). Researching lived experience: human science for an action sensitive pedagogy SUNY series in philosophy of education, SUNY Press.
- VanMannen, M. (1977). " Linking Ways of Knowing with Ways of Being Practical 6(3):." Curriculum Inquiry **6**(3): 205-226.
- VanMannen, M. (1997b). Researching lived experiences: Human Science for an action sensitive pedagogy London Althouse Press.
- Vaughan, D. (2007). Ethnographic analysis The Oxford handbook of analytical sociology P. Herdson, & Bearman, Peter Oxford University Press
- Vessantara (1993). Meeting the Bhuddas Birmingham Windhorse
- Wald, D. S. (2004). "Education and debate:Bureaucracy of ethics applications " BMJ **329**: 282-284.
- Walker, J., & Campbell, S (1989). Pain assessment, nursing models and the nursing process, Recent Advances in Nursing 24. London Churchill Livingston.
- Warburton, W. I. (2005). What are grounded theories made of? . University of Southampton LASS Faculty Post-graduate Research Conference, Southampton, UK, 6-7 Jun Southampton, UK, Faculty of Law, Arts and Social Sciences (LASS).
- Ward, A. (1996). "Never mind the theory, feel the guidelines" Theory, practice and official guidance in residential child care: the case of the therapeutic communities." Therapeutic Communities **17**(1).
- Ward, A., & McMahon, Linnet. (1998). Intuition is not enough: matching learning with practice in therapeutic child care, Routledge.
- Ward, A., & Gracey, J (2006). "Reflective practice in physiotherapy curricula: a survey of UK university based professional practice coordinators." Medical Teacher **28**(32-39.).

Ward, J., & McCotter, SS. (2004). "Reflection as a visible outcome for pre-service teachers." Teaching and Teacher Education **20** 243-257.

Wellington, B. (1996). "Orientations to Reflective Practice." Educational Research **38**(3): 307-315

Wendy, A., & Callery, Ptere (2001). "Enhancing the rigor of grounded theory :Incorporating Reflexivity and Rationality." Qualitative Health Research **11**(2): 257-272.

Wicksteed, J. (1948). The Growth of a Profession: being the history of the CSP 1894–1945. London, Edward Arnold and Co.

Wihite, A. (2006). "Ideological and Pragmatic Decision-making in Networks, ." Computing in Economics and Finance **103**.

Williamson, A. (1997). "Reflection in Adult Learning with Particular Reference to Learning-in-Action." Australian Journal of Adult and Community Education **37**(2): 93-99.

Willig, C. (2001). Introducing Qualitative Research in Psychology: Adventures in Theory and Methods
McGraw-Hill Education

Willis, P. (1999). "Looking for What It's Really Like: Phenomenology in Reflective Practice." Studies in Continuing Education **21**(1): 91-112

Wilson, H., & Hutchinson, SA (1996). "Methodological mistakes in grounded theory." Nursing Research. **45**(2): 122-4.

WMA. (2008). "World Medical Association :Declaration of Helsinki ", from <http://www.wma.net/e/policy/b3.htm>.

Wong, F., Kember, D, Chung, LY, & Yan, L. (1995). "Assessing the Level of Student Reflection from Reflective Journals." Journal of Advanced Nursing **22**: 48-57.

Wright, S. (1998). The Reflective journey beings a spiritual journey. In transforming Nursing Through Reflective practice. Oxford,., Blackwell,.

Young, M. (2004). "using reflective practice in podiatry curriculum in Tate and Sills The development of Critical Reflection in the Health Professions LTSN occasional papers 4."

Zarezadeh, Y., Pearson, P, & Dickinson, C (2007). A model for using reflection to enhance interprofessional education European Interprofessional Education Network: First International Conference; Learning together to work together Krakow Poland

Appendices

Appendix 1: Ethics

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Email: Trust.R&D@nuth.nhs.uk

Royal Victoria Infirmary
Queen Victoria Road
Newcastle upon Tyne
NE1 4LP

Tel: 0191 233 6161

Fax: 0191 201 0155

Our Ref: JEV/GW/3464

Your Ref:

25th July 2005

Mr Y Zarezadeh
PhD Student
School of Medical Education Department
Newcastle University

Dear Mr Zarezadeh

REFLECTIVE LEARNING IN HEALTH CARE

This letter is to confirm that The Newcastle upon Tyne Hospitals NHS Trust will act as Sponsor for this project, under the Department of Health's guidelines for research in health and social care.

In addition, the Trust has a Research Governance Implementation Plan, agreed with the Department of Health, in order to fully comply with Research Governance and fulfil the responsibility of a sponsor.

Yours sincerely



DR JANE E VAREY
Research Governance Manager

RESEARCH AND DEVELOPMENT DEPARTMENT

ROOM V3,037, THE BRIDGE, PEACOCK HALL, RVI

Tel: 0191-2825959 (Internal: Ext 25959)

Fax: 0191-2010155

Email: craig.mackerness@nuth.nhs.uk

Royal Victoria Infirmary
Queen Victoria Road
Newcastle upon Tyne
NE1 4LP

Tel: 0191 233 6161

Fax: 0191 201 0155

Our Ref: CM/GW

Your Ref:

6th June 2005

Mr Y Zarezadeh
PhD Student
School of Medical Education Development
Newcastle University
16/17 Framlington Place

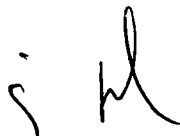
Dear Mr Zarezadeh

REFLECTIVE LEARNING IN HEALTH CARE

The purpose of this letter is to confirm that The Newcastle upon Tyne Hospitals NHS Trust would be happy to participate in your study for your PhD in medical education.

Good luck with the work.

Yours sincerely



DR CRAIG MACKERNESS
Head of Research and Development

Newcastle and North Tyneside Local Research Ethics Committee 2

Room G14
The Dental School
Framlington Place
Newcastle upon Tyne
NE2 4BW

Tel: 0191 222 3581

Fax: 0191 222 3582

Email: anne.taylor2@ncl.ac.uk

21 November 2006

Mr Y Zarezadeh
PhD Student
University of Newcastle upon Tyne
School of Medical Education Development
16/17 Framlington Place
Newcastle upon Tyne
NE2 4HH

Dear Mr Zarezadeh

Full title of study: Reflective Learning in Health Care
REC reference number: 05/Q0906/191

This study was given a favourable ethical opinion by the Committee on 14 November 2005.

It is a condition of approval by the Research Ethics Committee that the Chief Investigator should submit a progress report for the study 12 months after the date on which the favourable opinion was given, and then annually thereafter. To date, the Committee has not yet received the annual progress report for the study, which was due on 14 November 2006. It would be appreciated if you could complete and submit the report by no later than 14 December 2006.

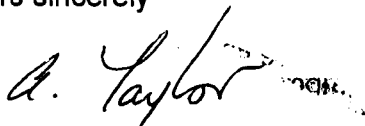
Guidance on progress reports and a copy of the standard COREC progress report form is available at <http://www.corec.org.uk/applicants/apply/progress.htm>.

There is also guidance on declaring the end of the study at <http://www.corec.org.uk/applicants/apply/endofproject.htm>.

Failure to submit progress reports may lead to a suspension of the favourable ethical opinion for the study.

05/Q0906/191: Please quote this number on all correspondence

Yours sincerely



Ms Anne Taylor
Committee Co-ordinator

Copy to:

Dr Craig Mackerness
Newcastle Hospitals NHS Trust
Clinical Research Facility
4th Floor, Leazes Wing
Royal Victoria Infirmary
Queen Victoria Road
Newcastle upon Tyne
NE1 4LP

Mrs Dorothy McGuiness, Research & Innovation Services, University
of Newcastle

Robin King, Research Beehive, Old Library Building, University of
Newcastle

Tina Cook, Research & Development, University of Northumbria

Participant Information Sheet

For the Teachers' Group

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is any thing that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Study Title: The Teaching and Learning of Reflective Practice in Medicine, Nursing, and Physiotherapy

Principal investigator: Yadolah Zarezadeh, PhD student,
School of Medical Education Development,
University of Newcastle

Supervisory Team: Dr. P. Pearson, Dr. G. Hammond, Dr. C. Dickinson
School of Medical Education Development,
University of Newcastle upon Tyne

What is the purpose of the research?

This study is conducted to obtain more understandings about the perceptions of reflective learning and reflective practice among students and academic teachers, similarities and differences among different courses in respect to reflection, and skills and strategies applied to enhance reflective thinking among students in the universities of Newcastle and Northumbria.

Why have I been chosen?

You have been chosen because you:

- are teaching in Medicine, Nursing or Physiotherapy which are the targets of this study.
- are involved or interested in reflective learning / teaching/thinking or reflective course design.

Do I have to take part?

