# **UNIVERSITY OF KWAZULU-NATAL**

# HOW NURSE EDUCATORS PROMOTE REFLECTIVE THINKING IN A COLLEGE OF NURSING IN KWAZULU-NATAL

MANIYA NAIDOO (2007)

# HOW NURSE EDUCATORS PROMOTE REFLECTIVE THINKING IN A COLLEGE OF NURSING IN KWAZULU-NATAL

A dissertation submitted to the Department of Nursing at the University of KwaZulu-Natal in partial fulfillment of the requirements for the degree of Masters in Nursing Education

#### BY

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**DECLARATION** 

I DECLARE THAT THIS IS MY OWN UNAIDED

WORK. IT IS BEING SUBMITTED FOR THE

**DEGREE OF MASTERS IN NURSING EDUCATION** 

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DURBAN, IT HAS NOT BEEN SUBMITTED FOR

ANY OTHER PURPOSE. ALL SOURCES HAVE

BEEN ACKNOWLEDGED BY MEANS OF

REFERENCING.

**MANIYA NAIDOO** 

**DATE: MARCH 2007** 

I

# **DEDICATION**

THIS DISSERTATION IS DEDICATED TO MY HUSBAND SELVA, MY DAUGHTERS DROBASHNI AND YASHIKA AND SONS-IN-LAW ANAND AND WESLEY FOR ALL THEIR LOVE, ENCOURAGEMENT AND SUPPORT.

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Lastly, to my late DAD, who instilled in me that education was the key to success and my late sister LEE who prayed for my success and encouraged me throughout

## **ABSTRACT**

There is a great deal of literature and a number of research studies that have been carried out on reflective practice, models and frameworks of reflection and teaching strategies that successfully promote reflective thinking. This study addresses the need to adopt teaching – learning approaches in nursing education that develop a link between theory and practice in a meaningful way. Reflective thinking is one such approach which is gaining popularity. Reflection is claimed as a goal in many teacher education programmes but the application of reflective teaching strategies has been problematic.

This study was aimed at exploring how nurse educators of the Nursing Colleges in KwaZulu-Natal promoted reflective thinking in their teaching. Three of the four Nursing Colleges chosen for data collection were from the greater Durban Metropolitan area because of the accessibility of the participants. There were seventy-two participants in the study.

A quantitative design was used, followed by statistical analysis of the data. Data was collected by means of a questionnaire which included structured and semi-structured questions.

What emerged in this study is the need for Nurse Educators to take cogniscance of determining appropriate teaching strategies that would develop reflective thinking skills amongst learners. However, the findings indicate that most Nurse Educators do utilize teaching strategies that promote reflective thinking, but a large percentage still use the lecture method as the primary teaching strategy.

There is a need to move away from the traditional teaching methods of allowing learners to be 'spoon-fed' and become critical thinkers and reflective practitioners.

Nurse Educators expressed the need for workshops, symposiums and inservice training that would assist them in developing specific skills to become reflective teachers. Some pointed out there should be support from management in respect of allocating more time to teaching periods and reducing the number of learners in a group so that reflective teaching approaches can be applied.

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## **CHAPTER 1**

#### 1. INTRODUCTION

#### 1.1 BACKGROUND TO THE STUDY

Reflective practice is a widely cited term in the literature of teaching and learning in higher education. Currently, the process of reflection as a learning tool is becoming increasingly prominent in nursing education. Some of the reasons for this rise in interest may be attributed to the changes that have taken place over the last decade, both within the nursing profession itself and within nurse education. There is greater emphasis on relevance of education to the needs and production of graduates who are in possession of transferable core skills required in practice (Atkins and Murphy, 1993).

Reflective practice is an approach to learning and practice development which is patient-centred and which acknowledges the untidiness and confusion of the practice environment.

Reflective practice involves thinking about and learning from one's own practice and from the practices of others so as to gain new perspectives on dilemmas and contradictions inherent in one's educational situation. It improves judgement and increases the probability of taking informed action when situations are complex, unique and uncertain (Burns and Bulman (2000). According to Burnard (1991) reflection has its roots in experiential learning and in the work of John (1997), as an important aspect of helping students to learn about and from clinical

experience. The effectiveness of reflection as a learning tool has been explored by educationalists, drawing on the work of Dewey (1933), Cowan (1997) and Gibbs (1988) to use reflection as component of learning through experience and helping students to integrate the theory and practice. As suggested by its name, experiential learning theory emphasises the central role that experience plays in learning. Experiential learning theory (Dewey 1933; Kolb, 1984) espouses the view that ideas are constructed and reconstructed through experience, rather than existing as fixed and unchangeable patterns of thought. True learning in experiential terms occurs only through reflecting upon experiences, according to Dewey (1933).

Reflective thinking and practice is often seen as representing a choice for practitioners to be reflective or not about their clinical practice, but in reality all practitioners engage in reflection about their professional work (Bright, 1995). Reflection is a process that allows practitioners to uncover and expose thoughts, feelings and behaviours that are present in a period of time. Hull and Redfern (1996) assert that by understanding more about practice through reflection and examining why certain interventions are used, and in what situations practitioners can extend their personal and professional knowledge making the process of reflection more than just simply thinking about practice.

Authors such as Driscoll, (2000); Smith and Hatton, (1992); and Merryfield, (1993), indicate that teaching strategies claimed to promote reflection include:

- action research projects and work-based learning projects,
- critical incidents,

- role-plays,
- reflective diaries,
- portfolios,
- case studies and case presentations by students,
- supervised practicum experiences,
- use of structured and answers in class instead of the traditional lecture method,
- group discussions,
- narratives and bibliographies where teachers or group members relate their stories
   through problem framing and analysing those stories grounding the analysis process on
   scientific literature and ethical dilemmas.

Cotton (2001) states that in nursing literature, reflection and reflective practice is extolled as being good for nursing and nurses because these methods enhance professional development, link theory and practice. According to Schon (1987), Conway (1994), Lauder (1994) these methods also promote critical thinking (Habermann,1986), lead to self-awareness and understanding (Scanlan and Chernomas,1997), empower practitioners (Carr and Kemmis, 1986), promote personal, social and political emancipation (Smyth, 1991) and potentially contribute to learning and enhanced patient care (Greenwood, 1993). Nurses are faced with problems which are more complex than mere facts in textbooks (Schon, 1983). The problems they encounter do not simply require textbook principles and solutions to a given problem, but each problem should be viewed as unique and therefore needs to be solved by innovative and creative actions. As a result, nurses should be developed as early as possible to be able to deal with problems of a complex nature. Reflective practice is one strategy that could be used to encourage learners to view each problem differently.

The concept of reflection in the context of nursing practice has increasingly drawn attention in nursing and nurse education. In relation to the perceived 'theory- practice gap' (Millar, 1991), the potential for reflection to function as a learning tool and strategy to facilitate integration of theory and practice has been described in literature (Clarke, 1986, Conway, 1994, Schon, 1987). Various authors (Schon, 1987, Atkins & Murphy, 1993) have referred to reflective learning in the clinical field as a key tool for the development of competent practitioners.

The idea of reflective practice has been used extensively to promote the process of professional development (Schon, 1983), and the articulation of the relationship between theory and practice, both pivotal aspects in the education and preparation nurses. While the desirability of nurses being reflective practitioners is truly supported in literature (Powell 1989, Garratt 1992, Stein and Owens, 1991), the teaching and assessment of nurses in this area of reflective practice is poorly understood, documented and actioned, (James and Clarke, 1994) commented on the complex nature of reflection and stated that teaching students the art of reflection is a difficult and challenging task. Other authors (Boud, Keough and Walker 1995; Stein and Owens; 1991) have offered models for teaching/learning and curriculum development to support reflective practice, but again failed to address specific issues of teaching and assessment strategies. Schon (1983), whose conceptualization of reflection for professional practice has been widely adopted, offered little practical guidance for the development of teaching strategies.

#### 1.2 RATIONALE FOR THE STUDY

Nurses play an important role in the promotion of health care to their patients. The quality of care is dependent on the ability of the nurse to make the right choices and decisions. From the researcher's experience as a Nurse Educator, it has been noted that student and pupil nurses in training are accustomed to the presence of the teacher in class, who provide the theoretical component of the curriculum by use of traditional teaching strategies. Application of this knowledge is monitored and evaluated in the clinical area but the process is somehow disjointed. Nurses have become very routine - conscious, in the sense that duties are completed as allocated. Little or no attention is paid to promote reflective thinking amongst nurses. The need for reflective practice is not questioned, however the implementation of innovative teaching programmes for undergraduate students is an identified need (Report of the National Review of Nursing Education in Higher Education Sector 1994, p.17).

The focus of this study is to determine how Nurse Educators in the KwaZulu-Natal College of Nursing's four campuses promote reflective thinking skills.

#### 1.3 PROBLEM STATEMENT

According to Stoddard (2002) reflective thinking has become a popular term. Literature however shows that in nursing, various definitions of reflection and reflective practice abound. Indeed, John (2000, p. 2) states: "It seems an academic pastime to try and define exactly what it [reflective practice] is". A concern is however raised about the various definitions as they reveal differing theoretical orientations. Mackintosh (1998) asserts that definitions that reveal differing theoretical orientations about reflection have resulted in confusion about its meaning,

its promotion and uses. Taylor (1998) defines reflective practice as "the systematic and thoughtful means by which practitioners can make sense of their practice as they go about their daily work". Lack of a common definition has also lead to the interchangeable use of the terms reflection and critical reflection that may "tacitly believe the different ideologies which can underpin reflective practice" (Ecclestone, 1996, p.150).

According to Jarvis (1992), the occupational structures within which much nursing, teaching and other professions are conducted today seem to preclude the opportunity of reflective practice. Nursing is therefore faced with the dilemma. It wants to encourage reflective practice, and even to claim that it has, but like some other professions, the structures within which it is conducted seems to inhibit regular reflection in practice. Reflective practice requires that teachers intentionally engage the students in a dialogue, modelling the process, and thereby making reflective practice accessible to learners who become more conscious of their learning and promote critically reflective learning (Ramsamy, 2002).

The study by Brockbank and McGill (1998) revealed some concerns about the nature of the educators expected to promote reflective practice because most of them have been socialized using a depository method of teaching. They have not been trained/taught on how to promote reflective thinking and practice among students. They are not familiar with teaching strategies promoting reflective practices.

However, little is known, about how these reflexive practice activities are associated with nursing students' learning processes as they progress from novices to competent generalists,

and then to experts in nursing care. Specifically, little is known about how nursing students in their first years of study evaluate their own learning of the competencies that demonstrate their understanding and application of course content, and how this self-evaluation relates to their success in each course and in their academic programme (Atkins and Murphy, 1993; Boud and Walker, 1998).

Critical reflection is viewed by some educators as a learning strategy that can be taught using tools such as diaries (Heath, 1998; Orem, 1997), action groups (Williamson, 1997), autobiographic stories (Brookfield, 1993), and sketching (Willis, 1999). However, some educators question the usefulness of classroom teaching.

Study conducted by Lee and Sabatino (1998) revealed that reflection skills used in the classroom did not correlate with performance during field projects. There was no significant correlation between the use of guided reflection and the learners' application of the content. However, attitudes toward reflection were positive. Learners indicated that reflective practices help to connect prior experience to new content. The conclusion was that perhaps critical reflection skills learnt in a classroom are different from the skills needed in everyday life. Perhaps the value of classroom teaching is to move learners from one orientation to another in a developmental sequence

Moreover, according to Ramsamy (2002) reflective dialogue often takes a back seat when the overriding concern is to complete tasks and assignments, regardless of whether these entailed reflective thinking and learning. This author also adds that this challenge is further

compounded when lecturers deal with learners who are low performing students especially because of language problems. According to Ramsamy (2002) language competency is an essential requirement to engage learners meaningfully in reflective learning. When educators have to struggle with language inadequacy and at the same time face the pressure of completing the course content, the question is how one engages the learners in reflective thinking and learning. How does one ensure that the task intended to promote reflection and critical thinking such as journal, peer-discussion and learning about learning strategies are not perceived as a 'burden' by learners. One needs therefore to ask how nursing can introduce the structures which encourage reflective practice, Smith and Hatton (1995) in studying reflection in teacher education summarized barriers which hindered the achievement of reflective approaches to teaching. Those included existing preconceptions which allowed teachers to develop reflective capacities, their possible responses to being required to undertake reflection and the structural ideological programme milieu within which various kinds of reflection are being encouraged.

