CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of the relevant literature related to the major aspects of the study. The review is organized into four sections, namely: 1) the concept and models of reflection, 2) reflective practice and nurse education, 3) reflective activities, 4) reflective practice: preparation and skills), and 5) assessment of reflection.

2.2 The concept and models of reflection

Interests in reflection as a rationale for professional activities increased in the 1980s (Stoddart, 1996). This was mainly due to the change in attitude towards professional autonomy which led to what Schon (1983) described as a crisis in professional confidence. According to Jarvis (1992), ever since the popularization of Schon's seminal book, reflective practice has been a constant theme among some group of professionals especially in the teaching profession. It was only during the 1990s that the nursing professional began to take a great interest in Schon's work.

Schon (1983) defines reflection as learning from events and incidents experienced during a course or practical professional programs. Schon also distinguishes between two types of reflection; reflection-in-action and reflection-on-action. Reflection-in-action occurs while practicing and influences the decisions made and the outcomes given, whereas reflection-on-action occurs after the event and contribute to the development of practice skills and the learning of new knowledge. It was further emphasized that reflection must be made explicit and can be both integral to an activity (reflection-in-action) or undertaken after the event (reflection-on-action). Practitioners thus can learn from both types of reflection and these need to be facilitated within a practice-led curriculum.

While Schon (1983) has been credited for spearheading the reflection movement in the 1980s, Dewey (1933) is reputed to be the first one to describe the

concept of reflection (Clarke et al, 1996). Dewey defines reflection as the 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 considerations to which it attends. Reflection is seen as an active process that needs time for deliberation in order to find meanings in the task being undertaken.

In addition, Dewey (1933) emphasizes that reflection involves an integration of skills and attitudes in methods of inquiries (cited by Boud et al, 1985). Dewey's five skills and three attitudes referred here are said to be interdependent for effective practices of reflection; that neither attitudes nor skills alone will suffice. The three attitudes which are considered as pre-requisite for reflective practice include open-mindedness, responsibility and whole-heartedness. Boud et al (1985) explains that open-mindedness is an active desire to listen to more sides and to recognize the possibility of error even in the beliefs that are dearest to an individual. While responsibility requires a synthesis of all the ideas received and the application of those ideas in a coherent way, whole-heartedness demands an inner strength for genuine reflection on the whole experience. The three attitudes of open-mindedness, responsibility and whole-heartedness are viewed as important in securing the adoption and use of reflection (Dewey, 1933; cited by Lourghran, 1994).

The five skills mentioned in Dewey's framework refer to the five phases of reflection and they are: suggestion, problem, hypothesis, reasoning and testing. While suggestion (phase 1) is seen as a stimulus for further inquiry, problem (phase 2) entails understanding the situation more precisely. In phase three, hypotheses involves making more observations and considering more information. Reasoning (phase 4) is linked to phase three when a purposeful approach is required for working through the hypotheses from different perspectives. The final phase of testing can lead to resolution or to reconsider the problem depending on outcome. According to Lourghran (1994), the development of a student's reflection is directly related to the student's ability to apply the five phases and these may come in stages until a fluency is achieved . However, Dewey (1933) also points out that the five phases need not occur in a set order (cited by Lourghran, 1994).

In Lourghran's (1994) study which involves his student teachers in a longitudinal study, the five phases of Dewey's reflection were used to identify the student teachers' approach and practice of reflection. Lourghran believes that these five phases and the three attitudes mentioned above have allowed him to genuinely map his student's reflection development. In addition, Lourghran suggests that the greater the frequency of these three attitudes, the more the individual would be likely to demonstrate the five phases of reflection. Lourghran also mentions that in general, a student displays open-mindedness more often than responsibility, and displays responsibility more often than whole-heartedness.