It is up to you to decide whether or not to take part in this study, if you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving any reason. A decision to withdraw at any time or a decision not to take part will not affect your work, study, or benefits. If any new information becomes available during the course of research which might affect your decision to continue to take part you will be informed via your address or email.

What will happen to me if I take part in the study?

- You will be interviewed with your consent

If you agree to take part in the study chief investigator will contact you and arrange a mutually convenient time and place to meet for an interview. **The interview includes some questions about your perception and experiences of reflective learning and methods that may be used to enhance it.**

The interview would take approximately one hour and it will be tape recorded. If you have to travel for any part of the study we will pay your travel expenses. However in general the researcher will be happy to travel to you. You may also be asked to fill a brief form about your demographic information, and will be asked to sign a consent form. You will be interviewed in a mutual agreed time and place.

-One of your reflective teaching sessions (if any) will be observed by the researcher with your consent.

After the interview the chief investigator will ask you for consent (signing a separate consent form) for observing one of your reflective teaching classes (if any).

The observation part of this study is not an Evaluative Observation, but it is just a tool to gather information on how reflective thinking and learning are taught from another angle. The observer who is a PhD student is not in a position to judge your performance or compare it with the performances of other participants.

The observer will not interfere with your class routine activities and will not report any individual information about the observation made. You are free to withdraw from this study at any time without your benefits, work, or any other rights being affected.

Will my taking part in this study be kept confidential?

All information which will be collected about you during the course of study will be kept confidential. If interviews for the study are audio taped with your agreement, the audio tapes will be securely stored in our research base and destroyed within four weeks of the completion of the study report as PhD thesis. All transcription of the interviews will be done at the School of Medical education Development, University of Newcastle. There will not be your name on the audio taped interview and transcriptions, so you will not be identifiable from them.

No quotes will be attributed to you as an individual in the reports of this study.

How many people will be in this study?

At this stage, it is intended to recruit 30 students and 12 academic teachers from 3 deferent courses (Medicine, Physiotherapy and Nursing) are intended to be interviewed in this study.

What will happen to the results of the study?

The results of this study will be presented as a PhD thesis and may be published as a report in academic journals. Results will be presented to the participants and the groups they represent in a presentation.

You will be informed of the time and venue of the presentation, if you wish to participate and receive feedback. **The researcher will send you details.**

It is up to you whether you want to be informed of the results and receive feedback.

You will not be identified in any report/publication.

The results will be obtainable from the research team as well.

Page 2 of 3

What is the contact point for potential complaints by research participants?

You can contact Prof. G Hammond

Head of School

School of Medical Education Development

16/17 Framlington Place

University of Newcastle

Newcastle upon Tyne NE2 4HH

For further information contact either:

Dr Pauline Pearson

Senior Lecturer in Primary Care Nursing &

Deputy Head of School of Medical Education Development

16/17 Framlington Place

University of Newcastle

Newcastle upon Tyne

NE2 4HH

Tel: 0191 222 6781

Email: P.H.Pearson@newcastle.ac.uk

Yadolah Zarezadeh

PhD Student

School of Medical Education Development

16/17 Framlington Place

Newcastle

NE2 4HH

Tel: 01912464557

Email: Yadolah.Zarezadeh@ncl.ac.uk

Thank you for taking time to read this

Participant Information Sheet

For Student Group

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is any thing that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Study Title: The Teaching and Learning of Reflective Practice in Medicine, Nursing, and Physiotherapy

Principal investigator: Yadolah Zarezadeh, PhD student,
School of Medical Education Development,
University of Newcastle

Supervisory Team: Dr. P. Pearson, Dr. G. Hammond, Dr. C. Dickinson
School of Medical Education Development,
University of Newcastle upon Tyne

What is the purpose of the research?

This study is conducted to obtain more understandings about the perceptions of reflective learning and reflective practice among students and academic teachers, similarities and differences among different courses in respect to reflection, and skills and strategies applied to enhance reflective thinking among students in the universities of Newcastle and Northumbria.

Why have I been chosen?

You have been chosen because you:

- are in second or upper academic year of study in one of the three courses that are the targets for this study.
- have an experience about reflection such as being familiar with reflective assignments, reflective journals, critical incidents, or reflection integrated in your course of study
- have been chosen randomly

Do I have to take part?

It is up to you to decide whether or not to take part in this study, if you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving any reason. A decision to withdraw at any time or a decision not to take part will not affect your work, study, or benefits. If any new information

becomes available during the course of research which might affect your decision to continue to take part you will be informed via your address or email.

Page1 Of 3

What will happen to me if I take part in the study?

-You will be interviewed with your consent

If you agree to take part in the study Chief investigator will contact you and arrange a mutually convenient time and place to meet for an interview. **The interview includes some questions about your perception and experiences of reflective learning and methods that may be used to enhance it.**

The interview would take approximately one hour and it will be tape recorded .If you have to travel for any part of the study we will pay your travel expenses. However in general the researcher will be happy to travel to you. You may also be asked to fill a brief form about your demographic information, be asked to sign a consent form and you will be interviewed in a mutual agreed time and place.

-Your Reflective assignments (if any) will be viewed with your consent.

Your reflective assignment (if any) will be viewed by the Chief investigator without making any comments and without any effect on your marks and your teachers opinion, because the researcher will not discuss his findings with your teachers or other related authorities. You will be asked to sign a separate consent form for the access of the researcher to your reflective assignment. A decision to withdraw at any time or a decision not to take parting either interview or viewing your reflective assignment will not affect your work, study, marks or benefits.

Your Reflective assignments will be viewed in order to gain more understanding about the methods and strategies currently in use in your School to enhance reflection and whether they are designed and structured enough to help you in learning to reflect.

Ultimately, Participants will be selected by a random sampling method ,therefore, you may not be selected although you have volunteered to participate.

-You will be paid £10 as reimbursement of expenses such as travel, meals and the time you allocate to this study.

Will my taking part in this study be kept confidential?

All information which will be collected about you during the course of study will be kept confidential. If interviews for the study are audio taped with your agreement, the audio tapes will be securely stored in our research base and destroyed within four weeks of the completion of the study report as PhD thesis. All transcription of the interviews will be done at the School of Medical education Development, University of Newcastle. There will not be your name on the audio taped interview and transcriptions, so you will not be identifiable from them.

Any information about viewing your reflective assignment will be kept confidential.

No quotes will be attributed to you as an individual in the reports of this study.

How many people will be in this study?

30 students and 12 academic teachers from 3 different courses (Medicine, Physiotherapy and Nursing) are intended to be interviewed in this study.

Page2 Of 3

What will happen to the results of the study?

The results of this study will be presented as a PhD thesis and may be published as a report in academic journals. Results will be presented to the participants and the groups they represent in a presentation.

You will be informed of the time and venue of the presentation, if you wish to participate and receive feedback. **The researcher will send you details.**

It is up to you whether you want to be informed of the results and receive feedback.

You will not be identified in any report/publication.

The results will be obtainable from the research team as well.

What is the contact point for potential complaints by research participants?

You can contact Prof. G Hammond

Head of School

School of Medical Education Development
16/17 Framlington Place
University of Newcastle
Newcastle upon Tyne NE2 4HH

For further information contact either:

Dr Pauline Pearson
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Nursing &
Deputy Head of School
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Yadolah Zarezadeh
PhD Student
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16/17 Framlington Place
Newcastle
NE2 4HH
Tel: 01912464557
Email: Yadolah.Zarezadeh@ncl.ac.uk

Thank you for taking time to read this

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Appendix: 2

Interview transcript example

Interview date: 28.03.09

Researcher: Thank you very much for participating in my research, my first question is: Has reflective thinking ever been discussed formally or informally in your school department?

Yes, yes, it is something that we are considered right from curriculum development through to acting things in the classroom and in the clinical sector. So it's something that we have given a lot of thought to that we incorporate into teaching and learning strategy.

Researcher: So is there any instruction for that?

Training for teachers, do you mean?

Researcher: Yes

No, the school does not offer formal staff development or formal training in reflection. Individuals if they wish can use their own staff development time to go on courses to attend seminars or to read um research around reflection and many of us do, um but the, but there is no formal training but what there is - is programme approach where staff get together, discuss the approach they are using. Check out whether they are understanding the same things teaching in the same way, offering students the same opportunities , so at that level there's organisation of thought and checking out of what each others doing.

Researcher: Are there any formal instructions or guidelines for teaching reflection to students?

Yes, yes, there is the physiotherapy students as soon as they start their pre registration programme whether that is BSc or MSc level are given reflective portfolios so that they have a structure for recording their reflections. For

structuring their reflections, that they can keep, that they can use in their discussions with university tutors and with clinical placement tutors so yes we do have a system where guidance for reflection for students and if you're able to interview X whose one of our staff members, if she agrees to be interviewed she helped to carry out the responsibility for that. For the development and implementation of the portfolios.