Exploring the promotion of reflective practice in nursing education is crucial because literature portrays this as a challenge that needs to be addressed by educators through conscious effort. Without it learning will degenerate into mere 'transmission learning' rather than 'transformational learning' that occurs when learner's existing assumptions about understanding, self and the world are challenged as stated in Brochbank and Mcgill cited in Ramsamy (2002). A review of the literature on reflective thinking, as stated in Stoddard (2002) suggests that there is no consensus on how to best promote reflective thinking in education

programmes. The only thing agreed upon is that reflective thinking is a complex topic, and deserves further discussion and examination.

According to Clift, Houston and Pugach, cited in Storddard (2002), there is no consensus regarding definition, concepts, or ways of encouraging reflective thinking. Ross (1989) gives the example of the University of Florida which has been struggling with problems such as defining the nature of reflection, identifying strategies for fostering reflection in students, and assessing the impact of such an approach. In line with these concerns, this study intended to explore and describe how nurse educators in a college in KwaZulu-Natal would be able to promote reflective thinking.

#### 1.4 PURPOSE OF THE STUDY

The purpose of the study was to explore and describe how reflective thinking is promoted by nurse educators in a college in KwaZulu-Natal.

#### 1.5 RESEARCH OBJECTIVES

- 1. To identify teaching strategies used by nurse educators to promote reflective practice.
- 2. To analyse the characteristics of the strategies used to promote reflective practice.
- 3. To identify factors that facilitates the promotion of reflective practice in nursing education.
- 4. To identify factors that hinders the promotion of reflective practice in nursing education.
- 5. To determine how the conditions that encourage promotion of reflective thinking in nursing education could be improved.

#### 1.6 RESEARCH QUESTION

The research was guided by this question:

How is reflective thinking promoted by nurse educators in nursing education programmes in a nursing college in KwaZulu-Natal?

#### 1. 7 SIGNIFICANCE OF THE STUDY

Although clinical teaching and clinical accompaniment are strategies that are used to monitor the correlation of theory and practice in nursing, very little is known about the application of reflective thinking in nursing practice. The promotion of reflective thinking and the application of reflective practice has been studied extensively by researchers worldwide The importance of this study lies in the fact the findings might allow for practitioners to become aware of the importance of critical reflection and to develop strategies to include these both in classroom and clinical settings. Nurse practitioners need to be mindful of their practice as they relate to dealing with people who have feelings and emotions, so that they would be sensitive of the care delivered. The study will also seek to address the issue of improving the quality of nurse education which will impact on the quality of nursing care provided.

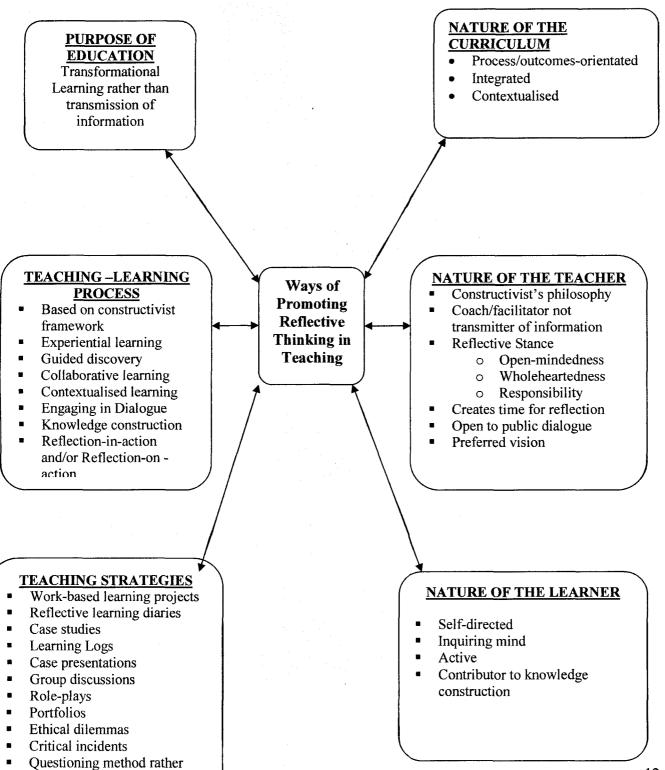
Reflection as a tool for developing practical knowledge and skills is well documented within the educational field (Bengtsson, 1994). Reflection can be seen as a way to take a step back and think about a situation and one's self to gain a new perspective on a situation (Molander, 1993). With reflective thinking, professionals can construct meaning and knowledge that guide their actions and emotions in practice. Francis (1994) argues that too little support is provided for professionals to help then make observations, think situations through and reconstruct

thinking and acting (Granqvist, 1999-2000). The present South African Nursing Council curriculum dictates the outcomes to be achieved in respect of a competent practitioner but does not specify how this should be achieved. The findings in this study may serve as baseline for future research.

#### 1.8 CONCEPTUAL FRAMEWORK

The following conceptual framework was used to guide this study. This framework is based on reviewed literature. The main concepts were derived from the framework, which is used when analysing educational theories and philosophies as stated in Tanner and Tanner (1995). Figure 1 below, shows variables that will be considered when collecting data.

#### FIGURE 1: CONCEPTUAL FRAMEWORK



than giving information

#### 1. 8.1 PURPOSE OF EDUCATION

In a programme that promotes reflective learning and reflective thinking, the purpose of education is to transform the learner personally, academically and professionally. Therefore, this would be considered as transformational learning, whereas in traditional nursing education the purpose of education is to transmit information (Billet, 1996).

There is evidence that nurses require time to reflect (James and Clarke, 1994; Scanlan, 1995) and also require training in reflection. Lack of training is clearly responsible for the nurse educator's lack of knowledge and skills on both how to reflect and how to assist students to reflect (Atkins and Williams 1996; Haddock, 1997).

#### 1.8.2 TEACHING / LEARNING PROCESS

A programme, which promotes reflective learning and reflective teaching, is based on Constructivism. Constructivism is a theory of knowledge with its roots in philosophy, psychology and cybernetics. The theory of constructivism rests on the notion that there is an innate human drive to make series of the world. Instead of absorbing or passively receiving objective knowledge that is 'out there', knowledge is gained by integrating new experiences into what they have previously come to understand, revising and reinterpreting old knowledge in order to reconcile it with the new (Billet, 1996).

The process works most effectively when it is embedded in a context in which new knowledge and skills will be used. Using the constructivist approach, teachers facilitate learning by

encouraging active inquiry, guiding learners to question their tacit assumptions and coaching them in a constructive process. This contrasts with the traditional approach that has dominated education, in which the teacher disseminates selected knowledge, and the learners as being passive recipient in the teaching/learning process.

Another feature of the teaching learning process in constructivism is that there is collaborative learning amongst learners and dialogue between teacher and learners. What happens in the classroom is more than what is planned by the teacher, suggested by the materials, or outlined in the curriculum guide. Rather, classroom events are constructed by the joint contributions of teacher and students. This idea implies, as Freire (1972) suggested, moving from a 'banking' mode of teaching to a 'problem-posing' mode, drawing on experiences and knowledge developed both in and out of schools. In Freire's (1970) Critical Pedagogy, emphasis is placed on problem posing and dialogue that is designed to promote reflection.

According to Duckworth (1987) reflective thinking can only occur when both teachers and students engage in dialogue to enhance understanding and break down any walls that might separate them. This dialogue emancipates students to experience higher levels of learning and consciousness. They learn to reflect on their experiences. Therefore, the formulation of cooperative learning groups focused on meaning construction activities is an integral part of the teacher's preparation programme. Such activities provide a type of cognitive apprenticeship in which students have multiple opportunities to observe and reflect upon the work they are expected to do. It is well known that even experienced teachers learn by watching each other teach (Cochran-Smith, 1995).

#### 1.8.3 TEACHING / LEARNING STRATEGIES

Literature revealed that strategies used to promote reflective thinking during the teaching/
learning process include case studies and case presentations by students, supervised practicum
experiences, structured curriculum tasks, use of questions and answers in class rather than
lectures, group discussions, action research project and work-based learning projects, critical
incidents, role plays, reflective diaries, portfolios, narratives and biographies where teachers or
group members tell their stories through problem framing and analysing those stories
grounding the analysis process on scientific literature and use of ethical dilemmas (Cyprus,
2004, p.2).

#### 1. 8.4 THE NATURE OF THE CURRICULUM

A curriculum that allows the promotion of reflective thinking is process and outcomes oriented. The process of learning is as important as the outcome of learning. It balances the coverage of relevant content and the development of life skills such as problem solving skills, critical thinking skills, communication skills, teamwork skills, cultural or diversity sensitivity etc. The curriculum that promotes reflective thinking is integrated, subjects are not compartmentalised and it is founded on context. The health issues and problems of the population informs the curriculum.

#### 1.8.5 THE NATURE OF THE TEACHER

In reflective teaching, the teacher deliberately helps students move towards self regulated learning by:

- a) scaffolding,
- b) modelling strategic thinking and meta-cognitive strategies,
- c) modelling or identifying alternative solutions or viewpoints.

The teacher also probes the students' understanding and encourages conceptual growth and change by presenting experiences or information inconsistent with the students' implicit beliefs. The teacher grounds learning in concrete experiences and supports the students' construction of abstract concepts with models when direct experience is not possible Educators who adhere to this philosophical approach to learners and learning believe that thought and experience are inseparable from the context in which they occur (Roth, Anderson, and Smith, 1987; Scardamalia and Bereiter, 1989).

According to Dewey (1933), for a teacher to develop a reflective stance he/she must have three attitudes: open mindedness, wholeheartedness and responsibility. Open mindedness refers to the ability to suspend judgement and be open to new possibilities. Suspended judgement is the ability to resist the temptation to jump to conclusions prematurely, to carefully weigh both the evidence provided by the learners and consequences of ones' own actions, before making instructional decisions. The teacher must never accept suggestions or solutions uncritically, and must always suspend judgement during the period of inquiry and reflection. Wholeheartedness is the capacity to enter into a teaching event with all of one's heart and attention.

Responsibility on the other hand refers to the moral and ethical implications inherent in the educational process.

According to Jones (1990) teachers, in promoting reflective teaching in learners, need to develop proficiency at inquiry, related to understanding students, and ways to encourage dialogue between themselves and students. Constructivist teachers do not regard teaching as merely transferring knowledge to students. They believe their task is to help learners acquire the skills and dispositions needed to carry out the work of learning. The reflective stance is developed within teachers' classroom practice and with support from colleagues.

#### 1.8.6 THE NATURE OF THE LEARNER

In reflective learning, the prescribed characteristic requires the learner to be self-directed, have an inquiring mind, participate actively and be able to contribute to the construction of knowledge. In contrast to the traditional view of learning as a solitary process, constructivist teachers recognise the important role that peers can play in the learning process by sharing responsibilities for learning through group activities and projects.

#### 1.9 OVERVIEW OF THE METHODOLOGY

A quantitative research design was used in this study and questionnaires were used to collect data. The questionnaire included structured and semi-structured questions. Data was analysed using the SPSS program.

#### 1. 10 <u>DISSEMINATION OF FINDINGS</u>

The findings of this study will be published as a dissertation which is a requirement towards the fulfillment towards the Masters Degree. Copies of this book will be distributed to the libraries at the University of KwaZulu-Natal and the R.K. Khan Campus.

#### 1. 11 OPERATIONAL DEFINITIONS

#### **Promoting**

Promoting suggests more than just acting as facilitators. It suggests that nurse educators take an active role in developing, establishing and advocating for a type of learning that is described as reflective

#### Reflection

Reflection is a process within which the practitioner can think about and achieve a better knowledge of their practice. It is one key way in which professionals can think about and develop their own practice (Schon, 1983).