Based on Dewey's and Schon's work on reflection, numerous authors have contributed their work on reflection and have provided other working definitions of reflection. In their book, Boyd and Fales (1983) offers a useful definition which suggests that reflection is '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' (cited by Clarke et al, 1996). The definition implies that reflection is a process of thinking about and exploring an issue of concern, which is initiated by an experience. The aim here is to try and make sense or meaning out of the experience. While exploring the experience, an individual inevitably focuses on something of central importance where there is potential for significant learning and growth.

Clarke et al (1996) discusses in detail Boyd and Fales' work on reflection which assigns six aspects to the process of reflective learning. These are: 1) a sense of inner discomfort triggered by the experience, 2) identification or clarification of the concern, 3) openness to new information, 4) resolution when an individual feels he or she has changed or learned something significant, 5) internalization of a new perspective results in a change in oneself, and 6) decision making and problem-solving.

In Boyd and Fales's framework, the notion of deliberate learning from experience has been highlighted. The element of experiential leaning is also evident in Boud et al's (1985) model of reflective process. In this model, the reflective

process is initiated when 1) the individual returns to the experience, 2) attends to feelings by recollecting what has taken place and replaying the experience, and 3) re-evaluating the experience. The process of re-evaluation involves four aspects: 1) association- relating raw data to that which is already known, 2) integration- seeking relationships among data, 3) validation- determining the authenticity of the ideas and feelings that have resulted, and 4) appropriation- making knowledge one's own. Boud et al (1985 cautions that the process of reflection do not proceed in a simple linear sequence and they are not independent of each other. There exists a continual cycling back and forth between elements.

It can be seen thus far that the process of using reflection to learn from experience is not only an active one, but it requires deliberate and thoughtful thinking. The frameworks of Dewey, Boyd and Fales, and Boud et al have a certain commonality in that reflection comes in stages, though not necessarily in a linear fashion, and that experience is central to reflection.

The meaning of reflection has also been put forward in a simpler manner by other authors. Durghaee (1996) sees reflection as a method of learning and teaching professional maturity through critical analysis of experience. Glen et al (1995) defines reflection as a process through which a professional learns from experience. To Lourghran (1994), reflection is the purposeful, deliberate perceived act of inquiry into one's thoughts through which a perceived problem is examined in order that a thoughtful , reasoned response might be tested out.

These definitions help to sum up the idea that by reflecting on an experience in a purposeful manner, a reflective practitioner is said to have turned the experience into a learning episode. The process of learning by practicing reflection can be achieved by using Boud et al's model of reflective process or Dewey's framework as discussed earlier. For a more structured approach, Johns's (1992) model offers a useful alternative.

In Johns's model of structured reflection, a series of questions are put forward with an aim to tune the practitioner into his or her experience in a structured and meaningful way (see Appendix A).The model emerges as a natural sequence through which the practitioner explores the experience in supervision. Nurse educators will find John's model a useful guide in facilitating reflective learning among students who may be lacking in practice experience. The model is also helpful for the educators who may need to practice reflection themselves in order to be able to teach the concept of reflection

2.3 Reflective practice and nurse education

There have been comments made in the nursing literature regarding the lack of clarity as to the meaning of reflection (Atkins and Murphy, 1993; Jarvis, 1996; Jones, 1995). However, this has not deterred the nursing profession from transporting the concept of reflection to nurse education. This may be due to the nature of nursing itself. As a practice-led profession, much of the nursing knowledge and skills are grounded in the practice area. Therefore in nursing, the students need to focus on practice to ensure that learning will take place (Boud et al, 1985). Otherwise, there will be no improvement in knowledge, skills, and personal and professional development.

While it is likely that student nurses become competent in their skills and learn about nursing by going through the experience in the practice area, experience alone does not necessary lead to knowledge (Lourghran, 1994).   According to Andrews (1996), an experienced and knowledgeable practitioner is not wholly dependent on the time spent on the job. A nurse with ten years working experience may have considerable less knowledge than a junior colleague. Palmer et al (1994) sums it up by saying that it is not enough just to be practicing, being there does not necessary equal learning.