Researcher: How closely do you think your definition of reflective thinking parallels with the definition of reflection that other people may have in your department?

It is my guess, that at a broad level we all understand the same thing by reflection. However, at a very specific level in terms of how to use reflection in clinical decision making, how to use reflection in terms of promoting individual learning how to use reflection to develop new knowledge. I would think we all do it differently, and that we all have our own preferred method, that would be my guess, and if you look at module descriptors where reflective practice is included for example in year 3 of the pre-registration BSc course we teach a module, called integrated reasoning and in that module.

I teach clinical decision making theoretically. I talk about guided reflection and I use a specific paper, from research that was done. I talk about guided reflection and how students can promote their own reflection organise their own reflection in order to help their own decision making skills so I deal with them in a very specific way in relation to decision making, whereas others might deal with say using a critical incident technique to help students get in the way of reflecting to even remember to reflect on what happened during a clinical incident in an important way of organising knowledge and learning. So it's all in the same pot if you like, but yet we'd be doing specific activities for different purposes on the themes of reflection and reflective practice.

Researcher: So how do you define reflection?

Without going back to papers and quoting definitions, which I'm sure, is not what you want me to do, my own definition of reflection is: A structured guided activity that contributes towards the development and organisation of new knowledge. I have personally, I have concerns about reflective practice that isn't guided, isn't structured, and doesn't lead to the development of new or

reorganised knowledge. I think too many people believe we're practising reflectively by just sitting having a cup of tea with someone mulling over the events of the day, without actually thinking well how have I learned from this and how does this now alter my practice or enhance my practice and putting together similar incidents similar episodes and what that means and taking that new personal knowledge, checking it back against the literature, checking it out with other people. I think could also be added value activities of reflection that are often missed and that what people do is talk about what they did. And even if they've made a mistake or something that's gone badly I think we're too ready to just talk about it, say in a supervision session and then let it go, without thinking, well, how have I learned, thinking properly – how have I learned? Which is why we give the students the reflective portfolio is that they can keep records, which then puts them into a process, a structured process, which hopefully takes reflection through to the new learning end, rather than thinking about what they did. It's a different between cognition and method cognition.

Researcher: What does this school do to teach reflection in terms of methods, strategies ...

Nothing that would unify all the courses, each programme area, physiotherapy, occupational therapy, nursing or perhaps, or if they have education and social work, each programme area will be responsible for its own approach to teaching and learning – they're setting that out in the curriculum, which obviously will be validated and for operational sing that through teaching and learning strategies. But the school as a whole does not give us guidelines or specific methods that we should all follow (that's individuals at ground level).

Researcher: Do you assess students in respect of reflection?

Yeah

Researcher: In your assessments of reflection, what do you expect to see?

Okay, the best way to answer the question is probably to give you an example of the type of assessment, and I will refer again to the X module, that I'm involved in teaching and assessing because I'm – I'm confident I know about that and that module is called integrated reasoning where reflection and

reflective practice is seen to be a very important and central component of reasoning, clinical reasoning, clinical decision making and that's assessed through 2 components. The first component requires students to choose a case from practice, which has particularly either interested or challenged them or made them think – something a little bit out of the ordinary.

Researcher: Like critical incidents?

Yes, and they have to choose one or two critical incidents around that case where there's been influential in their learning whether that be in a negative way or a positive way, it doesn't matter, just something that's really been influential and made them think. In the first component we ask them to present that case to 2 staff members in a 10 minute presentation to talk about what happened – what the issues were how they felt and how it altered – what was the significant issue and how it might have altered their decision making or management. In the second component, we ask them to follow that through in a 2,500 word essay where we ask them to discuss the theoretical underpinning for example – I'll give you a typical one that tends to happen in physiotherapy as the students become more advanced. They'll be confronted with a patient whose referred to them usually for a physical problem, because that's what physiotherapy is all about let's say for instance a knee problem or a knee injury – the student will go along a track or a treating the knee perhaps getting nowhere or making very slow progress, and then something will happen which will enlighten them, the patient will perhaps share some information that they previously hadn't or they will suddenly – I'm over simplifying this but, they will suddenly see the whole person instead of the knee. And then they talk about this in the presentation, and then in their essay they may talk about moving from a very medical model orientated approach to a much more client centred collaborative reasoning and they will talk about their reflections – if they've got them to that point – perhaps it will be supervision with a clinical mentor who asks them pertinent questions and made them think or perhaps they suddenly engaged more effectively with the patient, and learned new information, but that whole essay is meant for them to theorise much more about what has happened to change their thinking and they talk a lot about reflection in that, theories of reflection.

Some of them use for example, Kolb's Learning cycle, as a framework, some of them use reflection on an inaction, the work of Shaun to theorise about what they're doing, whatever theories they choose they link it and I think sometimes their theories are very closely linked anyway – they use them to find a framework to discuss what they did and why. They go for 2 examples of how we would assess their reflective skills.

Researcher: Okay, now I would like to know if you have noticed any differences in the students' ability to reflect effectively in relation to their maturity, academic year, or the extent to which they may reflect. Are there any differences between them?

I will talk about the individual level first in my experience after nearly N years in physiotherapy education the more mature student in terms of life experience not in terms of years, but in terms of life experience and maturity tends to become natural reflective practitioners. Whereas the younger student straight from school tend to need much more support and guidance to develop reflective thinking skills. I also would observe that some students who are attracted to physiotherapy because of an interest in sport, in injury in fast track musculo-skeletal type physiotherapy work sometimes are slower to stand back and reflect on the whole person and to adopt a more collaborative model than the student whose interested in long terms conditions in disability, in enduring problems an overgeneralization.

Generally, the students who have an interest in long term disability and chronic conditions tend to adopt a reflective approach much more quickly because you cannot , you can't work with a patient with long term disability effectively unless you do, whereas you can treat a sprained ankle or an acute injury with a medical model and get away with it, without standing back and reflecting so those are individual instances that I've observed.

In terms of academic level we've recently begun a career registration MSc route, and the entire curriculum is base don enquiry based learning so right from the beginning the MSc student get much less didactic teaching and are expected to take responsibility for their learning right from the beginning because these are people who already have first degrees, and we take them through the pre-registration, education and training in 2 years. And the feedback that we're

getting from the clinical educations is that they are much more independent in their learning, much more able as problem solvers and reflect much more easily and fully on what they're doing at an earlier stage than the BSc students and I think it would be very, very interesting to follow these students out into practice and see what type of practitioners they become and what they're career path will be – because they're already identifying that they are much more independent and much more critical in their thinking and the interesting question for me is will they become more advanced practitioners in the future. But we've only had one cohort who has graduated so they're not in a position to answer that yet but we're hoping to be able to follow them up.

Researcher: Is reflection something that we can consider as a natural human ability or is it something that must be learnt, must be taught?

I think some people have natural more, kind of reflective, inbuilt skills – some people are better than others, naturally, because in their own way of thinking and their own personality but I believe it can be taught and learned, I definitely do, because I can think of students who have entered the programme, perhaps very narrow minded perhaps very linear in their thinking not very lateral.

Researcher: They are not open to listen ...

Yeah. Who after a period of 3 years that – you know – they'll say to you, "I think so differently, now to the way I used to." So I do believe it can be taught and learned.

Researcher: So there are. You say that there are some theories and strategies to enhance this. What are the theories and strategies that you use to enhance reflection and reflective thinking over time?

Well, the main vehicle that we use nowadays is the portfolio, the student portfolio. ~Which we encourage them to take ownership of – it's their document – we hope that they do share it with people although they're not required to do so. that is a way for them to keep records of their reflection to chart their progress, and to ask them to find gaps in their learning needs so from placement to placement for instance they can come to a new educator and say this is where I think I'm doing well, this is where I think I'm not doing so well –

could you give me some opportunities in the areas where I think I need extra guidance or help that's – that is a main strategy that we use – the other strategy as I've already mentioned that we're using with the MSc students is to erm, influence the whole curriculum with a method of learning which is enquiry based learning – we feel it is very appropriate to do that – with people who already have a first degree who have proved themselves to be good learners we take people who only have a 2.1 or above and ask them to adopt that open enquiry based problem solving collaborative – because they have to learn together we ask them to do that right from the beginning – and that's the middle strategy to try to develop more enquiry reflective based practitioner.

Researcher: At graduation, are the students equipped with insight, skills and strategies needed for a reflective practitioner?

I think the feedback that we get and when we look at what is written nationally and keep up with the debate, the feedback is varied. I think if you went out into practice and asked employers and managers that question. Some of them would say that the new graduates of today are marvellous. That they're independent in thinking, that they're critical, and some of them will tell you that they're cool technicians, that they're having lots of skills acknowledgeable of the students of the past because we've moved away from transferring lots and lots of knowledge to giving them life long learning skills. So my personal view is that the feedback from the employers is often driven by their own preferred methods of learning and their own comfort zone and people who are reflective practitioners value others who are reflective.