#### Reflective Thinking

Reflective thinking in the context of this study relates to the practitioner 'taking a step back' and thinking about the intervention /action that has been undertaken and learn from their mistakes so as to improve future practices. Is a process within which the practitioners can think about and achieve a better knowledge of their practice (Schon, 1983).

#### Reflection - In - Action

Reflection-in-action occurs when the person reflects on behaviour as it happens, so as to optimise his or her immediate actions. According to Schon (1988), Knowing-in-action is the sort of knowledge that professionals come to depend on to perform their work spontaneously when confronted by an unexpected outcome or surprise. In simple terms it means 'thinking on your feet' (Schon, 1983). .

#### Reflection - On - Action

Reflection-on-action involves thinking about and reviewing an area of practice after the event, allowing the practitioner to review, describe, analyse, and evaluate the situation, so as to gain insights for improved practice in the future. It can be viewed as a retrospective activity, looking back and evaluating current skills, competencies, knowledge and professional practice (Schon, 1983).

#### **Nurse Educators / Tutors**

In this study context, nurse educators /tutors will be used interchangeably and the terms refer to those practitioners who have undergone training as Nurse Educators according to R118 of 1/87 and are certified as such with the South African Nursing Council.

#### **Education Programmes**

The nursing education programmes included in this study were as follows:-

- The 4 year Integrated Nursing Programme leading to the Diploma in General
   Nursing, Community Nursing Science, Psychiatric Nursing Science and Midwifery.
- 2 year Bridging Programme of Enrolled Nurses
- Post Basic Programmes ie. Advanced Midwifery; Ophthalmic Nursing; Intensive
   Nursing and Theatre Technique

#### 1.12 CONCLUSION

In this chapter, the background to the study and the meaning of reflective practice and experiential learning was explained. The problem statements, the purpose for the study and the

research objectives were identified. The researcher explained the rationale for /and the significance of the study and the benefits it may have for the nursing profession and ultimately for the recipient of care.

# **CHAPTER 2**

#### 2. LITERATURE STUDY

#### 2.1 INTRODUCTION

This chapter presents reviewed literature, including the theoretical basis of reflective thinking and previous research studies on reflective thinking in nursing practice.

#### 2. 2 ORIGINS OF REFLECTIVE PRACTICE

To begin to explain the origins of reflection one needs to understand the concept 'Experiential Learning'. Experiential learning is an approach that has grown in popularity over the past twenty years. This type of activity learning occurs when students participate in some activity, reflect upon the activity, use their analytical skills to derive some useful insight from the experience, and then incorporate their new understandings into their daily lives. What experiential learning does best is to capture the interest and involvement of the participants, but most importantly it contributes significantly to the transfer of learning (Burnard, 1999).

"Tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand" (Confucius circa 450 BC). Experiential learning is a cyclic process that capitalises on the participants experiences for acquisition of knowledge. This process involves setting goals, thinking, planning, experimentation, reflection, observation, and review. By engaging in these activities, learners construct meaning in a way unique to themselves incorporating the

cognitive, emotional, and physical aspects of learning (Oxendine, C., Robinson, J.A., William, G., 2004).

One of the key ideas and features of all aspects of learning from experience is that of reflection. Reflection as a (Deweyan) concept has been brought to our attention by Donald Schon (1983, 1987, and 1991). Dewey (1933) expressed an early view that 'while we cannot learn or be taught to think, we do have to learn how to think well, especially since thinking acquires the general habit of reflecting. 'Since Dewey's time many writers in the field have emphasised the importance of reflection: Kolb (1984) drew attention to the role of reflection in Lewin's experiential learning cycle, Schon (1983, 1987) introduced the concept of reflective practitioner into current discourse and many others have taken the idea of reflection and explored it in the context of theory and practice in experiential learning (Boud, D. and Walker, D., 1990).

"Meaning making, according to constructivists, is the goal of the learning process; it requires articulation and reflection on what we know" (Jonassen, et al, 1994, p.31). Individual reflection is an important strategy that may enhance the development of insight, heighten cognitive awareness, promote critical thinking, and engender personal transformation (Andrusyszn and Davie, 1995).

Schon (1983, 1987) clearly writes about reflection as being ultimately bound up with action.

He states that professionals should learn to frame and reframe the often complex and ambiguous problems they are facing, test out various interpretations, then modify their actions.

He talks about "Reflection-in-action" and Reflection-on-action which involves making reasoned judgements about preferable ways to act, but the latter implies conscious modification while on the job.

Reflection is often overlooked by educators, who assume it is taking place (Boud et al, 1985). Yet, the opposite is often true (Candy et al, 1985). Many learners are not aware of the way(s) in which they reflect and the way(s) in which they may actively engage in the process. "most students are almost totally unaware of how they attribute meaning to the things they encounter in lectures, laboratories, libraries, seminars, work-placements and elsewhere" (Candy et al, 1985, p.101).

# 2.3 MODELS OF REFLECTION

There has been a great deal of literature written on the theoretical discussions of reflective practice and a large number of frameworks and models exist which describe the stages of the process of learning from reflection. To a greater or lesser extent these models or framework and theoretical accounts suggest the actual methods which can be used to facilitate learning through reflection (Platzer et al, 1997).

Reflective models are based on the premise that intentionally reflecting, or learning about clinical practice, will lead to a better understanding and awareness, thereby enhancing clinical practice. All of the models reviewed (Boud et al, 1994) are cyclic, and involve returning to an experience, describing it and attending to thoughts and feelings before going on to the later

stages of reflection, where constructive feedback may enable the practitioner to learn from experience (Platzer et al, 1997).

A model of reflection may help to guide and stimulate reflective practice and arguably not constrain the range and potential complexity of reflection. There are many models of reflection available. These can be seen as potential frameworks to structure the reflective activity, which may be helpful. It is not necessarily ideal to feel the need to use one, but they should be seen as potential options. The practitioner may rather decide that they do not want to work within a published or established model of reflection and they may alternatively wish to construct their own (John, 1994).

## 2.3.1 DEWEY'S MODEL OF EXPERIENTIAL LEARNING

In his model of experiential learning process, John Dewey emphasises the developmental nature of learning that transforms the impulses, feelings and desires of concrete experience into higher - order purposeful action. The formation of a purpose is a rather complex intellectual operation which involves the following:

- Observations of surrounding conditions
- Knowledge of what has happened in similar situations in the past, a knowledge
  obtained partly by recollection and partly from the information, advice, and warning of
  those who have had a wider experience and
- Judgement, which puts together what is observed and what is recalled to see what they signify (Dewey, 1938, p.69).

Dewey worked as an educationalist and developed his concept of reflective practice and reflection through experiential theories. He concluded in his work that the experiences the individual lives through can be described as a dynamic continuum- and that each experience influences the quality of future experiences.

Dewey (1933) defined reflection as an 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 conclusion to which it tends. Describing reflection as a process that enables connections between the various elements of an experience, Dewey refers to reflections on experience as a learning loop that runs back and forth between the experience and the relationship being inferred (cited in Boud et al, 1998).

## 2.3.2 KOLB'S MODEL OF EXPERIENTIAL LEARNING

In Kolb's Experiential Learning Cycle, the cyclic approach facilitates the analysis of learning from the process of assessment, planning, implementation and evaluation. The process of reflection follows a concrete experience or critical incident leading to the formation of abstract concepts which are then tested out in the practical setting.

The concept of the learning loop has gained popularity through the work of Kolb and his Four Stage Experiential Learning Model (1984. p. 21): 1) experience; 2) reflection; 3) generalising or theorising; and 4) planning. Therefore the ideal experiential learner will be able to:-

- 1) Involve themselves in new experiences without bias;
- 2) Reflect upon experiences from multiple perspectives;

- 3) Integrate their observations into logically sound theories; and
- 4) Use these theories in decision making and problem solving (Kolb 1984:30).

While Kolb's experiential learning cycle (1984) is widely cited, it is often stripped of his elaboration of the work of Dewey and Lewin and is reduced to little more than the stages of the cycle. Kolb does not say much about the process of reflection (Boud et al except in relation to the other three parts of the cycle. Thus Kolb notes that in the process of learning, the actor becomes more detached from the action, moves to the role of reflective observer, creating a new form of experience that becomes the subject for reflection at each stage of the cycle

## 2.3.3 SCHON'S MODEL OF EXPERIENTIAL LEARNING

Schon (1983) also sees the learner as engaging in experience, reflection, restructuring and planning. However, he advances the notion of reflection by distinguishing between reflection-in-action and reflection-on-action. Best known for his use of the term 'the reflective practitioner', Schon postulates that our knowing is in our action and that such knowledge is tacit (1983. p. 49). When reflecting in action "There is some puzzling phenomenon with which the individual is trying to deal. As he [sic] tries to make sense of it, he also reflects on the understandings which have been implicit in his action, understandings which surfaces, criticises, restructures, and embodies in further action" (Schon, 1983. p.50).

Schon (1987) suggests a number of differences between traditional styles of teaching and facilitating reflective practice. One of the central issues is the role of the teacher who will become, in Schon's schema, a coach rather than a transmitter of knowledge. This coaching

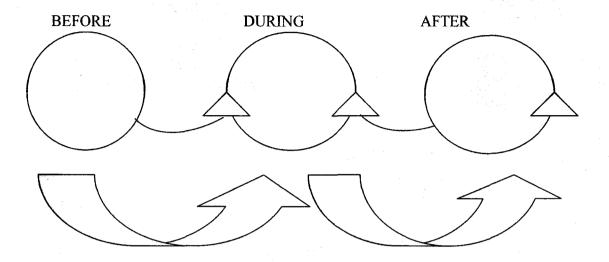
implies an androgogical perspective, treating the student as an independent adult with a capacity for self-directed learning. It also implies, however, a degree of expertise in the teacher, and the ability to articulate his or her mode of reflective practice in a way that is understood by the student.

Schon (1987) describes a crisis of confidence in professional knowledge in general. Students, he comments, need to learn how to make decisions under conditions of uncertainty and this is best achieved through reflections with an experienced coach. This process of reflection-in-action will produce an effective practitioner who is able to define and redefine problems in practice, a more complex activity than problem solving. The complexity of practice is well identified by Schon (1987) in his work and he also emphasises the need for reflection in order to efficiently confront the problems that this complexity causes.

John Cowan (1997) extended Schon's work to encompass a third reflective loop: reflectionfor-action. Reflection-for-action is anticipative: here the learner "defines their aspirations ......

[And] ......establishes priorities for subsequent learning" (Cowan 1997). In Cowan's model,
reflexive processes incorporate introspection within the period of interaction. This formulation
is described in Cowan's "loopy diagram."

# FIGURE 2: COWAN'S MODEL OF REFLECTION



## THE EXPERIENCE

Cowan, J. (1997).

# 2.3.4 THE MODEL (DRISCOLL 1994, 2000)

This model contains three elements of reflection:

- 1. What? A description of the event
- 2. So what? An analysis of the event
- 3. Now what? Proposed actions which following the event.

Each of the three elements interacts within the different stages of an experiential learning cycle. Associated trigger questions are designed to help in completing the learning cycle.

## 2.3.5 GIBB'S REFLECTIVE CYCLE

According to Gibbs (1988) reflection can be depicted as a cycle:

- 1. Firstly something must occur and this event is sometimes referred to as a critical incident.
- 2. Secondly, feelings, both good and bad, should be acknowledged and the outcome evaluated.
- 3. In the next step, the circumstances need to be thought about and understanding should be sought, with consideration given to alternative action.
- 4. Finally, consideration should be given to what actions could be taken if facing similar circumstances in the future.

# **FIGURE 3: GIBB'S REFLECTIVE CYCLE**

# **Description**

What happened?





Action plan

If it arose again,

what would you do/

Feelings.

What were your

THE feelings?

think/feel?



REFLECTIVE

**CYCLE** 



Conclusion

What could you have done

differently or in addition?

**Evaluation** 

What was good/bad

about the experience?





**Analysis** 

What can you learn

from the event?

Gibbs, G. (1988)

Following Gibb's reflective cycle, allows a person to implement alternative actions to a previously experienced and thought about event.