Consequently, learning from practice and through reflection calls for an intense examination of an experience (Lourghran, 1994). There is no additional knowledge to gain if a practitioner just 'do the job' and do not reflect and explore further to make that particular experience more meaningful.   Lourghran adds that

through deliberately and purposefully considering the experience, thoughts and actions are reviewed in light of the rational reflection. In his now well-known longitudinal study into the development of reflective practice in a group of student-teachers, Lourghran (1994) uses Dewey's (1933) model of three attitudes and five phases of the reflective processes to encourage, monitor, and assess how the students develop their reflective skills. His study had shown that reflective practice was an effective teaching and learning tool for the teaching profession. Likewise, the nursing profession has gone the same way in reflective practice and nurse researchers are doing studies to investigate how reflection can help nurses to learn form their practice experience.

By the early 1990s, it was clear that the adoption of reflective practice within nurse education has been well accepted. This was evident in the number of books written on reflection and the amount of papers and empirical studies published in the various nursing journals. Within these nursing literature advocating reflection as a learning strategy for student nurses, a frequently mentioned topic is that of the perceived theory and practice gap in nurse education (Boud et al, 1985; Davies, 1995; Palmer et al; Reed and Procter 193; Wong et al, 1997).

Reed and Procter (1993) elaborates on how student nurses tend to see knowledge as compartmentalized; associating school with lectures and knowledge and the clinical areas with a place to gain working experience. Students face difficulties in applying theory in the practical situation as the busy clinical environment differs widely from the classroom or skill laboratory in the nursing school. In reflective practice, nurse educators see a useful method which can help to bridge the theory-practice gap. Away from the busy ward, the clinical educator can help the student to recall her experience through reflection-on-action. The student's experience is 'taken apart' and through reflective dialogue with the teacher, the student's experience is turned into a learning episode.

Stark (1994), on the other hand, sees the potential of reflective practice in self-directed learning (cited by Riley-Doucet & Wilson, 1997). According to Stark, nurses are adult learners who are independent beings and have developed their self-concept based on the accumulation of life's experiences. Reflective practice can offer self-directed learners an effective mean to increase personal and professional development. Just like their medical counterparts, practice nurses need to keep abreast with the ever changing healthcare system. By practicing reflection in their daily work, these nurses can look forward to continuous self-education.

While there are nurse educators who accept reflective practice as a useful tool which can help to narrow the theory-practice gap or to enhance self-directed learning, others are doubtful about its capability. Newell (1994) equates reflection as pseudo-science and Burnard (1995) comments on the considerable amount of rhetoric surrounding reflection. What is needed is much more empirical evidence to either shore up the concept of reflection or to ensure the useful parts of reflection and its processes are extrapolated and taken forward into new educational practices (Burnard, 1995).

Despite some of these adverse comments about reflection, it is still evident in the literature that nurse educators and researchers continue to write about the many advantages of reflective practice. Other commonly discussed topics include reflective activities to improve reflective skills, preparation and skills needed for reflective practice and the assessment of reflection.

2.4 Reflective activities

There are two reflective activities which can be used to engage student nurses and registered nurses in their reflection on learning. These are reflective diary or reflective journal and clinical debriefing. Schon (1997) suggests that writing about experiences in the form of a diary is a useful way of studying reflection because it may enable professionals to make explicit the knowledge that is implicit in their actions.

According to Burrows (1993), keeping a reflective diary is an effective way to enable student to reflect on their learning experiences in order to analyse the way they learn and to record 'discoveries' in clinical practice. The diaries can also reflect both personal and professional issues which students find stimulating, challenging, troublesome or puzzling (Reed & Procter, 1993). The idea here is to 'talk' about the experience by reflecting on issues surrounding the event by recording in the diary about one's personal feelings or professional comments and even arguments. As suggested by Richardson, the diary should be viewed as a tool which enables the student to engage in an ongoing dialogue with themselves or with the instructor in an informal basis. Alternatively, Johns's (1993) structured model of reflection (Appendix A) can also be used as a guide to work through the reflective process during diary writing.