People who are very tech – technically orientated in their practice can be threatened and feel uncomfortable with models of reflective practice where the linear thinking the linear thinking person finds it hard to work alongside someone who is more creative and open, and less protocol driven than they are – so I don't think there is an easy question to your question. I think what I advise my students when they come to talk to me about going into practice and applying for jobs, is I advise them to find out as much as they can about a department, that they want to work in and see what the natural learning style is within that department or organisation and whether they think they will fit into it as the type of practitioner that they think they are because I don't think of the

one size fits all, and one of the problems of that we have now in trying to educate and develop reflective practitioners is that the NHS in this country as you'll have gathered is in a state of crisis – that jobs are being cut, you hear it on the news every day – 500 jobs here, 400 jobs there so that fewer people are going to have to do the work and that means that still quick decision making, independent through cut are going to become valued much more than development and creativity within the next short term. So I think that it's going to be quite difficult for new graduates to fit into an NHS that's under so much pressure and indeed what's happening to save money, a lot of Trusts are cutting their junior physiotherapy course, so that we currently have a – have an unemployment situation in new graduates. Out of our ten MSc newly qualified practitioners who graduated in January of this year only one has a job as a junior physiotherapist. The rest are working – some in a voluntary capacity, some in the role of unqualified assistant a couple have gone abroad – but only one has got a job as a junior physiotherapist. In addition, that person is working in private practice. So that what we have is a situation of crisis and flux in the NHS that might not necessarily now be a good environment for an open minded creative practitioner who will have to go in, get a job done, with little support and guidance. And as you know to continue to develop reflective skills as a new practitioner, that guidance, that continued mentorship is absolutely vital and I think we're in a period of time where that might not necessarily be routinely offered .

Researcher: Do you remember someone who you can consider as a reflective practitioner?

Yes, I think of a colleague who is a reflective practitioner yes I can, yes.

Researcher: What are his or her characteristics that you want to mention?

The person I am thinking of who I believe to be a reflective practitioner is um, open minded, listens to new ideas is continually trying to develop and move forward their practice and this person who I'm thinking of who works here is a lecturer but also does some practice work. I hear other people, being very complementary about their practice and the quality of their practice which is – which is another thing isn't it – it's not just what you see, you listen to what

other people think and say about individuals. It's a person who I enjoy having conversations with who I enjoy talking about practice find it stimulating and

Researcher: Inspiring

Yes

Researcher: And does he or she have a certain time to reflect?

Yeah. Yeah.

Yes, I think they do, I think they must do otherwise they wouldn't have reached the level that they have but it's interesting that as a practitioner and an expert practitioner this person has also chosen to have a university role, and it could be that that's part of the reason why they've become the practitioner that they have, that they've tried to pursue the intellectual academic side of practice, alongside the clinical I think both of those who've been in teaching, lecturing and myself in research for a long time and who have left clinical practice erm, are often viewed by others as having lost important clinical skills because they don't engage with patients every day. Yet I would argue the extent to which I reflect and think on practice is – is much more developed than practitioners who are in a daily grind of – of seeing patients without really having the time or the guidance to reflect on practice and I think in physiotherapy some departments don't always have a structure for – for either peer mentoring, so that you do have that stimulus and facilitation for guided reflection – I think we do a good job with our pre-registration students but the worry is often dependant on where they go and work they can often very quickly unlearn and become resocialised into different ways of learning to fit in and survive and cope in whatever environment they find themselves, because we – that's a constant battle and challenge as you know in professional education anyway, proving good role models, good facilitation, ideal standards and then knowing that a lot of that is unlearned out in the clinical situation if those values, attitudes are not shared by people that they work with.

Researcher: In the profession of physiotherapy, do people have time to reflect?

Not enough time but you have to make it, you have to prioritise time, and make time to reflect.

Researcher: Do people reflect on their practice?

I think some people do and some people do not. It depends on their priority and how they manage their time and how they deal with their workload. I think some people continue to do what they've always done, in the same way there is others will take time to reflect to move forward to change and to adapt the best that we can do in a busy environment where resources are – are scarce is to support each other, help each other and encourage each other take time out to think about specific issues debate them, discuss them, and to I guess people who manage programmes and who manage staff have got to remember that opportunities for reflection are every bit as important as the work's that done in the classroom or in the clinical field otherwise as practitioners as educationalists if we don't continue to learn ourselves then we can't promote the learning of others I believe that we're all life long learners and the day that we stop learning is the day that we should get out.

Researcher: Do you think there are any differences between full time educators and clinicians in terms of reflection?

I don't think , I don't think there are differences just because one is is a full time lecturer and one is a full time clinician , someone who is full time in clinical practice, and works as an educator, and student comes out on placement – what they tell us – from what I observe is that they are very, very busy, very pressurised t keep waiting lists down to feel off the patients and also the demands of paperwork, record keeping and other things, I think does often make it difficult for people to find the time and the practitioners that I admire the most and the ones that I see coming onto our masters programme, getting involved in their own development I guess they're the people who invest their personal time – as well as their work time into developing and enhancing practice and I think as a professional in the modern day NHS if you don't invest personal time then you would never become a true reflective advanced practitioner because the 9 to 5 day doesn't allow – it's not built in – practitioners don't have in their working hours and in their contract – you may

take an hour a day to reflect on practice whereas in the university within our contract we have 35 days a year – I think it's 35 for what's called research or scholarly activity where we have to demonstrate over a period of a year what are we doing in that scholarly activity time to advance our practice and to develop the work.

Researcher: Documented?

Yes, through staff appraisal, everyone has an appraisal with someone, part of the appraisal process is to agree what you're going to do in your we call it RSA time and then to look at what the outcomes of that have been.

Researcher: What other avenues do you think I should follow in order to help me to gain a better understanding of teaching and learning reflection?

Looking at the curriculum and what we write down, in other words what we claim we do and what our intent is to speak to our students about their experience, and also I suppose some of the – the questions you've already raised to find out from people in the clinical environment, practitioners, managers, whether they believe that:

A) The service needs a reflective practitioner and

B) Do we produce them?

I mean obviously you cannot do everything because your time and resources are limited, but if you wanted to triangulate it over the important stakeholders not forgetting patients and service users. Wouldn't it be an interesting question to find out whether or not a patient is able to tell the difference and feels that the quality of care is different between someone who adopts a reflective, collaborative approach and someone who tells them what they need. Whereas in physiotherapy, particularly in disability and long-term conditions what we're aiming for often is for people to make life style changes isn't it and for them to incorporate new or different ways of – of doing things of moving, for them to embark on an exercise programme, all those kinds of things require motivation – they require time, they require someone to – someone to negotiate time out of work or time out of family responsibilities to – to go to a gym or to walk round the block everyday. It could be very simple, and it will be interesting to find out from patients whether they find it easier and more beneficial to have the

practitioner who does the assessment tells them what they have to do – what they must do or whether it's the collaborative practitioner who asks – who involves them in the decision making asks them what their preferences are – encourages them to reflect I think, because that's what reflective practitioners do in their practice – they encourage others to reflect – once you become a natural reflector I believe that you then facilitate others and you see – I see that in practitioners and in students and they don't realise they're doing it. The open minded creative thinker will work with someone in that way and expect them to be the same whereas the linear thinker will behave like that in practice and assume that the person that they're with wants the $a+b=c$ formula , for whatever their problem is.

Researcher: Do you teach students about the literature on reflection?

A particular essay that they do in their final year requires them to look at the literature. When we teach them, we cannot talk about the entire, because there's a massive amount of research. But when I teach clinical reasoning I talk about two different types of reflective activity that I think helps as novices. We introduce the novice expert continuum and they all get a bit hung up on that, because they think, "Oh great!" That means that I am a novice and that is an excuse for everything – and they can get a little bit hung up on that. So here I am, on the novice end and by the time I've been qualified for 5 years I'll be an expert and you have to say so. You may be qualified for 40 years and never be an expert, it depends on different factors. Anyway, I teach them guided reflection activities the Donaghy and Morss work which I think is helpful which provides the structure for reflection – questions to ask – things to do, and I say to them, in your work with your clinical supervisor structure your reflection like this. If they don't automatically ask you this type of question, ask it of yourself and so that's one thing.