## 2. 4 CRITICISM OF MODELS

Models of reflection are criticised by Clarke (1986), who are particularly concerned that the structuring of reflection runs the danger of creating a technical rational model of reflection. Such a model of reflection can be encouraged by the ways in which structuring is used. For example, diaries have been identified as leading to superficial reflection (Greenwood, 1993). Kelly (1994) commented that a 'deficit model' has emerged in relation to reflection, where the initial assumption is seen as the opportunity to 'do it better next time'.

John (1997) argued that there are many reasons why it may be hard to apply a model of reflective thinking in reflective practice. He argues that practitioners may not recognise the significance of their own personal knowledge and may only value researched based knowledge. Further problems relating to factors influencing memory, such as anxiety (Newell, 1994) or hindsight bias (Jones, 1990), may limit the extent to which practitioners can learn through reflection. Another complication cited by John (1994) concerns the perceptions and attitude of the practitioners who participate in the reflective process. Besides these limited perceptions, John believes that many practitioners would prefer to stick to routine and ritual practices 'than face the effort of curiosity, reflection and commitment' (John, 1994, p. 119).

Taylor (2003) observes a number of limitations to reflective practice. There is the confessional nature to reflection, especially in the way thoughts, motives and misgivings are shared with the

mentor. In health care one needs to examine this practice and what is problematic about it, such as near miss incidents, but it is questionable whether individual reflection is adequate to resolve collective problems. It is also debatable whether mentors are adequately prepared to help the learner resolve the 'ifs, buts and maybes' of reflection (Price, 2003).

All of these problems suggest that any techniques used to facilitate reflection need to be powerful, need to be used expertly applied and need to facilitate reflection at every stage of the learning cycle. That is, they need to move the students beyond the stage of merely describing experiences and associated feelings. It has been argued that where research has been conducted into techniques for promoting reflection, it tends to concentrate on the use of writing journals or diaries, and these techniques are unlikely to take the students beyond the first two stages of the learning cycle. It may be that the coaching advocated by Johns is taking place when methods such as discussion and group work are used, and that these methods will help students complete the cycle of reflective learning (Platzer et al, 1997).

## 2.5 THEORETICAL BASIS OF REFLECTIVE THINKING

Reflection should lead to action. According to Dewey (1933) reflection without action is a waste of time. New understandings resulting from reflection should be used to improve practice. Cervero (1988) maintains that the essence of effective practice in adult education is the ability to reflect-in-action. Adult educators must be able to change ill-defined practice situations into those in which they are more certain about the most appropriate course of action.

For Habermas (1972) an important reflective process occurs in the context of purpose which he calls 'critical intent.' He sees this as a disposition to investigate and reconstruct an aspect of the social and moral environment to achieve enlightenment and ultimately, emancipation. In his view, a group of persons with critical intent bringing their informed judgement to bear on the apparent issues and problems is an act of reflection. This process generates critical ideas or theories about the validity of the questions which are drawn and the reconstruction of new ones. Reflective activity is, for Habermas, the heart of the process that frees the human mind (Boud et al, 1985).

While limited experience may restrict the use of reflection or at least the ways in which it is used with the less experienced, the complexity of skills should not be seen as a barrier. To be able to engage in reflection at whatever level, it is necessary for the person to have certain skills. Although reflective methods are sometimes featured in textbooks, they do not appear to be widespread in nursing in most social endeavours. Dewey (1933) emphasised that most human behaviours were properly based on habit and impulse, but problematic situations required the mediations of thought and reflections, which can in turn become habitual. Given the biological and psychological make up of human beings, Dewey saw how crucial it was that the use of reflective methods be natural, virtually automatic and something that could engender commitment, emotion and even passion. Goodman (1984) and Boud et al, (1985) suggest that a perquisite for reflection is to be open-minded and motivated. According to Atkins and Murphy (1993), the skills required are self-awareness, description, critical analysis, synthesis and evaluation. Benner (1984) suggested different instructional strategies for each discreet level of performance. The need to match levels need not, however, create too great a problem. When

Schon (1983) described the gap that exists between knowing-in-action and articulating that knowledge, he pointed out that without excessive information the simplified picture may enable reflection. This could be especially true when reflections are shared in a group of practitioners whose experience varies. Reflective practice is viewed as a social process because teachers need support from colleagues.

Boud and Walker (1990) suggest that a model to enable practitioners to engage in reflection focuses more directly on the experience itself. They describe experiences as the situation as it is known and lived by the learner and the ongoing experience as a continuing, complex series of interactions between the learner and the learning milieu, manifested by reflective processes.

To be able to engage in reflection at whatever level, it is necessary for persons to have certain skills. Goodman (1984) and Boud et al, (1985) suggest that a prerequisite for reflection is to be open-minded and motivated. According to Atkins and Murphy (1993), the skills required are self-awareness, description, critical analysis, synthesis and evaluations. Teaching and learning strategies can be employed to encourage students to develop these skills and so adopt a reflective approach to their practice. This author advises that as educators, we need to break down the metaphoric walls between classrooms and be willing to share the successes and the problems that occur in our teaching lives. A *preferred vision* refers to what the teacher is working towards, and this allows the teacher to articulate what he/she would want their classrooms to be like.

The concept of a virtual world, one that mirrors reality, but is in fact a protected environment, is very important in Schon's discussion of how teachers can manage the development of reflective practice. This cannot be left to chance, and so part of the coaching function is to create and develop practicums in which this integration can be developed. The onus is therefore on the teacher to control, structure, and order these environments, using his or her expert knowledge of real life problems. According to Schon (1987), a practicum provides a learning environment that is designed to enable students to put into practice the theoretical knowledge they have already learnt.

In literature on the area of reflection, lecturers at Trinity College Dublin faced a dilemma with regard to including these concepts in the nursing curricula. They were faced, on the one hand, with national recommendations for the use of reflection and reflective practice, and on the other with personal and professional concerns about the practical, ethical and moral implications raised in teaching and assessing this subject. The literature reveals that there is little consensus of opinion regarding the exact nature of reflection. There is also little empirical evidence to support the benefits of teaching and assessing reflection and reflective practice from either an educational or clinical perspective. This, together with the practical difficulties of teaching and assessing reflection, may negate against the incorporation of reflection and reflective practice into the nursing curriculum. It is suggested that, rather than isolate reflection as a distinct topic, the skills of critical thinking, problem-solving, self-awareness and analysis be developed within the curriculum (Carroll et al., 2002).

In order to prepare teachers for the diffuse, complex, and controversial nature of global education, teacher educators need to plan reflective exercises as part of their instruction. Both teachers and teacher educators benefit from ongoing reflection on the evolution of their conceptualisations of global education and on experiences in applying such ideas to their own instructions (Merryfield, 1993).

Articulating one's vision allows one to know whether one is making progress. A preferred vision grows as one's knowledge base and classroom experience expand. One's ability to articulate one's expectations in the classroom will directly affect one's ability to reflect on their teaching. As reflective practitioners, educators should know where they are heading before they begin their journey. Mezirow, (1991) suggests that reflection is a complex task necessitating the use of higher order mental processes such as inferences, generalisations, analysis, discernment and evaluations as well as feeling, remembering and problem-solving.

In order to develop reflective practice, reflective thinking seeks to incorporate reflection and to make it the centre of a practice that will allow for life - long responsiveness to real world circumstances, to other people and to change. Reflection is used as kind of umbrella or canopy term to signify something that is good and desirable. It is seen as a tool in the continuous construction of reflexivity, a way of relating to the world and a basis of understanding and responding to experience (Dewey, 1933).

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were properly based on habit and impulse. Problematic situations however, require the mediations of thought and reflections, which can in turn become habitual. Given the biological and psychological make up of human beings, Dewey saw how crucial it was that the use of reflective methods be natural, virtually automatic and something that could engender commitment, emotion and even passion. He concluded in his work that the experience the individual lives through can be described as a dynamic continuum and that each experience influences the quality of future experiences

Reflective thinking and its counterpart, experiential learning, entail the construction of ideas and assumptions through the examination of and reflection upon experience. According to Kolb (1984), one of the primary exponents of experiential learning theory, the ideal experiential learner will:

- involve themselves in new experiences without bias.
- reflect on experiences from multiple perspectives.
- integrate their observations into logically sound theories.
- use these theories in decision making and problem solving.

Clearly, experiential learning and reflective thinking are synonymous with the notion of self-directed life-long learning skills (Jolly, Radcliffe and McLeod 1999).

In order to facilitate the process of reflection, the critical incident technique has been used. The explicit value of the technique is described firstly as a strategy for helping carers to deal with stressful situations such as death and dying and secondly, as a method of promoting reflection (Smith and Russel, 1991).

Description of critical incidents has also been advocated as a tool for teaching critical reflection. Hunt (1996) taught reflective practice processes by having learners select critical incidents arising from the practice environment. Learners engage in a reflective practice discussion group under the guidance of a tutor. The use of the group is essential if implicit assumptions and practices are to become visible. However, using reflection results in a journey for which neither the instructor nor the learner chart or predict the outcome. Reflection should help learners make meaning out of content applied in a specific practice situation and better understand the complexity of how one acts and might act in future situations. Critical reflection holds out the promise of emancipatory learning, learning that frees adults from the implicit assumptions constraining thought and action in the everyday world (Ecclestone, 1996).

Scant attention is paid in literature to the negative aspects of reflection. Hullat (1995) claims that reflection may lead to anxiety, whilst Rich and Parker (1975) state that there is the potential for psychological harm. Use of private information and use of others in nurses' reflection raise serious moral and ethical questions in relation to ownership of information, respect for autonomy, confidentiality and trust in professional relationships, and requirements for informed consent (Cain 1997, Hargreaves 1997). Hargreaves (1997) claims that nurses' own reflections may place them in a vulnerable position, especially when a formal investigation of care ensues where such information is used as evidence.

The effect on students who are encouraged to engage in critical reflection is another issue that emerges in nursing literature. The phrase 'tales from the dark side' (Brookfield, 1993, p.1) is

used to describe the experiences of a group of adult graduate students who engaged in activities designed to foster critical reflection. They found that critical reflection led to self-doubt, feelings of isolation, and uncertainty. Critical reflection in a group context can be unsettling as described by Haddock (1997), who was confronted and challenged by others. He then found it difficult to avoid examining personal values and the extent to which they affect attitudes, beliefs and ideas which one holds on to. Adult learners who engage in activities to facilitate critical reflection must be supported in their efforts.

Another issue related to the experiences of students who engage in critical reflection has to do with the kind of teaching that supports critical reflection. As described by Foley (1995) and Millar (1991), it is labour intense and may require restructuring of existing curricula. Also, not all students may be predisposed to engage in critical reflection, which may be problematic.

#### 2. 6 CONCEPTUALISATION OF REFLECTION

Definitions that reveal differing theoretical orientations about reflections have resulted in confusion about its meaning and uses (Mackintosh, 1998). Lack of a common definition has also lead to the interchangeable use of the terms 'reflection' and 'critical reflection' that may "tacitly belie the different ideologies which can underpin reflective practice" (Ecclestone, 1996, p.150).

In nursing, various definitions of reflection and reflective practice abound. Indeed, John (2000, p. 2) states: 'It seems an academic pastime to try and define exactly what it [reflective practice] is'. Taylor (1998) defines reflective practice as "the systematic and thoughtful means by which

practitioners can make sense of their practice as they go about their daily work". Reflection is often initiated when the individual practitioner encounters some problematic aspect of practice and attempts to make sense of it.

As cited by Cotton (2001), Atkins and Murphy (1995, p. 32) define reflection as a complex and deliberate process of thinking about and interpreting experience in order to learn from it. This is a conscious process and does not occur automatically, but is in response to experience and with a definite purpose. Reflection is a highly personal process, and the outcome is a changed conceptual perspective, or learning.

Chris John (2000, p. 34), using the language of both hermeneutic phenomenology and critical theory, defines reflection as:

Reflection is a window through which the practitioner can view and focus self within the context of his/her own lived experience in ways that enable him / her to confront, understand and work towards resolving the contradictions between what is desirable and actual practice. Through the conflict of contradiction, the commitment to realise desirable work and understanding why things are as they are, the practitioner is empowered to take more appropriate action in the future situations.