The other reflective activity of clinical debriefing is essentially a learning activity that is rather unique in nurse education. It is usually organised toward the end of each clinical day whereby the teacher will work through ideas, issues, feelings or concerns generated by the student. Boud et al (1985) calls this 'turning experience into learning'. The process of clinical debriefing involves analysis of the clinical experiences, structuring reflection and deriving meaning from the experience.

With reflective dairy and clinical debriefing being considered as useful tools in developing student's reflective skills, studies have been done to examine the effects of these two learning activities. In a study by Davies (1995) to determine the effect of reflection on students' clinical practice experience, results indicated that the use of reflective processes of clinical debriefing and reflective journaling did impact on the environment, the process and the focus of learning. Students stated that both activities had helped to increase their knowledge and improve their problem-solving skills. While the debriefing sessions had helped to reduce anxiety in the clinical areas, these sessions also assisted in enhancing the students' interpersonal skills.

Where studies on reflective diaries are concerned, positive findings have been
rted. In Richardson's (1995) study involving a group of second year student
es, reflective diaries were reported to have facilitated reflective learning.
vever, some students in the study commented on their inability to describe
ings in diaries due to concern over 'being assessed'. One of Richardson's aim in
study was to assess the level and extent of reflection from students' reflective
ies.

In another study carried out by Durgahee (1996), one hundred and ten nurses
e surveyed after one year of reflective practice. Results indicated that majority of
students found reflective diaries helpful in motivating them to think about their
ctice; making them alert of client's needs.

In addition to Richardson (1995) and Durgahee (1996), there are other nurse
ters who speak favorably on the activities of reflective diary and clinical
riefing as useful teaching and learning strategies in improving nurses' reflective
lls (Edwards, 1996; Johns, 1994; Paterson, 1994). These writers stress on the
portance of learning and understanding the concept and process of reflection in
ler to practice meaningful reflection. Effective learning from reflective practice
ll not occur if reflective diaries contain only descriptive narratives and clinical
briefing sessions are not guided by experienced facilitators. In order to become
ective practitioners of reflection, additional preparation and skills are needed by
th the teachers and students.

5 Reflective practice: preparation and skills

urse educators and researchers familiar with the concept of reflection are aware of
e difficulties encountered in trying to teach students the process of reflection.
almer et al (1994) points out that reflection is profoundly difficult to achieve without
uidance and support. In Snowballs et al (1994) study which examined the potential
f reflection as a learning tool during dissertation supervision, difficulties were
ncountered in establishing and using reflection with their students. The study also
ported the need for a constructive support while each of the researchers engaged in
ie process of reflection. The difficulties mentioned here applied equally to reflective

sessions between researcher and her individual student as well as among the researchers. It can be seen here how supportive environment are needed by not just the students but the teachers as well.

In terms of guidance and support for students during reflective practice sessions, nurse educators facilitating the sessions have an important role to play. Andrews (1996) suggests that reflection with an experienced and committed supervisor will enhance the reflective process and help to legitimize reflection as an important learning activity in the clinical setting. Using a case study approach, Johns (1993) used reflection and supervision to observe and examine how the skills associated with primary nursing could be learned. An important finding of the study was the realization of a need for supervisors to be experienced in the process of supervision and reflection.

In another study by Getliffe (1996), one of the aim was to identify student's and teacher's preparation required for reflection. The six undergraduate students reported that while knowledgeable and experienced facilitators were important, a relaxed and supportive atmosphere was also necessary for reflective practice. Similarly, the importance of a conducive environment was highlighted by Bailey (1993) who insisted that a busy, stressful and impersonal clinical surrounding can inhibit the development of student's reflective practice. In addition, Snowball's (1994) study indicated that a sense of partnership between teacher and student will further boost a relaxed atmosphere.