The other thing is I talk to them about peer coaching, and say to them, if they get the opportunity to work with another student on placement and we're trying to develop that – not always easy – because the clinical environment can't always cope with 2 students at once, but we're trying to develop more placement opportunities where students are there in pairs, because the peer coaching is - has been shown to be very effective in terms of promoting learning

because the students ask questions of each other in a different way that they would with a qualified person and they learn with each other and from each other and that's been demonstrated and that's the thing that we're trying to develop – although there is a degree of resistance from our clinical colleagues because they perceive that it will increase their workload substantially and perhaps decrease the quality of the educational experience of the student – if they can't – if they can't offer the same amount of one to one, whereas, it's our job to convince them that luckily evidence will demonstrate that they will benefit from working from each other and in fact it may reduce the amount of time that you have to spend make it easier for students and enhance the quality of the learning experience provided the 2 students are reasonably matched, we know it doesn't work very well with a very strong student and a failing student. We would like to introduce more, more experienced student with a less experienced student. That does work for both parties because the new student learning from the more experienced one and the more experienced one learns by having to teach develop .

Researcher: Learning by doing

Yeah

So those are things that we are trying to develop but we need to have the support of our clinical colleagues to try to get that up and running and I supervised some masters research last year with a clinical colleague who did some interviews much like you're doing now with staff members in the clinical field who had taken more than one student on placement who were brave enough to do it, what their experiences were, what they thought the positives and the negatives were and were going to try and use her research and disseminate it to try to engage more practitioners in the debate and as well as improving and promoting learning it will give us more placement opportunities for students which we desperately need.

So those are the 2 out of the 3 works and theories when I teach decision making and how they can improve their decision making skills – I ask them to engage wherever possible in peer coaching and peer learning and I ask them to structure their reflection with their clinical supervisors and if that is not immediately on offer to ask for guidance in their reflection, because as I said to you earlier I

don't think it happens naturally with everyone and I think that we go so far in what I feel is the reflective process and then stop and we stop short of the reorganisation we think of in knowledge and experience – in other words turning reflection into learning – needs guidance of our – of our facilitators.

Researcher: Thank you very much, is there anything else about reflection that you would like to add to this conversation.

I do not think so, I think we have covered a lot of ground actually, it has made me, and you have really made me think. (Laughs). I was sitting here reflecting on everything that I do, no, no, I don't think so, I think I've said everything I would want to say.

Researcher: Thank you very much.

A Model for Using Reflection to Enhance Interprofessional Education

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Abstract

Both Reflective Practice and Interprofessional Education (IPE) have gained a considerable attention in the past three decades. Although a plethora of literature exists on either topic, few articles address the issue of using reflective techniques to enhance IPE (King & Ross, 2003; Ross *et al*, 2005; Goosey & Barr, 2002; Craddock *et al*, 2006) and fewer provide a model to achieve this.

The aim of this article is to propose a simple model for employing reflection in the context of healthcare education to enhance the outcomes of shared learning occasions. This model encourages a “reflective dialogue” (Schon, 1987) between self and self (I and Me) on “self” and on “self and others” from a symbolic interactionism’s view.

This model is based on the literature review, findings of a PhD project on “Reflective Learning in Healthcare” and the aims of IPE such as improving services (Wilcock & Headrick, 2000), reducing “*failure in trust and communication between professions*”, and modifying “*negative attitudes and perceptions*” (Carpenter, 1995).

The model offers a structure for reflection in three personal, professional, and interprofessional levels, considering the organisational context and the culture of patient –centeredness. In each level a set of questions guide the reflections in such a way that insights gained in different levels relate to and inform each other. The

outcome of reflection using this structure is awareness about “self”, roles and responsibilities, the meanings of self and role, and emotions evoked in the personal level. This awareness is achieved in the professional level when an individual reflects on assumptions, identity, role, and importance of the profession. Finally, guided reflections on the role, and importance of other professions, opportunities of learning, teaching, and working with them, generate a higher level of awareness that encompasses the broader context of patient care.

Keywords: Interprofessional Education, Reflective Practice, Reflective Learning, Model

1. Introduction

Both reflective practice and interprofessional education have gained a considerable attention in health and social care within the past three decades in the UK and worldwide. The overabundance of literature, enormous and ongoing research papers, together with apparently universal investment of time, effort and resources on various methods and models for implementing both reflective learning and interprofessional education in educational settings suggest that they have been considered more than just another educational fashion (Finch, 2000; Craddock et al, 2006) by most academics and educationalists. On the contrary, both movements have showed to have potential educational values leading to a better practice and improving health outcomes (Gilbert et al, 2000; Almas, 2000).

Reflective learning and interprofessional education are two concepts deeply grounded in adult learning theory and both are strongly influenced by the works of Boud (1985, 1988); Kolb (1975, 1984) and, Schon (1983, 1987, and 1991). Reflection as defined by Boud et al (1985) as *“those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations”*(p.19). Reflection is mostly perceived as individual and is inclined to be utilised within uniprofessional structures (Karban & Smith, 2006) whereas , *“interprofessional learning involves co-reflection like a double mirror held up by another to see aspects of oneself that one can not see directly in single mirror”* (Wee, 1997 as cited in Barr, 2002).

Although a plethora of literature exists on both topics, few papers address the issue of using reflection to enhance interprofessional learning and fewer provide a model to achieve this in a practical way. For instance, Karban and Smith (2006), despite expressing their concerns about using a model of critical and reflective practice in interprofessional education argued that a model of critical and reflective practice within an interprofessional learning programme would offer an opportunity for professionals to develop a shared understanding of the world. They introduced a model based on a range of multiprofessional workshops supported by small multiprofessional groups of students during the academic year to provide opportunities for student to reflect. Ross et al, (2005) devised, piloted, and developed a reflective exercise to help professionals examine complex interprofessional relationship in health and social care. They used arrow- shaped cards displayed on large visual layouts as a reflective technique to provide a description of the relationships. They argue using this technique would enable professionals to explore the meaning of professional identity and consider intentions and actions within

complex multidisciplinary situations. Both above models possess potential strengths such as considering the importance of obtaining shared understanding of the social world in the former and the meaning of professional identity in the latter. They have hardly provided a more comprehensive cover for most critical aspects of an IPE such as the role of emotions self-awareness, and portraying self and profession in relation to other professions. Finally, they have not considered the importance of the appreciation of the unique role and importance of self and others.

Craddock *et al.* (2006) critically reviewed IPE in health and social care in the UK. They noted that reflective practitioner theory had been used to underpin the IPE initiatives in some universities. They observed that guiding teams to reflect in an IPE contact would help professionals to gain an appreciation of the role and underpinning views and models of both their own profession and those of others. These aspects of IPE have received explicit attention in our model.

Reflective learning has a potentially fundamental role to play in actualisation of some of interprofessional education's aims such as to overcome ignorance and prejudice amongst professions (Barr, 2002), to modify negative attitudes and, perceptions and to remedy failure in trust and communication between professions (Carpenter, 1995).

These can be potentially achieved by a structured "reflective dialogue" (Schon, 1987), between components of "self" about "self" and "others" (Blumer 1996). The outcome of such internal dialogue is raise in awareness about self and an appreciation of "others." This awareness and appreciation is prone to ongoing modification and change through a process of obtaining new insights and ideas.

This paper aims to introduce a model for using a structured reflective dialogue that enables professionals and students to become more aware about identity, role, importance, boundaries, and limitations of themselves as professionals and others in the personal, professional, and interprofessional levels.

2. Interprofessional Education

The movement of inter-professional education emerged out of the fact that "working together and learning to work together" in the health care delivery system were not easy and straightforward. This has been attributed to certain factors such as misunderstandings, negative stereotypes, role overlap, and failure in trust and communication (Higgins et al, 1994; King et al, 1999). Therefore, the high quality collaborative patient care that policy makers strived for did not seem to be fully achieved in such work environments. In response to this, a number of initiatives were launched. (NHS, 2000; WHO, 1998; Department of Health 1989, 1990, 1997, 1998, 2001 as cited by Ross et al, 2005). IPE was perceived to be an appropriate approach to overcome this problem, and to promote working relationships between practitioners (Ross et al, 2005). Observably better working relationship, it was hypothesized, would lead to better team working and consequently enabling patients to obtain a professionally harmonized, inclusive plan of care (Forbes & Fitzimmonds 1993; Miller et al 1999, 2001; Barr, 2002). According to CAIPE (2002), *Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care.*" It aims at much more than just sitting side-by-side or learning together. IPE is a style of education that enables professionals to extend their outlooks beyond their specialist fields. It helps them to learn how to draw on the expertise and approaches of other professions (CVCP, 2000). IPE has been seen as a potential means of obtaining collaborative

competencies, distinguished by Barr (1998). The aim is to create a more positive approach to others, trust among professions, mutual respect and understanding, opening lines of communications, creating opportunities to learn from and about others. The aim of IPE initiatives is to contribute to development and knowledge of others, and foster a desire to permeate while not changing the professional boundaries (Torkington et al, 2004). This seems to be important for professionals to be able to deliver a profession-specific defined service to the community.