Two authors are considered to be experts and initiators of reflection in professional practice, Schon (1983, 1987) and Benner (1984). Schon studied reflective practice in a variety of settings and professions while Benner has concentrated upon nursing. Benner wanted to identify the 'know how' of nursing, as it is possessed by expert nurses. She recognised that

clinical expertise had not been adequately described or analysed. To further their personal and professional development, nurses need to describe, document and compare their experiences to identify how nurses can, and do, move from novice student nurse to expert clinical practitioner. In her discussions, Benner considered all aspects of nursing including management of change, resources, workload, research, professional issues and how to improve the status of nursing.

Reflective practice is the process of transforming reflective thought into reflection action by way of creating a potential for learning situations. Benner, (1984) like Schon (1983), attempt to identify and describe the knowledge that is embedded in practice. Benner talks of the wealth of untapped knowledge embedded in the practices and she states that for this knowledge to expand and develop, nurses need to systematically record what they learn from their own experience, suggesting that if learning is to occur from practice then reflection is vital.

There are different ways to reflect, depending on individual practitioner preference. In his work Schon (1987) identifies three principal components of reflective learning: knowing-in-action; reflection-in-action and reflection-on-action Other educators have expanded on this model and introduced a further stage whereby the practitioner reflects on 'reflection on action' and considers outcomes in terms of self-learning through dialogue with others. Reflection-on-action can be viewed as a retrospective activity, looking back and evaluating current skills, competencies, knowledge and professional practice (Brockbank and McGill, 1998).

Alternatively, reflection in action can be seen as a more dynamic process of thinking about and coming to an internal knowledge of current professional practice at the time. These distinctions

may seem quite blurred at times and it is the process of reflective activity itself that is of more importance than the individual strategy selected with which to do so. Many of these specific approaches can be applied quite appropriately within the fairly broad spectrum of reflective practice (Schon, 1987).

An essential part of reflective practice is learning from practical professional experience.

According to Schon (1983), practitioners can either engage only in superficial problem solving according to tradition or under pressure of work, or rather engage at a deeper level, with potentially more meaningful and difficult inquiry. It may, however, be more appropriate for the busy and practical professional practitioner to aim somewhere between these two extremes and nevertheless be actively involved in research and evidence based practice.

Difficulties were identified within the literature about the concept of reflection and reflective practice. The research by Schon (1983, 1987) based on the topic is at times hard to follow. Practitioners need time to learn the skills of reflection and time to reflect on practice. Reflective skills can include the ability to be self-aware, descriptive, analytical and constructively evaluative. There may be a perceived gap between knowing and articulating this knowledge. However this process can be simplified and/or shared and group reflection can help towards this and overcome some of the perceived barriers to reflection. Within group reflection, individuals can interpret the experiences of others and identify with it, as they may have experienced similar situations within their own practice. It can be an opportunity to think about the depth and range of nursing practice and the scope of professional practice. As even working within current Trust policies and procedures, there can nevertheless be a safe range of

practice and it is possible for the qualified practitioners to perform competently with different levels of knowledge and experience.

Mezirow (1981) suggests that reflection is a complex task necessitating the use of higher order mental processes such as making inferences, generalisations, analogies, discriminations and evaluations, as well as feeling, remembering and problem solving. He also identifies seven levels of reflectivity. These are varying levels of reflection, which can occur at different times for different people and in varying situations. These include reflectivity, affective reflectivity, discriminate reflectivity, judgemental reflectivity, conceptual reflectivity, physical reflectivity and theoretical reflectivity. Powell (1989) however, considered these to be too theoretical to apply to practice of nursing.

Jarvis (1992) suggests that reflection occurs when the anticipated outcome has not materialised. As a result, the practitioner has to inquire why and remedy why things were different from those expected. Much of the literature on experiential learning, as Peter Jarvis comments (1992, p. 75), "is actually about learning from primary experience". He continues, "unfortunately it has tended to exclude the idea of secondary experience entirely". Jarvis also draws attention to the different uses of the term, citing Weil and McGill's (1989, p. 3) categorisation of experiential learning into four villages:

Village One is concerned particularly with assessing and accrediting learning from life and work experience....

Village Two focuses on experiential learning as a basis for bringing

change in the structures... of post-school education....

Village Three emphasises experiential learning as a basis for group Consciousness raising....

Village Four is concerned about personal growth and self-awareness.

These 'villages' of approaches retain a focus on primary experience and do not really problematise the notion of experience itself (Weil and McGill, 1989).

# 2.7 EMPIRICAL STUDIES RELATED TO THE PROMOTION OF REFLECTIVE TEACHING

While it is argued in the nursing literature that reflective thinking is the approach *par excellence* for learning and advancing the art and practice of nursing, few empirical studies have been undertaken to examine these claims. In a qualitative study conducted at the Massey University, Palmerstown North, New Zealand, the researcher obtained and analysed data from interviews of 10 registered nurses in order to study reflective thinking in nursing practice. Ten non-routine nursing situations were analysed for the presence of reflective thinking. Time-line interviews of the events resulted in a total of 59 micro-moments, each of which was explored in terms of the thinking processes utilised to make sense of the situation as well as the focus of their thought. 'Pre-perceptions' played an important part in how the respondents perceived their situation.

Reflective thinking was extensively manifest, especially in moments of doubt and perplexity, and consisted of such cognitive activities as comparing and contrasting phenomena, recognising patterns, categorising perceptions, framing, and self-questioning in order to create meaning and understanding. Self-questioning was identified as a significant process within reflective thinking. By exploring and analysing the type of questions respondents were asking themselves, the study uncovered three hierarchical levels of reflective thinking. Respondents most often engaged in reflective thinking-for-action which centered on the here and now in order to act. Reflective thinking-for-evaluation focused on creating wholeness and contributed to the realisation of multiple perceptions and multiple responses. Reflective thinking-for-critical-inquiry could not be demonstrated in the study sample. The findings of this study resulted in the development of a model of reflective thinking, which is discussed in terms of the implications for learning in nursing practice (Teekman, 2000).

Research undertaken by Kluge (1996) in a major teaching hospital in Sydney set out to explore the proposition that participants in a Transitional Support Programme (TSP) could benefit by using reflective practice. This qualitative research project focused on the change in the meaning and use of reflection and reflective practice in Nursing for recent graduate nurses in the TSP when professional journaling was encouraged. The project was conducted over a six month period. Triangulation of qualitative data collection methods included questionnaires, interviews and knowledge of the concept of reflection, whilst only limited knowledge of reflective practice pre-existed. However, following an initial introduction, the concept of reflective practice was successfully integrated into their clinical work (Kluge, 1996).

The above study's findings highlighted that most participants demonstrated a comprehensive understanding of the meaning of reflection at the commencement of the study. Generally, they defined reflection as a cognitive process that involved four stages of cognitive action. This definition is consistent with various authors who view reflection as a three — stage process that involves the self and results in a changed conceptual perspective as outcome (Boud et al, 1985; Boyd and Fales, 1983). Whilst only limited knowledge of the concept of reflective practice existed at the beginning of the study, the meaning of this concept had changed considerably after three and six month intervals. Participants identified that keeping a professional journal proved to be beneficial as it enhanced their reflective practice in Nursing and therefore facilitated their personal and professional development. The study highlighted a number of issues that may be considered for the planning of future nurse education, particularly the opportunity to utilise reflective practice as a strategy to bridge the gap between theory and practice. The researcher felt that the value of reflection, despite it being seen as an essential requirement of today's practitioner, was often undervalued. He also notes that reflection for the students was not an easy process (Kluge, 1996).

According to Usher (1985) reflection is an experience that students find difficult, many preferring to learn facts from a book. However despite Usher's assertion, the researcher found that the evaluations from the students indicated a positive response towards using reflection as a means of linking theory to practice.

In a study undertaken in the Republic of Ireland at the Trinity College, researchers Niholl and Higgins, (2002) to determine the perceptions and interpretations of reflective practice in pre-

registration nursing curricula. Data were collected using postal questionnaires distributed to 40 nursing schools. The result indicated variations between nursing institutions in the number of hours allocated to the subject and where reflective practice was included in the curriculum. Emphasis was placed on theoretical models of nursing as opposed to the process or the skills required to become a reflective practitioner. Lecture and group discussions were the dominant teaching methods. A number of teachers expressed dissatisfaction with the preparation they had received to teach the subject, and identified some of the challenges they experience when teaching reflective practice. The results from this study provided a focus for the debate amongst nurse educators involved in implementing reflective practice in the curriculum. Though the results were limited by a response rate of 50% and by geographical setting, the result did suggest that there was a need to clarify curricula content in relation to reflective practice and reflection in pre-registration nursing curricula (Niholl and Higgins, 2002).

Sutcliffe's (1993) study, which investigated the preferred learning styles of nurses, found that students wanted discussions and questioning within a lecture, suggesting reflective approach. Reflections did make the links between theory and practice more explicit. Jarvis' (1992) work, added that the occupational structures within which nursing, teaching and other professions are conducted today seem to preclude the opportunity of reflective practice. Nursing is therefore faced with the dilemma that it wants to encourage reflective practice, even to claim that it has but, like some other professions, the structures within which it is conducted seems to inhibit regular reflection in practice. One might therefore ask how nursing can introduce the structures which encourage reflective practice. Based on Jarvis' (1992) observations, in order to succeed the introductions of these structures, two elements seem significant: firstly, nursing needs its

own theory of practice and secondly it needs to train both mentors and managers to help students and qualified carers to take the time to question and reflect upon their own practice.

Study by Clamp (1984) described how the technique was used in nursing education to increase student's awareness of nurses' attitudes to clients and their level of interpersonal communication skills. The incidents were used as a trigger for in-depth discussions concerning the attitudes and behaviours of those involved The technique appears useful as a means of identifying key aspects of nursing (Smith and Russel, 1993). The process does not only develop students understanding of the clients, but can also enlarge their understanding (Burnard,1991), and other nurses behaviour. This technique can be used in conjunction with role playing exercises in order to help nurses to become familiar with the situations involving clients in terminal care, along with the necessary support. In the safety of the classrooms, one can hopefully sharpen one's sensitivity to an individual's specific needs and develop a repertory of behaviours on which to draw once the need is identified (Epstein, 1975).

In another study set up purposefully on a part-time post-registration Diploma in Professional studies in Nursing programme to enable students to reflect on and learn from experience. The use of these groups was qualitatively evaluated by the use of in-depth interviews. Although there were many barriers to such learning, some students made significant developments in their critical thinking ability and underwent perspective transformations that led to changes in attitudes and behaviour. These changes were identified as an increased professionalism, greater autonomy in decision — making, more self-confidence to challenge the status quo and make their own judgements, and a less rule-bound approach to their practice. The processes by which

these changes occurred were identified as support and challenge within the groups offered by both the facilitators and other group members (Platzer et al, 2000).

Given the lack of research on the topic and the need for evidence on which to base the teaching of reflective practice, a descriptive exploratory study was undertaken by Goodman (1984), on the *Issues and Innovations in Nursing Education*. The study was aimed at reporting how nurse educators perceived and interpreted reflective practice in pre-registration nursing curricula. Data were collected using a postal questionnaire distributed to all (40) nursing schools in The Republic of Ireland. The results indicated a variation between institutions in the number of hours allocated to the subject and where reflective practice was included in the curriculum. Emphasis was placed on theoretical models of reflection as opposed to the process or skills required to become a reflective practitioner. Lecture and group discussions were the dominant teaching methods. Additionally, a number of teachers expressed dissatisfaction with the preparation they had received to teach the subject, and identified some of the challenges they experience teaching reflective practice.

The results provided a focus for further debate amongst nurse educators involved in implementing reflective practice in the curriculum. The authors of the study indicated the need for further research but did suggest the need to clarify curricula content in relation to reflective practice (Goodman, 1984).

## 2.8 DEVELOPING SKILLS IN REFLECTIVE THINKING

One learning strategy that can be used by educators to support the development of mindful practice in students is reflexive practice. This method provides opportunities for critical reflections on events, interactions, choices made and outcome of one's choices through the use of diaries, journals, class and small- group discussions, and other critical reflection exercises. Little is known about how beginning nursing students evaluate their own learning of the competencies that demonstrate their understanding and application of course content, and how this self-evaluation relates to their success in each course and in their academic programme (Brookfield, 1993).