Earlier in the chapter, Dewey's (1933) three attitudes of open-mindedness, responsibility and whole-heartedness had been mentioned as pre-requisites for reflection. Other skills were also mentioned by Atkins and Murphy (1993) in their literature review on reflective practice. These skills were identified as self-awareness, description, critical analysis, synthesis and evaluation. In exploring teaching and learning strategies to maximize reflective learning in a study, Wong et al (1997) reported on the three attributes important to reflective learning. These are willingness, commitment and open-mindedness. The study also found that journal writing and reflective dialogue complemented each other in facilitating student reflection.

The question of having formal training in reflective practice was brought up by Durgahee (1996). The suggestion was to have educators undergoing formal training in the art and skill of reflection. Other preparations for reflection include the use of guidelines and frameworks on reflective sessions and reflective diary writing (Burrows, 1995). While guidelines can be drawn up by individual teacher to suit local conditions, the reflective frameworks of Dewey's or Johns' model will prove to be helpful.

2.6 Assessment of reflection

Empirical study on the assessment of the level and extent of a student's reflectivity is rather limited in the nursing literature. This literature review will look at two notable studies which have also been included in the sample for this current meta-analysis. The review is kept brief in order to avoid repetitions in later chapter of this study.

Powell's six levels of reflectivity was used to analyze students' reflection from their reflective diaries in Richardson and Maltby 's (1995) study. The study involved a random selection of thirty diaries which were analyzed according to Powell's instrument. Results of the study showed the scores heavily weighted towards the lower levels of reflectivity. The scores were 31% at level 1; 28% at level 2; and 30% at level 3. At the higher level, results showed 1% at level 4; 2% at level 5 and 3% at level 6. Information on Powell's instrument was lacking in the study reported by Richardson and Maltby. It was mentioned that scores were given based on the number of textual elements being allocated to each reflection level. The study concluded by saying that the lower scores at the higher level of reflectivity had implication for nurse educators. On the question of reliability of assigning reflective scores to the students diaries, inter-rater reliability was established by the exchange of analyzed diaries between the researchers.

In another study, Wong et al (1995) attempted to develop a procedure for assessing the level of reflection from students' written papers. The coding system was developed based on Boud et al's (1995) and Mezirow"s (1991) reflective model. Findings suggested that while the student writing can be used as evidence for the presence or absence of reflective thinking, the process of allocating students to the

three categories of non-reflectors, reflectors and critical reflectors was reliable. Results in Wong et al's study showed 13.3% of students as non-reflectors, 75,6% as reflectors and 11.1% as critical reflectors. As in Richardson and Maltby's (1995) study, fewer students in Wong et al's study scored at the highest level of critical reflection.

Review of these two studies on the assessment of students' reflectivity indicated the challenge lying ahead for more empirical work to be done by the nurse profession. A reliable and valid tool to measure reflection is needed if nurse educators are serious about using reflection as a learning method to teach students in the clinical areas. In the absence of such an assessment tool, it will not be appropriate to consider reflective practice as a formal theory of learning

2.7 Summary of literature review

In this literature review, various significant aspects on the concept of reflection and reflective practice have been discussed and the pathway leading reflective practice to nurse education has been traced. The nursing enthusiasm in embracing the concept in the 1990s can be likened to 'jumping on the wagon'. Since then, many nurses have published papers and studies done in the areas of reflection and reflective practice. The review of literature has indicated the acceptance of reflective practice as an effective learning strategy for students during their clinical postings.

The writing of reflective diaries and clinical debriefing have been touted as important reflective activities capable of developing reflective skills in the students. Most studies reported positive findings on the effects of reflective practice on enhancing learning and professional development. Included in the literature are studies explaining the necessary preparation and skills required by teachers and students for reflective practice.

With so much attention focused on reflective practice playing a significant role in nurse education, especially in clinical education, there is an obvious need for nurses to do more studies in this area. It is believed that a meta-analysis of reflective practice is timely and will add knowledge and understanding on this seemingly powerful concept of reflection. The current meta-analysis study will present findings on the analysis of fifteen research articles on reflective practice.