3. Reflective learning

Reflective practice has been widely and constantly viewed as *“the process of internally examining and exploring an issue of concern, triggered by an experience, which reacts and clarifies meaning in terms of “self” and which results in a changed conceptual perspective”* (Boyd and Fales, 1983, p.100). This definition of reflective practice is consistent with symbolic interactionism’s concepts of “meaning” and “self” which highlights the importance of the meaning of “things” for individuals in human interactions (Blumer, 1996).

Reflective practice is recognised as a beneficial way for professional development (Clegg et al, 2002; Clouder, 2000). For many professions reflection is considered as an indispensable element of practice that potentially leads to integration of theory and practice. It serves as a vehicle to *“enhance the awareness of one’s assumptions, values and intentions embedded in practice and various social, cultural and psychological forces shaping this assumptions and values”* (Tsang, 2007, p.682). This awareness which is a product of a dialogue between components of self (Blumer, 1996) is seen as the fundamental foundation of constant change and improvement on “the continuum of novice to expert” (Dreyfus & Dreyfus, 1985; Benner, 1982; Benner and Tanner, 1987). The object of such internal conversation can include “self,” “others,” “situations” and “things” (Blumer, 1996). A structured model of reflection (John, 1995; Gibbs, 1988; Schon, 1987; Kolb, 1984) can guide this process. Some models of reflection (Fish and Twinn, 1997; John, 1995) advocate some forms of reflective questions. Smyth (1992) suggested posing questions to be answered in written journals could enhance reflective thinking. The usefulness of posing questions to awaken reflection in individuals has been frequently reported elsewhere (Poskiparta, 1998; Campbell, & Lom, 2006; Tate, 2004; Driscoll, 1994; Broockfield, 1995; Taylor, 2000).

Reflective practice if it remains just a uniprofessional activity it is less likely to develop mutual trust and respect. Rather it may lead to development of different meaning and language for different professional backgrounds (Hodge, 2004 as cited in Karban and Smith, 2006). This may lead to professional territoriality and professional ethnocentrism, which are two of the three main barriers, identified by Nyatanga (1998) that may obstruct shared learning. While professions are dealing with the same sort of problems, (things), they need a shared language and meanings to maintain the lines of communication opened and avoid different assumptions made, based on different meaning for the same thing (Griffin, 1997). Different professions are supposed to work together for a shared mission, which is delivering a better healthcare. According to symbolic interaction theory *“humans act toward people and things based upon the meaning that they have given to those people or things”* (Blumer, 1996). Therefore, different professions need to develop shared meanings, in order to be able to communicate and cooperate effectively. Reflective practice in an interprofessional educational context may contribute to the acquisition of such shared

meanings, which lead to a better understanding of other professionals' role and importance and put "others" and "self" into the broader picture of collaborative care.

4. The model

The model of reflection discussed in this paper can only be seen as a potential guide to reflection in an interprofessional educational context, not a blueprint for action. This model, like any other models of reflection, is a device that professionals can use and alter later, after employment in different shared learning occasions. On the one hand, reflection contributes to enhanced professional development and maturity and on the other hand, it seems that an ability to learn is required to embark it beyond technical and descriptive levels. In fact until the professional "*can move from a position of dualism to a more complex view of knowledge she/he will find it difficult to reflect*" (Perry, 1997). Structure and guidance appear to be useful to overcome this problem and enable professionals to achieve deeper levels of reflection. Powell (1989) in her study about reflection in nursing noticed that nurses were inclined to reflect at the technical and descriptive levels if they were not challenged and were not provided a structure. Reflective learning is determined by question and dialogue. By engaging in a reflective dialogue, the professionals enhance their understandings about the experience. The practice of answering questions aids professionals to achieve a deeper level of reflection and enables them to reflect again and possibly find greater meaning (Moon, 1999). In an interprofessional educational context, this meaning can be achieved in the form of a shared meaning, which potentially leads to an increased understanding about others and become a foundation for mutual trust and respect.

The model for reflection suggested in this paper is based on a set of questions designed for the professionals to answer in relation to three personal, professional, and interprofessional levels. This may enable them to "*explore, uncover, unpeel, (as the skins of an onion), to get at the core issue and to get (new) insight and begin to understand*" (Weinstein, 1999 p.37). Devising such a three level model is based on the assumption that reflection is in essence a personal issue but learning is a socially constructed process (Peddler, 1997; Thorpe et al, 1997). It could be argued that in an interprofessional educational milieu, three main human elements are identifiable. These are the "self," the "profession" which self is affiliated to, and "others" which are the members of other profession(s). This can be used as a basis for reflection in order for the novice professionals to find "self", "own profession" and "others" in the wider picture of healthcare, clarify their understandings and obtain a new insight and "*a vision of the whole*"(Jones, 1996) in their constant progress towards becoming an expert.

Answering questions designed for each level potentially results in raised "awareness" about the topic of reflection. The questions in each level are deliberately designed to bring certain important concepts such as role, identity, importance, interrelationships, boundaries, and limitations of self and others into the scope of reflection. Learners' motivation increase when they encounter learning opportunities about a matter of concern (Schwenk & Withman, 1987). Questions make those issues a matter of interest for them. Considering feelings and emotions is an essential constituent of reflection process in many models (Gibbs, 1988; Boud et all 1985; Kolb, 1984) in fact, reflection starts with a kind of feeling and emotion. This has received attention in each level in line with the hypothesis that it leads to increase in emotional intelligence (EI). EI is defined as "*the ability to monitor one's own feelings and emotions to*

discriminate among them and to use this information to guide thinking and action” (Mayer and Salovey, 1993 p.433).

The reflection in each level starts with questions exploring the identity of “self” “profession” and “others.” Answering these questions specifies the topic of reflection enables the individuals to concentrate on the topic and provides the professionals with a starting point and bedrock for reflection on other aspects and elements of IPE. It also helps them to become more aware of their professional identity, which is *consisting of a set of values, attitudes, ideas, knowledge and skills* (Winslade, 2003).

Reflection in the personal level would outcome self- awareness. This is related to *“knowing one’s internal state, preferences, resources and intuitions* (Gendron, 2004). Most of the questions in this level have been built upon three competencies resulted from self awareness identified by Gendron (2004) Figure 1. The first competency is emotional awareness which relates to recognising one’s emotions and their effects on thought and action. This is echoed in questions about emotions, and feeling and their effects on the professionals. The ability to assess one’s own strengths and limitations and the impacts they may have in social life is another competency named self-assessment. Some questions in the first level are designed to cover this aspect of personal competency. The last competency described by Gendron is self-confidence which concerns with a well-built self assurance in one’s self-worth and abilities. This is a kind of emotional security resulting from faith in one’s abilities or capabilities. It is hoped that guided reflective questions make professionals enable to recognise their capabilities and powers and help them to build a better self-confidence, which seems to be necessary to interact in a socially constructed learning situation like IPE. In addition, outer self-awareness (Bayne et al, 1994) which is about an individuals’ consciousness about how they are perceived by others underpin some questions in this level. This is in line with the symbolic interactionist’s idea of taking others’ perspectives to view the self (Blumer, 1996).

The questions provided for the reflection in the professional level enable professionals to develop “profession-specific attitudes” and cohesion, which are required to work as professionals (Figure 2). These profession-specific attitudes are “not inhibited by IPE” experiences (Pollard et al, 2006) and do not contradict its basic assumptions. IPE has been reported to increase personal and professional confidence (Sinclair, 2004; Parsel and Bligh, 1998) and it is achievable whilst professional borders remain intact. This dimension of IPE is supported by providing questions to facilitate a structured reflection on the role and importance of “self” in healthcare team, via bringing the unique contribution and importance of the profession to the scope of reflection. This would potentially contributes to an IPE curriculum to have a more “positive effect on students’ attitudes to their own professional relationship” (Pollard et al, 2006) and a sense of professional unity and fellowship.

Contact theory is one of the theories underpinning much thinking about IPE. According to this theory, interaction between different members of different groups under a controlled set of conditions can lead to a reduction in prejudice (Brown, 2005; Allport, 1954). Reduction in prejudice and modifying negative attitude is one of the aims of interprofessional education (Barr 2002, Carpenter, 1995). Reflection on the role and importance of “others” leads to better understanding and a more reinforced acquaintance, which, in turn, lessens prejudice and breaks stereotypes. This is encouraged by asking questions about the role and the importance of others in the healthcare team in the interprofessional level (Figure 3). Reflecting on the inimitable

input of other professions to the healthcare team potentially creates respect and appreciation.