The art of reflection is seen as a key in bringing together practice and knowledge in nursing. More specifically, reflection addresses the artistic elements of nursing care delivery. It thus appears a useful skill for pre-registration students to begin developing. However, research suggests that students under the age of 25 years may lack both cognitive readiness and the experience necessary for mature critical reflection. Teachers must therefore examine whether the reflective strategies and models that they present meet these students' educational needs. It is postulated that simple models have a greater chance of success than those that are complex and demand a high time commitment. One such model suggested is reflective journal writing. Diary keeping or journaling is a popular means of recording events and reactions to events (Heath, 1998; Mackintosh, 1998; Orem, 1997 and Williamson, 1997). Diary writing does have serious limitations. Writers may suffer from selective recall of events and may be reluctant to express thoughts that others may read (Mackintosh, 1998).

While training in reflection may be achieved through thinking, speaking or writing, the act of transferring thought processes into words may lead to higher levels of abstractions and analysis. Writing is a powerful medium for facilitating reflection on practice (Heath, 1998 and Kottkamp, 1990) whether in the form of reflective diaries or journals, and it assists the reflective process, by acting as a reminder and a more in-depth analysis of what went on in practice (Fisher, 1996).

For this reason, the journal has proven to be particularly effective in developing the skill of reflective thinking. Cartwright (1997: 75) notes that "journal allows learners to converse with the situation and make inferences which are often drawn from previous experiences". The efficacy of journaling is similarly praised by Kolb (1984) and Schon (1983) who particularly noted the usefulness of having a written account of experiences upon which to build strategies for future action. Fostering reflection in and on practice, the journal ideally engages the learner in constant inner dialogue, aiding in the development of life-long learning skills. Apart from being a useful aide-memoir about clinical practice, recorded documentation is essential about what goes on in the reflective session. Reflective writing as a preparation for the session or, as a post-session activity also allows the facilitator and the individual practitioner to follow up on any intentions for practice and is a useful tool for monitoring the effectiveness of clinical practice.

Learners may be unable or unwilling to confront or seek disconfirming information about themselves or implicitly their held knowledge. Bright (1995) suggests that to be able to write reflectively, learning to be reflexive in one's thinking is a prerequisite skill, "because it is the practitioner's understanding which is the window through which a situation is understood and

interpreted. An essential feature of 'reflective practice' is the need for the practitioner to be aware of her own processes in the development and construction of this interpretation. In this sense, 'reflective practice' is reflexive and involves much self-reflection on her own practice" (p. 177). Resistance to going beyond technical descriptions of experience as expressed in diaries may be due to lack of writing skills, or the inability to confront comfortable assumptions (Heath, 1998 and Orem, 1997).

Reflective practice can be a beneficial process in teacher professional development, both for pre-service and in-service teachers. Authors Clift, Houston and Pugach (1990) recommend that reflective teaching combines John Dewey's philosophy on the moral, situational aspects of teaching with Schon's process for a more contextual approach to the concept of reflective practice.

In a 1993 study of how student teachers develop the skills necessary for reflective teaching during their field experience, Ojanen (1993) explores the role of the teacher as coach. Teacher educators can most effectively coach student teachers in reflective practice by using personal histories, dialogue journals, and small and large group discussions about their experiences to help students reflect upon and improve their practices.

In recent decades there has been a growing interest in teacher preparation programmes (Berliner, 1984; Beyer and Zeichner, 1982; Calderhead, 1988; Doyle, 1985; Koehler, 1985; Lasley, 1980; Stone, 1987). Much of this interest has been in reaction to a technical approach which has dominated teacher education for many years. Some teacher educators are attempting

to apply reflective or inquiry-oriented perspectives to their teacher preparation programmes and courses. Reflective practice in field experiences, student teaching, and seminars have been of primary interest (Gore, 1991; Maas, 1991; Noffke and Brennan, 1991), while research involving reflection and methods courses, or methods courses in conjunction with field experiences, has been conducted to a lesser degree (Adler, 1991; Gomez, 1991; Goodman, 1986, 1991; Zeichner, 1981; Zeichner and Liston, 1987). The interpretative research study reported in this paper is an investigation of reflective journal writing as a means of student reflective thinking within an art methods course for pre-service elementary teachers. The possibilities and limitations of such a strategy are examined along with alternative approaches students chose to employ during the latter part of the study.

Review of the literature on reflective thinking suggests that there is no consensus on how to best promote reflective thinking in teacher education. Clift, Houston and Pugach (1990) reported that at the "Reflection in Teaching and Teacher Education" conference the only thing agreed upon by those who attended was that reflective thinking was a complex topic, and deserved further discussion and examination. There was no consensus regarding definition, concepts, or ways of encouraging reflective thinking. Ross (1989), for example, stated that the University of Florida has been struggling with problems such as defining the nature of reflection, identifying strategies for fostering reflection in students, and assessing the impact of such an approach.

One strategy that Ross (1989) and others have found appropriate for the development of reflection is the writing of journals. Journal writing as a Means of Reflection Writing is about

developing awareness of strategies that support the development of reflection, Ross (1989) stated that reflective writing was an important component of programmes that stress reflective thinking. Ross (1989) gave two reasons why programs emphasising reflection should include reflective writing: "First, reflective writing provides a way for pre-service teachers to practice critical analysis and reasoning, second, writing provides the faculty with a way to challenge and support each student's reflective thinking" (p.103). Others who have advocated the use of reflective journal writing include Gomez (1991), Gore (1991), Maas (1991), Maher (1991), Ross (1990), Teitlebaum and Britzman (1991), Yinger and Clark (1981), Zeichner (1986), and Zeichner and Listen (1987).

Reflective practice is often seen as representing a choice for practitioners to be reflective or not about their clinical practice, but in reality all practitioners engage in reflection about their professional work. Reflecting on an experience is an intentional and skilled activity requiring the ability to analyse practice actions and make judgements regarding their effectiveness.

Contemplating an experience or an event is not always purposeful and does not necessarily lead to new ways of thinking or behaving in practice which is the crux of effective reflective activity (Bright 1995).

Yinger and Clark (1981) argued the importance of the cognitive activity involved in writing reflective journals. They suggested that theory and research support the concept that learning is improved and memory is enhanced when the memory elaborates information. Writing can provide a way to process memories more deeply through an interaction between concept development and symbolic expression. The act of writing allows the writer to express

knowledge in a form different from what was originally represented in memory. Maas (1991) had another approach to journal writing and wrote about the limitations of a cognitive approach.

Authors such as Yinger and Clark (1981), Kemmis and McTaggart (1988), and Stover (1986), all referred to reflective journal writing as a means to force people to think and reflect. Maas felt this reduced ownership of the journals and forced thoughts into a given form. Not wanting to force students to write, Maas set up flexible structures for journal keeping. Roderick (1986) found that dialogue writing was a context for pre-service elementary teachers to reflect on their teaching experience in the field and to maintain a weekly exchange of dialogue with the professor. Writing dialogue journals, Roderick stated, enables persons to solve problems, develop a sense of audience, and share personal meanings. Roderick not only found dialogue journal writing beneficial for students but also extremely beneficial for the professor as a teacher-researcher.

Jarvis (1992) advocates the need for reflective practice since nurses are dealing with people who because of their individual nature, require nurses to be responsive and reflective instead of simply carrying out routine tasks or rituals of everyday nursing practice. Cox, H., Hisckson, P. and Taylor, B. (1994) suggest that nurses like other people in all aspects of living, do not think through their every action in detail. Such actions can sometimes be likened to 'working on autopilot', in which set patterns are followed that govern and direct nursing actions.

Reflection is a process that allows practitioners to uncover and expose thoughts, feelings and behaviours that are present in a period of time Hull and Redfern (1996) assert that by

understanding more about practice through reflection and examining why certain interventions are used ,and in what situations, practitioners can extend their personal and professional knowledge making the process of reflection more than just simply thinking about practice.

Rich and Parker (1975) argue that support for both tutor and student is an essential component of systematic, structured reflection in the classroom and the clinical area. These workshops should be a humanistic approach to reflection, offering the students a comfortable, safe and supportive environment in which to take chances. Tutors as well as mentors should incorporate critical thinking exercises, such as role playing. This will enhance the students' cognitive flexibility regarding the variety of nursing intervention students may implement to provide quality patient care (Smith and Russel, 1993).

Reflective practice has also been defined in terms of action research. Action research, in turn is defined as a tool of curriculum development consisting of continuous feedback that targets specific problems in a specific school setting (Beyer and Zeichner, 1992). As such, it has become a standard concept in teacher education programmes. The teacher educator as researcher and role model encourages students to put theories they have learnt into practice in their classrooms. The students bring reports of their field experiences to class and analyse their teaching strategies with their mentors and colleagues. This collaborative model of reflective practice enriches students' personal reflections on their work and provides students with suggestions from peers on how to refine their teaching practices (Syrjala, 1996).

Currently, the process of reflection as a learning tool (Atkins and Murphy, 1993) is becoming increasingly prominent in nurse education. Some of the reasons for this rise in interest may be attributed to the changes that have taken place over the last decade, both with the nursing profession itself and within nurse education in general (Gobbi, 1995).

There are many successful techniques for investing teaching practice with reflection, some of these have been mentioned above. Action research conducted in teacher education programmes can be designed to engage the reflective participation of both pre-service and in-service teachers.

The findings in a study by Lee and Sabatino, (1998) revealed that reflective skills promoted in the classroom did not correlate with performance in field projects. There was no correlation between use of guided reflection and the learners' application of the content. However, attitude towards reflection was positive. Learners indicated that reflective practices help to connect prior experience to new content. The results also raised the question of whether and/or how much the ability to act intuitively, to reflect critically upon one's experience, and to contemplate and review in a mindful way, can be taught. In other words, it would be useful to know if the ability to engage in reflexive practice or to develop a mindful practice is inherently innate, and can be improved through guided teaching/learning experiences designed to improve critical reflection, or are a learned skill that anyone can master with opportunity and experience.

Additional information about the importance and nature of this mindfulness in nursing students would encourage nurse education to design experiences that could challenge students to reflect

upon, interpret and derive personal meaning from their learning experiences. Information about the learned and/or innate nature of these cognitive processes would also add to our understanding of the role these reflexive practices should play in curricular design and delivery (Lee and Sabatino, 1998).

## 2.9 COMMENTS ON REFLECTION AND REFLECTIVE THINKING

The definition, meaning, understanding and methods of reflection in nursing varies across dimensions and perspectives. The idea of reflective practice has been used extensively to promote the process of professional development (Schon, 1983) and the articulation of the relationship between theory and practice, both pivotal aspects in the education and preparation of nurses. While the desirability of nurses being reflective practitioners is truly supported in the literature (Powell, 1989; Garratt, 1992; Stein and Owens, 1991), the teaching and assessment of reflective practice is poorly understood and actioned.

#### 2.10 CONCLUSION

From the literature reviewed for this study, it is evident that theorists, authors and researchers postulate positively about reflection and reflective practice. Research from the Constructivist paradigm postulate that promoting reflection improves cognitive thinking abilities during clinical problem-solving and decision – making. Nurses and students observed in educational and practical settings display varying degrees of reflection. Framed within the experiential settings, researchers used the social cognitive theory and observation of situated learning and according to the constructivists, meaning-making is the goal of learning.

There is general consensus amongst researchers that reflective thinking needs to be promoted so that nurses develop the skill in reflective practice thereby providing quality health care.

Strategies that promoted reflection and reflective practice include critical incident reflection, journals and diaries, group discussions and questioning.

# **CHAPTER 3**

# 3. RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION

In this chapter the researcher presents the research approach, design, research setting, population, process and sample size and the data collection instrument used in the research. Data collection was undertaken using a questionnaire and the data was analysed using the SPSS program.