Evaluations of IPE programmes and theoretical contemplation suggest that ‘contact’, ‘learning side by side’, and ‘familiarity’ are not enough for attitudinal changes to occur (Dickinson and Carpenter, 2005; Zajonic, 1968; and Berkowitz, 1980 as cited in Barr 2002). Indeed, there is the possibility that “*contact with others may confirm the reality based negative perceptions*” (Barr 2002 p.18). Reflective practice in an appreciative way may enable professionals to “*embrace an awareness and appreciation of self and others*” (Ghaye, 2004) which helps them to overcome their negative perceptions by developing an appreciative way of looking at others, their roles, importance and responsibilities. This is reinforced by urging professionals to reflect on their own feelings about others and their presence in the team. Appreciative questions in this model may be beneficial in creating an opportunity for the contact hypothesis to take effect. The questions devised for the interprofessional level of this model aid professionals to achieve the collaborative competencies aimed by IPE, distinguished by Barr (1998). Figure3

Reflections in all levels are interrelated and inform one another so that a constant cycle of reflecting, getting new insight and knowledge, reflecting again, and connecting the outcome of reflection in one level to other levels is aimed and has to be encouraged. In the first level, the model helps professionals to make sense of their own feelings, and emotions. The questions and, the context of the reflection in the first level would inevitably lead the professionals to relate their reflections to “others” which are the members of the profession and other professions. This natural connection is directed through structured reflection in the other levels of the model. This is an incessant cycle of reflection with self, profession, and others professions at the centre, with raised awareness being intended at each level and in relation to other levels. This has been depicted in Diagram 1. It is hoped that engaging in reflection, in this way, enables professionals to put themselves into the bigger picture of the healthcare. Although we are aware that this model has never been piloted in an IPE programme, we would be enthusiastic to see the outcomes of implementing it in the real world.

5. Conclusion

In this paper, an attempt has been made to explain the importance of using reflection in IPE and introduce a simple three level model for this purpose. The three levels of the model are based upon three main human components of an IPE programme, which are self, own profession and other professions. A set of structured reflective questions, based on theoretical principles, IPE goals, the literature on reflective practice and findings of corresponding author’s PhD project on reflection have been devised to guide reflection in and on IPE. The outcome of reflection using this model is expected to be a greater awareness about self, own profession and other professions situated in the wider context of the patient care. The theoretical principles underpinning the model have been explored in appropriate points in the paper and in part summarised in Figures 1, 2 and 3. It is hoped that using this model would lead to more clarity of meanings, increase in knowledge and understanding of the importance of IPE in healthcare education.

Figure 1- The reflective questions and some literature underpinning the questions at the personal level

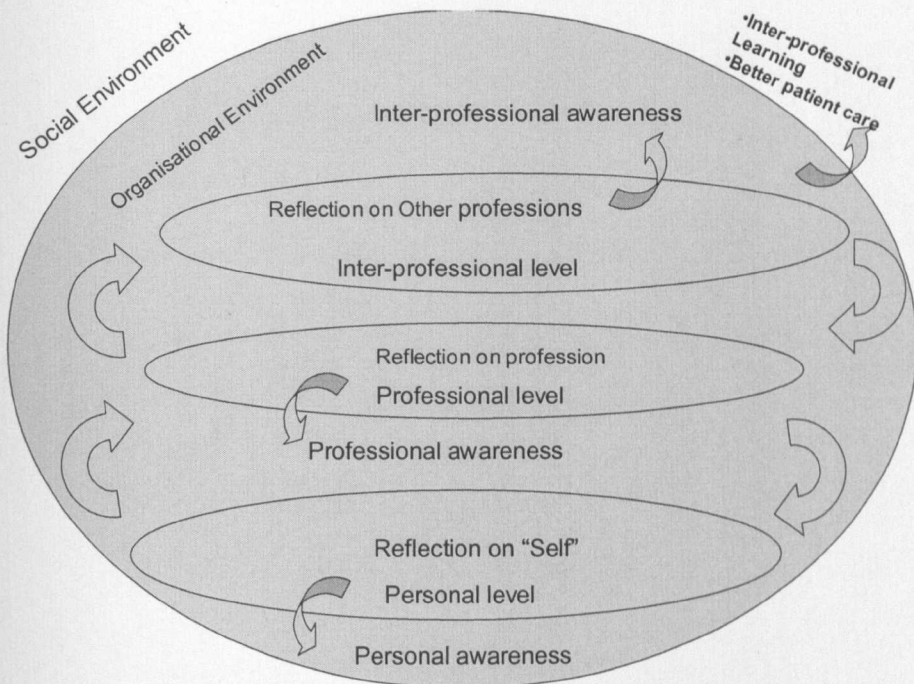
The questions guiding reflection at the personal level	Literature underpinning the questions at the personal level
<p>Who/ what I am? What is my role? What does this role mean to me? What is my feeling about it? Why do I feel like this? What are the effects of my feelings on my thoughts and actions? How can I play my role better? How others see my role and me? How do they feel about me? How do I know this? What are my strength and limitations? How can I use my strengths to address my limitations? What I have learned from this reflection?</p>	<p>Gendron's (2004) three personal competencies:</p> <ul style="list-style-type: none"> • Emotional awareness (recognizing one's emotions and their effects) • Self assessment (knowing one's strengths and limits) • Self confidence (Strong sense of one's self worth and capabilities) <p>Bayne et al (1994) model of self-awareness:</p> <ul style="list-style-type: none"> • Outer self-awareness which concerns an individuals' awareness of their own behaviour and how they are perceived by others <p>Attending and considering the feelings (Gibbs 1988, Boud et all 1985, Kolb 1984)</p> <p>Symbolic interactionist's notion of the importance of the meaning of "things" in human conduct (Blumer 1996)</p>

Figure 2- The reflective questions and some literature underpinning the questions at the professional level

The questions guiding reflection at the professional level	Literature underpinning the questions at the professional level
<p>What is my professional identity? What does being a professional mean to me?</p> <p>What are the basic assumptions of my profession?</p> <p>What are the boundaries /limitation of my profession?</p> <p>What are the outstanding/unique contributions my profession makes to the healthcare team?</p> <p>Where my profession stands in the bigger picture of healthcare?</p> <p>How do I feel about this? What have I learned from this reflection?</p>	<p>Professional identity (Winslade, 2003)</p> <p>“Vision of the whole” (Jones, 1996)</p> <p>Appreciative reflection (Ghaye, 2004)</p>

Figure 3- The reflective questions and some literature underpinning the questions at the interprofessional level

Reflective questions at the interprofessional level	Literature underpinning the questions at the interprofessional level
<p>Who are they (members of other professions)?</p> <p>What is their role in the context of healthcare?</p> <p>What are the commonalities /differences between us?</p> <p>How important is their role in the context of healthcare?</p> <p>What is their unique /outstanding contribution to healthcare team?</p> <p>How do I feel about their role and importance?</p> <p>What can I learn from them?</p> <p>Have I learnt from them?</p> <p>What can I teach them about my role, my responsibilities, and myself?</p> <p>Have I thought them any?</p> <p>What can we learn together?</p> <p>What can we do together?</p> <p>What is our shared mission?</p> <p>What do they think/feel about me/us?</p>	<p>Collaborative competencies distinguished by Barr (1998):</p> <ul style="list-style-type: none"> • Describe one’s own roles and responsibilities clearly to others • Recognise and observe the constrains of one’s role, and responsibilities • Recognise and respect the role, responsibilities and competence of other professions • Enter into interdependent relationships, teaching and learning from <p>Learning together working together (Jones 1986)</p>



Reflective Practice at the service of Inter-professional Education

Diagram 1- The Model of Reflection in Interprofessional Education

References

- Allport, G. W. (1954). The nature of prejudice Cambridge, MA: Addison-Wesley.
- Almas, S. (2000). "Uniprofessional and interprofessional learning for physiotherapy and occupational therapy students: a comparative attitudinal study in Norway." Journal of Interprofessional Care **14**: 291-2.
- Barr, H. (1998). "Competent to collaborate: towards a competency based model for interprofessional education." Journal of Interprofessional Care **12**(2): 181-188.
- Barr, H. (2002). Interprofessional Education: Today, Yesterday, and Tomorrow. Occasional Paper 1 London, The Learning and Teaching Support Network for Health and Science Practice.
- Bayne, R., L. Horton, et al. (1994). The Counsellors' Handbook: A Practical A-Z Guide to Professional and Clinical Practice. London, Chapman & Hall
- Benner, P. (1982). "From novice to expert" American Journal of Nursing **82**: 402-407
- Benner, P., & Tanner, C. (1987) "Clinical judgment how expert nurses use intuition" American Journal of Nursing, **87**: 23-31.
- Blumer, H. (1996). Symbolic Interactionism: Perspective and Model, Englewood Cliffs, NJ: Prentice-Hill.
- Boud, D., Keogh, R. and Walker, D. (1985) Promoting Reflection in Learning: a model In D. Boud, R. Keogh, & D. Walker (Eds.), *Reflection: Turning experience into learning* (pp. 18-40). London: Kogan Page
- Boud, D., Ed. (1985). Problem-Based Learning for the Professions Sydney, HERDSA
- Boud, D., Keogh, R. and Walker, D., R. Keogh, et al. (1988). Moving towards autonomy in: Boud, D. ed. Developing student autonomy in learning London, Kogan Page.
- Boyd, E. and A. Fales (1983) "Reflective learning key to learning from experience" Journal of Humanistic Psychology **23**(2): 99-117.
- Brookfield, S. (1995) Becoming a critically reflective teacher Sanfrancisco , Jossey-Bass Publishers
- Brown, R., & Hewstone, M. (2005) "An integrative theory of inter-group contact In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 255–343)"
- CAIPE (2002) "Interprofessional Education: The Definition." Retrieved 17July, 2007

Campbell, A. M. a. B. L. (2006) ""A Simple E-Mail Mechanism to Enhance Reflection, Independence, and Communication in Young Researchers" " CBE Life Science Education 5((4): 318-322.

Carpenter, J. (1995) " Doctors and Nurses: Stereotype and stereotype change in interprofessional education." 9: 151-62." Journal of interprofessional Care 9: 151-162.

Clegg, S., J. Tan, et al. (2002) "Reflective practice and continuing professional development in higher education" Reflective practice 3(1): 131-146.

Clouder, L. (2000)"Reflective Practice in Physiotherapy Education"" Studies in Higher Education 25(2, 1 June): 211-223.

Craddock, D., O'Halloran, et al. (2006). "Interprofessional education in health and social care: fashion or informed practice? Learning in Health and Social Care" Learning in Health and Social Care 5(4): 220-242.

CVCP (2000) CVCP response to the consultation on 'A Health Service of all the talents: developing the NHS workforce London: Committee of Vice Chancellors and Principals.

Dickinson, C. and J. Carpenter (2005) "Contact is not enough: An inter-group perspective on stereotypes and stereotype change in Interprofessional Education. The Theory-Practice Relationship in Interprofessional Education Occasional paper 7 The HE Academy Health Sciences and Practice subject centre ed Colyer, Helme and Jones."

Dreyfus, H., & Dreyfus, S. (1985). Mind over machine the power of human intuition and expertise in the era of the computer New York Free Press.

Driscoll, J. (1994). "Reflective practice for practise" Senior Nurse 13(7): 45-50.

Finch, J. (2000)"Interprofessional education and team working: A view from the education providers." British Journal of Medicine 321: 1138-1140.

Fish, D. and S. Twinn (1997).Quality Clinical Supervision in Health care Professions – Principled Approaches to Practice London Butterworth – Heinemann

Forbes, E. and V. Fitzimmonds (1993)"Education: the key for holistic interdisciplinary collaboration." holistic Nurse Practice 7(1-10).

Gendron, B. (2004). "Why Emotional Capital matters in Education and in Labour? Toward an optimal exploitation of human Capital and Knowledge management, in les cahiers de la maison des Sciences Economiques Serie rouge n 113 Paris Universite Pantheon- Sorbonne."

Ghay, T. (2004) "Reflection for spiritual Practice" Reflective Practice 5(3).

Gibbs, G. (1988). Learning by Doing: a guide to teaching and learning methods. Oxford, Further Education Unit - Oxford Polytechnic.

Gilbert, J. H., Camp II, R. D., Cole, C. D., Bruce, C., (2000). "Preparing students for interprofessional teamwork in health care" Journal of Interprofessional Care **14**(2): 223-235.

Goosey, D. and H. Barr, Eds. (2002) Selected Case Studies of Interprofessional Education Centre for Advancement of Interprofessional Education London

Griffin, E. (1997). A First Look at Communication Theory New York: The McGraw-Hill Companies.

Higgins, R., C. Oldman, et al. (1994). "Working together: Lessons for collaboration between health and social services" Health & Social Care **2**, 269-277

Johns, C. (1995). "Framing learning through reflection within Carper's fundamental ways of knowing in nursing" Journal of Advanced Nursing **22**(2): 226-234.

Jones, P. A. (1996). We're All Reflective Practitioners Now: Reflections on Professional Education' in Teaching Lawyers' Skills in Webb, J. & Maughan, C London, Butterworth.

Jones, R. V. S. (1986). Working together-Learning together Occasional Paper 23. London RCGP

Karban, K. and S. Smith (2006) Developing critical reflection within an interprofessional learning programme Conference Paper Professional lifelong learning: beyond reflective practice University of Leeds

King, N. and A. Ross (2003) " Professional Identities and Relations: Interprofessional Evaluation of Collaborative Community Schemes." Social Work in Health Care **38**(2): 51-72.

King, N., A. Ross, et al. (1999). "Evaluation of the fast response scheme: Part one – Staff reactions. Unpublished report PCRG University of Huddersfield UK"

Kolb, D. A. (1984) Experiential Learning: Experience as the Source of Learning and Development New Jersey Prentice Hall

Kolb D. A. & Fry, R. (1975) Toward an applied theory of experiential learning; Theories of Group Process London: John Wiley.

Lumague, M. M., Alisha; Mak, Diana; Hanna, Mary; Kwong, Joanne; Cameron, Colette; Zener, (2006). "Interprofessional Education: The Student Perspective " Journal of Interprofessional Care **20**(3): 246-253.

Mayer J.D. and Salovey, P. (1993) "The intelligence of emotional intelligence" Intelligence **17**(4): 433-442

Miller, C., M. Freeman, et al. (2001). Interprofessional practice in health and social care London, Arnold

Miller, C., N. Ross, et al. (1999). Shared learning and clinical teamwork: new directions in education for multi-professional practice London English National Board for Nursing, Midwifery and Health Visiting

Moon, J. A. (1999) Reflection in Learning and Professional Development, Theory & practice London, Kogan Page

Nyatanga, L. (1998). "Professional ethnocentrism and shared learning" Nurse Education Today **18**: 175-177.

Parsell, G. and J. Bligh (1998)"Interprofessional learning" Postgraduate Med Journal **74**(868): 89-95

Peddler, M. (1997) "What do we mean by action learning? A story and three interpretations In Peddler, M. (ed.) Action Learning in Practice, Hampshire, England, Gower Publishing, pp. 61-75. ."

Perry, W. (1997) Forms of Intellectual and Ethical Development in the College Years: A Scheme New York: Holt, Rinehart and Winston. .

Pollard KC, Miers ME, et al. (2006). "A comparison of interprofessional perceptions and working relationships among health and social care students: the result of a 3 year intervention
"Health and Social Care in the Community **14**(6): 541-552.

Poskiparta, M., T. Kettunen, et al (1998) "Reflective Questions in Health Counselling" Journal of Qualitative Health Research **8**(5): 682

Powell, J. H. (1989). "The Reflective Practitioner in Nursing" Journal of Advanced Nursing **14**(824-832).

Ross, A., K. Nigel, et al. (2005). "Interprofessional Relationships and Collaborative Working: Encouraging Reflective Practice." Online Journal of Issues in Nursing (January 31).

Schon, D. A. (1983) The Reflective Practitioner. How professionals think in action. London, Temple Smith

Schon, D. A. (1987) Educating the Reflective Practitioner.CA, Jossey Sanfrancisco.

Schon, D. A. (1991) The Reflective Turn: Case Studies In and On Educational Practice. New York, Teachers Press, Columbia University

Schwenk, T. L. and N. Withman (1987) Physician as teacher Baltimore, Wiliams &Wilkin

Sinclair, L. (2004). Interprofessional Education (IPE): New knowledge in need of translation? Canadian Physiotherapy Association Research New and Views Newsletter: 11-13.

Smyth (1992) "Teachers' works and the politics of reflection" American Educational Research Journal **29**: 267-300

Tate, S. and M. Sills (2004) Developing Critical Reflection in the Health Professions LTSN Occasional Paper 4

Taylor, B. J. (2000). Reflective Practice: A guide for nurses and midwives, Buckingham Open University press.

Thorpe, R., Taylor, M. and Elliott, M. (1997) "Action learning in an academic context In Peddler, M. (ed.) Action Learning in Practice Hampshire, England , Gower Publishing, pp. 146-172. ."

Torkington, C., M. Lymbery, et al. (2004). "The impact of shared practice learning on the quality of assessment carried out by social work and district nurse students." Learning in Health and Social Care **3**(1): 26-36.

Tsang, N. M. (2007). "Reflection as Dialogue" Br J Soc Work **37**(4): 681-694.

Webb, J. M., C (1996). Teaching Lawyers' Skills London, Butterworth

Weinstein, K. (1999). Action Learning, second addition a practical guide Gower Aldershot

Wilcock, P. M. and L. A. Headrick (2000)"Continuing quality improvement in health professions education" Journal of interprofessional Care **14**(2 **Special issue**)

Winslade, J. (2003). "Storying Professional Identity" Journal of Narrative Therapy and Community Work **4**

Glossary

IPE: Interprofessional Education