#### 3.2 RESEARCH APPROACH

The most appropriate strategy to pursue in this study was a quantitative approach. A quantitative design is used if the data is measured in numbers. This view is also supported by Burns and Grove (1997) who define the quantitative method as a systematic process in which numerical data are utilized to obtain information about the phenomenon under study. A quantitative approach was be used in this study for a number of reasons.

The quantitative approach uses a systematic method to collect information followed by statistical analysis of the data. Quantitative research tends to emphasise deductive reasoning, the rules of logic, and the measurable attributes of human experience, as stated in Polit and Hungler (1991). Deductive reasoning is a process of developing predictions from general principles. It is not a source of new information; it is rather an approach to illuminating relationships as one proceeds from the general (an assumed truth) to the specific. A

quantitative study uses a scientific approach to inquiry where a general set of orderly, disciplined procedures are used to acquire dependable and useful information, which is what the researcher intends to do in this study.

#### 3.3 RESEARCH DESIGN

According to Kerlinger (1986, p. 279) a design is a plan, structure and strategy of the investigation, so conceived as to obtain answers to research questions. Burns and Grove (1997), state that the purpose of the research design is to achieve greater control of variables, thus improving the validity of the study in examination of the research problem. For this study an exploratory descriptive survey was conducted. Polit and Hungler (1995), state that exploratory research is an extension of descriptive research. In descriptive research the researcher selects a specific event, condition or behaviour and makes observations and records of the phenomenon.

The final result of this investigation is a list, catalogue, a classification or some other type of description. Exploratory research on the other hand focuses on a phenomenon of interest, but pursues the questions: What factors influence, affect, cause, or relate to this phenomenon? The aim is to establish the nature of the phenomenon, what is going on and what factors are related to the phenomenon? This design was therefore appropriate to this study as it was aimed at exploring the promotion of reflective thinking in teaching, the factors that facilitate and those that hinder the promotion of reflective thinking in nursing education programmes in one of the nursing colleges in KwaZulu-Natal.

An exploratory design was used to explore the facts which related to the phenomenon under study and obtain a richer understanding of the phenomenon Polit and Hungler (1995).

#### 3. 4 RESEARCH SETTING

The Natal College of Nursing (NCN) was used as a research setting in this study. This setting was selected because NCN commenced the implementation of the outcomes-based curriculum in 2002 both in the four-year programme which included bridging courses and in the post-basic programmes. According to the curricula documents used in this institution, the programme and course outcomes are in line with the critical-cross field outcomes by South African Qualifications Authority. Nurse educators are supposed to be using innovative teaching strategies that promote reflecting thinking and the nature of learning experiences in these documents are those regarded in literature as facilitating the development of reflective thinking skills. Four campuses under this college were involved in this study. These four campuses are Addington, King Edward. R. K. Khan and Greys/Northdale. The other reason for selecting these facilities is to contain costs, to facilitate accessibility and to be able to work within the time constraints.

#### 3. 5 POPULATION

A population is "the total possible membership of the group being studied" (Wilson, 1989, p.124), whereas a sample is a subset of the population selected to participate in the research study (Polit and Hungler, 1995). As stated in Burns and Grove (1997) an accessible population is the portion of the target population to which the researcher has reasonable access. A total of

99 nurse educators were reported to be involved in teaching. The nurse educator population was distributed as follows -:

R. K Khan Campus

= 20

**Addington Campus** 

= 22

Greys/Northdale Campus

= 27

King Edward V11 Campus

= 30

### 3. 6 SAMPLE AND SAMPLING PROCEDURES

#### 3. 6. 1 SAMPLING APPROACH

Non-probability sampling was used in this study due to the nature of the study and the limited number of nurse educators in the selected nursing education institutions. In non-probability sampling, elements are selected by non-random methods (Polit and Hungler, 1995). Purposive sampling was used to select the participants. The reason for using purposive sampling was to seek subjects with particular characteristics in order to increase the theoretical understanding of the facets of the phenomenon being studied (Burns and Grove, 1997). Morse (1995) describes purposive sampling as a process of selecting participants who are rich in the information needed by the researcher.

Due to the limited number of educators that participated in this study, all nurse educators were requested to participate. However, out of 99 nurse educators only 72 returned usable questionnaires.

#### 3. 7 DATA COLLECTION AND RESEARCH INSTRUMENT

The researcher targeted all nurse educators as participants from the four nursing campuses to obtain sufficient data The Principals of each nursing college collected the questionnaires from the participants which was then handed over to the researcher.

A self-developed instrument guided by the reviewed literature was used to collect information from the participants. The questionnaire had closed - ended as well as open -ended questions (see Annexure F). The choice of the instrument was motivated by Babbie (1992) who stated that the central element in survey research is the standardised questionnaire. Section A collected demographic data. Section B was divided into four subsections where the first section focused on the teaching strategies used, the second subsection focused on the assessment of learning, the third on the characteristics of teaching strategies that promote reflective thinking and fourthly, the factors that promoted or hindered promotion of reflective thinking.

All nurse educators involved in the teaching of the Four Year Integrated Programmes, Post Basic Programmes and Bridging Programme were included in the study. The researcher, with the assistance of the principal, had access to the participants after staff meetings. In this meeting the purpose of the study as well as its benefits to the participants were explained. The researcher requested all the tutors to participate, as their contribution to the study was going to be appreciated. The participants were not coerced to participate. Questionnaires were collected personally by the researcher from the principals of the nursing colleges for control purposes.

# 3.8 DATA ANALYSIS

Data was analysed statistically using SPSS. Version11.5 (SPSS Inc, Chicago; Illinois, USA) ANOVA tests was used to examine whether any factors affected the use of reflective teaching techniques.

Descriptive statistical analysis was achieved using frequency tables and bar charts to describe the responses to each question. A score for reflective thinking teaching was generated by summing scores for questions identified as reflective thinking teaching questions. These questions were each graded on a scale of 0 to 3 with 0 for Never and 3 for Always. Thus the higher the score, the more the respondent used reflective thinking teaching techniques.

## 3.9 VALIDITY AND RELIABILITY

Validity refers to the extent to which an instrument measures what it is supposed to measure (Polit & Hungler, 1995). Reliability on the other hand, refers to the extent to which the same result can be obtained if the instrument has to be repeated on others (Polit & Hungler, 1995). In this study, the researcher used content validity and test retest reliability.

#### 3.10 ETHICAL CONSIDERATION

**Permission:** Permission to carry out study was obtained from:

- The Research Ethics Committee (see Annexure D)
- Kwa Zulu Natal Department of Health (see Annexure E)
- Principal of Natal College of Nursing (see Annexure E)

- Principal of R.K. Khan Campus (see Annexure E)
- Principal of Addington Campus (see Annexure E)
- Principal of Greys/Northdale Campus (see Annexure E)

Consent: Obtaining informed consent from human subjects is essential for the conduct of ethical research Oddi and Cassidy (1990). Informed voluntary consent is an explicit agreement by research participants, given without threat or inducement based on information which any person would want to receive before consenting to participate in a study Burns and Grove (1997). There was no cohesion, so willingness to participate was considered as a valid consent, but attempts were made to ensure sufficient participants completed the questionnaire to enable the researcher to arrive at some findings.

Confidentiality: Burns and Grove (1997) state that confidentiality means that the researcher keeps in confidence issues that the participant does not want to disclose to others. The researcher numbered the questionnaires and requested that the Principals of the Nursing colleges to collect and forward the completed questionnaires.

Anonymity: To ensure anonymity, the researcher assigned special codes for the each campus and numbers were used to identify these questionnaires. In this way it was not possible to link the questionnaire to the participant.

# **CHAPTER 4**

# 4. DATA ANALYSIS

# 4.1 INTRODUCTION

This chapter provides an analysis and discussion of the data collected through the use of the questionnaires. The questionnaire was the primary source of data collection. A total of 72 out of the 90 participants used in the study completed questionnaires and the questionnaire contained 108 individual questions. Questions were used to elicit the responses specific to the study. SPSS version 11.5 (SPSS Inc, Chicago, Illinois, USA) was used to capture and analyse the data. Scores were expressed as percentages and the distribution of scores was found not to differ significantly from a Gaussian distribution, thus parametric testing was used. Scores were compared between certain demographic factors using ANOVA tests to examine whether any factors affected the use of reflective teaching techniques. A p value of <0.05 was considered as statistically significant.

#### 4. 2 RESULTS / DEMOGRAPHIC DATA

#### 4.2.1 TEACHING EXPERIENCE

Seventy – two nurse educators responded to the questionnaire. The majority of the respondents had been working as nurse educators for between 1 and 4 years 22 (30.6%), while 19 (26.4%) had been working for between 5 and 9 years.

Responses to the question on how long they had been working as a nurse educator are shown in Table 1.

Table 1: Length of time respondents had been working as a nurse educator

	Frequency	Percent
less than one year	3	4.2
1 - 4 yrs	22	30.5
5 - 9 yrs	19	26.4
10 - 15 yrs	16	22.2
above 15 yrs	12	16.7
Total	72	100.0

Of the 72 respondents who answered the question on which programme they were teaching, the majority 32 (4.7%) indicated that they were teaching on the 4 year Comprehensive Basic Nursing Programme. There were 19 (27.1%) each on the Post Basic Programme and a combination of the Comprehensive and Enrolled Nursing Programme.

This is shown in Table 2.

Table 2: Teaching programme

		.:	Frequency	Percent
4 yr Comprehens	sive Basic Nur	rsing Programme	34	47.2
Post-Basic Progra	amme		19	27.4
4 yr Comprehens	sive Basic Nur	rsing Programme and Enrolled nursing	19	27.4
programme				
Total			72	100.0

## **4.2.2 RESEARCH QUESTIONS**

# 4.2.2.1. Describe the current teaching philosophy of nursing educators.

In order to answer this question, respondents were asked what they viewed as teaching. Responses to this question are summarised below. The majority viewed teaching as developing learners academically, personally and professionally 47 (65.3%). This group was followed by the 11 who viewed teaching as transmitting worthwhile bodies of knowledge (15. 3%) and the 7 (9.7%) who viewed teaching as a life-changing process. The remaining 7 (9.7%) viewed teaching as teaching learners how to learn. From the data above it is evident that about 61% of the nurse educators' teaching philosophy support the promotion of reflective teaching.

Table 3: "What do you view as teaching"

	Frequency	Percent
Developing learners academically, personally and professionally	47	65.3
Transmitting worthwhile bodies of knowledge to learners	11	15.3
As a life changing process personally, academically and professionally	7	9.7
Teaching learners how to learn, raising learners' consciousness	7	9.7
Total	72	100.0

# 4.2.2.2 How do nurse educators promote reflective thinking in their teaching?

In order to answer this problem, participants were asked to rate themselves on a scale of always, often, seldom or never, with regards to their use of certain reflective teaching practices. Eleven questions in the questionnaire were specific to reflective thinking. Responses to these questions are summarised below in Table 4.

The findings revealed that 68 (95.7%) nurse educators encouraged learners to link their present learning with past experiences followed by 58 (84.1%) who give students the opportunity to assess their performance. Group projects, role-plays group discussions and the use of ethical dilemmas featured significantly as teaching strategies used by nurse educators to promote reflective thinking. However Reflective Learning Diaries were reported not to be commonly used. 23 (33.8%) and 19 (27.9%) never or seldom used Reflective Learning Diaries.

Also noted was that nurse educators did encourage learners to give reasons for their decisions (n = 40, 55.6% + n = 29, 40.3%) and equally significant was that nurse educators probed learners instead of giving them answers.

Table 4: Responses to reflective thinking teaching questions

	Nev	ver	Selo	dom	О	ften	A	lways
	Count	Row	Count	Row	Count	Row %	Count	Row %
	Freq	%	Freq	%	Freq		Freq	
Encourage learners to link								
their present learning to	1	1.4%	2	2.8%	40	56.3%	28	39.4%
their past experience							·	
Give students an								
opportunity to assess their								
performance and come up	0	0%	11	15.9%	42	60.9%	16	23.2%
with ways of improving				!				
their learning								
Using group projects in my								р.
teaching	3	4.2%	25	35.2%	38	53.5%	5	7.0%
Using ethical dilemmas	3	4.2%	12	16.7%	51	70.8%	6	8.3%

Table 4: Responses to reflective thinking teaching questions (contd)

		<del></del>	<del></del>	T				
Using role-play in teaching	3	4.3%	25	36.2%	36	52.2%	5	7.2%
Learners work together in								
groups, talking, sharing								
ideas and working out	2	2.8%	18	25.4%	45	63.4%	6	8.5%
answers	-							
Using cross curricular								
themes-topics instead of	7	10.1%	25	36.2%	29	42.0%	8	11.6%
specific subjects								
Students keep diaries in								
which they reflect on their	23	33.8%	19	27.9%	20	29.4%	6	8.8%
own learning			:					·
Using solving problem								
activities where I encourage	_		·					
learners to provide reasons	1	1.4%	14	19.7%	44	62.0%	12	16.9%
based on their personal								
judgment								
Encourage learners to give								
reasons for their decisions	0	0%	3	4.2%	40	55.6%	29	40.3%
Probe learners instead of								
giving them answers	0	0%	1	1.4%	41	57.7%	29	40.8%

These questions were scored with always = 3 and never = 0. Responses were summed up to generate a score, expressed as a percentage. The higher the score the more frequently the respondent used reflective thinking teaching techniques. The mean reflective thinking score for the entire sample was 61.32%; the standard deviation was 13.93% and the range 18-91%.

# 4.2.2.3. Teaching strategies used to promote reflective thinking

For the purpose of comparison of the responses, the researcher grouped the Never and Seldom as well as the Often and Always responses. To obtain specific information for this question, the researcher only focused on those strategies that promoted reflective thinking.

A very high percentage 50 (71.4%) of Nurse Educators still used the lecture method; 58 (80.6%) used text books as the main source of information and 65 (91.6%) used textbooks as one of the sources of information.

However from the analysis of the responses to this question it is evident that Nurse Educators do use some form of teaching strategy that promotes reflective thinking. The remaining item analysis of this question is presented in Annexure B.

The one strategy that negatively impacts on reflective thinking is that 66 (92.9%) of the respondents indicated that they encourage learners to memorise facts from the textbooks.

However only 4 (5.6%) of the nurse educators indicated that they video recorded their teaching sessions, 11 (15.2%) invited other teachers to observe their classroom teaching and 43 (59.7%) gave learners questionnaires at the end of the teaching sessions to evaluate their teaching.

In viewing the responses in Table 5 it is evident that nurse educators promote reflection and active participation in their teaching practice. Findings also indicate that 61 (80.7%) do not encourage peer evaluation and 33 (40%) do not obtain feedback from their learners in respect of learning/teaching. It is evident from this point of view that "teachers do not engage in a Reflective Stance" as stated by Dewey, Teachers need to develop a reflective stance and must possess attitudes of open-mindedness, wholeheartedness and responsibility.

Table 5 summarises the responses to the questions on teaching practices in addition to other than those shown in Table 4.

**Table 5: Teaching Practice** 

in the second second	Never		Seldom		Often		Always	
	Cou nt Freq	%	Count Freq	%	Count Freq	%	Count Freq	9/6
Use a lecture method when teaching	0	0%	20	28.6%	42	60.0%	8	11.4%
Use textbooks as the main source of information	0	0%	14	19.4%	40	55.6%	18	25.0%

Provide learners with opportunities to								
work or learn in groups	0	0%	27	38.0%	37	52.1%	7	9.9%
Encourage learners to examine their							4.12	
attitudes, belief and assumptions about								
their practices	1	1.4%	10	14.3%	44	62.9%	15	21.4%
Encourage learners to step back, think								
about how to solve problems and what								
they would do differently in future	2	2.9%	12	17.4%	41	59.4%	14	20.3%
Use classroom activities relevant to real								
world situations	1	1.4%	5	7.0%	43	60.6%	22	31.0%
Students collect information about								
certain cases and present those cases in								
class or tutor	3	4.3%	20	28.6%	37	52.9%	10	14.3%
Use simulations for learning purposes								
	1	1.4%	15	21.1%	47	66.2%	8	11.3%
Use textbooks as one of the sources of								
learning the content	0	0%	6	8.5%	43	60.6%	22	31.0%
Encourage learners to use textbooks to	0	0%	8	11.1%	37	51.4%	27	37.5%
ground their arguments during group								
discussions								
Using case studies drawn from real life	1	1 40/	12	10 10/	22	44 407	26	26 10/
Using case studies drawn from real life	1	1.4%	13	18.1%	32	44.4%	26	36.1%

cases								
Encourage learners to memorise facts								
from textbooks	38	53.5%	28	39.4%	4	5.6%	1	1.4%
Using work-based learning activities for								
learning purposes	0	0%	9	12.7%	53	74.6%	9	12.7%
Provide opportunities to engage learners								
in gathering information to look for	2	2.9%	7	10.1%	44	63.8%	16	23.2%
possible solution								
Provide questions that prompt students								
to consider alternatives and implications	0	0%	3	4.3%	43	62.3%	23	33.3%
of their ideas								
Provide opportunities for students to								
choose and implement the best	3	4.3%	7	10.1%	47	68.1%	12	17.4%
alternative								
Encourage learners to re-evaluate their								
results and findings	1	1.4%	6	8.7%	41	59.4%	21	30.4%
Using demonstrations in my teaching	0	0%	12	16.9%	52	73.2%	7	9.9%
Learners sit in rows with me standing in								
front of the class teaching	3	4.2%	24	33.8%	24	33.8%	20	28.2%
Learners do presentations in groups	2	2.8%	26	36.1%	39	54.2%	5	6.9%
Learners are grouped together with								

other learners of similar ability	29	42.0%	25	36.2%	12	17.4%	3	4.3%
Learners are grouped together with								
other learners of different abilities so as	12	17.1%	8	11.4%	35	50.0%	15	21.4%
to help each other								
Questioning and answering techniques								
during my teaching	2	2.8%	6	8.3%	37	51.4%	27	37.5%
Try and draw out answers from learners							11 E/1987	
rather than giving them answers	0	0%	3	4.3%	33	47.8%	33	47.8%
Give students an opportunity to conduct								
self assessment	2	2.9%	13	18.6%	45	64.3%	10	14.3%
Provide the students with an opportunity					***************************************			
to recognise their own failings	0	0%	8	11.4%	45	64.3%	17	24.3%
Share my teaching experiences during								
reflective sessions with my colleagues	7	9.9%	18	25.4%	34	47.9%	12	16.9%
Viewing video recordings of my own								
teaching to improve my teaching skills	40	66.70/	20	27.00/	4	5.60/	0	007
· · · · · · ·	48	66.7%	20	27.8%	4	5.6%	0	0%
Land Control of State of the Control				10000				
Inviting other teachers to observe my								
classroom teaching	29	40.3%	32	44.4%	6	8.3%	5	6.9%
Give students questionnaires to								
complete at the end of the term	15	20.8%	14	19.4%	18	25.0%	25	34.7%
regarding their learning and my teaching							•	

Make learners seek alternative								
solutions to problems	2	2.8%	11	15.5%	49	69.0%	9	12.7%
Ask learners to compare and	n wiles							
contrast two competing ideas or	4	5.6%	20	27.8%	40	55.6%	8	11.1%
viewpoints								
Seek theoretical basis of or			· · · · · · · · · · · · · · · · · · ·					
underlying rationale for answers	2	2.9%	16	22.9%	36	51.4%	16	22.9%
provided		·				·		
Point out other possibilities to								
learners to stimulate their thinking	0	0%	6	8.5%	44	62.0%	21	29.6%
Provide a less structured learning								
environment that prompts students	3	4.3%	22	31.4%	39	55.7%	6	8.6%
to explore what they think is vital								
Provide explanations to guide							<del></del>	
students though processes during	0	0%	6	8.5%	51	71.8%	14	19.7%
explorations								
Provide enough time for students								
to reflect on their experiences	1	1.4%	25	35.2%	34	47.9%	11	15.5%
Provide emotionally supportive								
environment	0	0%	7	10.0%	44	62.9%	19	27.1%
Prompt reviews of the learning								
situations, what is known, what is								•
not yet known and what has been	1	1.4%	8	11.6%	42	0.9%	18	26.1%

learned		9						
Provide authentic tasks involving								
ill structured data to encourage								
reflective thinking during learning	6	8.8%	19	27.9%	36	52.9%	7	10.3%
activities								
Prompt students' reflection by								
asking questions that seek reasons	1	1.4%	13	8.3%	41	57.7%	16	22.5%
and evidence			27			E .		
Provide a social learning								
environment such as is inherent in								
peer group works and small group	2	2.8%	18	25.4%	38	53.5%	13	18.3%
activities to allow learners to see								
other points of view								
What happens in class is more								2
than what I have planned	1	1.4%	27	38.0%	38	53.5%	5	7.0%

# 4.2.2.4 Assessment Methods

In Figure 4 below the percentage of responses to each listed method of assessment is shown. The percentages total more than 100% as multiple responses were permitted. The most commonly used method of assessment was tests, theory and practical examinations (35%) as well as case presentations (35%). This was followed by problem solving activities (33%), and assignments forming part of the assessment (29%).

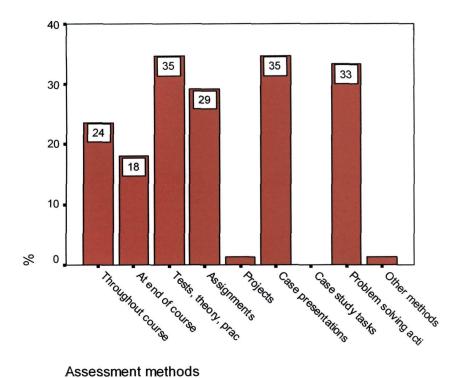


Figure 4: Percentage of responses to each method of assessment

Table 7 shows that the first two questions were frequently asked of learners, but the other questions were not frequently used.

The findings indicate that 73 (85%) of the nurse educators evaluate what learners have learned in their sessions; 33 (47.8%) evaluate students' preparation for class and 41 (58.6%) evaluate students' participation in the classroom.

Table 7: Responses to: "How often do you ask learners the following?"

	Never		Seld	om	Oft	en	Always	
	Count	%	Count	%	Count	%	Count	%
Thates	Freq		Freq		Freq		Freq	
What have you learned in this								
session?	2	2.8%	7	9.7%	44	61.1%	19	26.4%
How much have you learned in								
this session?	2	2.8%	16	22.5%	30	42.3%	23	32.4%
Why do you say you have								
learned in this session?	15	23.1%	15	23.1%	23	35.4%	12	18.5%
What has helped you to learn								
successfully in this session?	18	26.1%	10	14.5%	32	46.4%	9	13.0%
What would you do differently			-					
in preparation for class?	13	18.8%	23	3.3%	27	39.1%	6	8.7%
What would you do differently								
regarding your classroom	14	20.0%	15	21.4%	34	48.6%	7	10.0%
participation								

# 4.2.2.5. Reasons for selecting the strategies they used for teaching

Reasons for nurse educators using the strategies they chose were explored in the questionnaire.

Responses are described below in Table 8.

For the purpose of reporting on these findings, the following were grouped-: Promotes problem solving skills / higher order thinking skills + Promotes problem solving skills + Promotes

development of higher order thinking skills + Promotes development of higher order thinking skills + Enhances development of decision making skills + Stimulates learners to think through unfamiliar situations.

21 (29.5%) were positively inclined towards reflective teaching.

A total of 19 (26.7%) indicated that the nurse educators encouraged learners to participate actively in dialogue and discussions which is indicative of reflective learning.

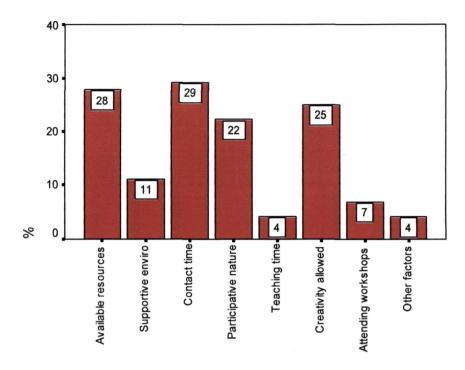
Table 8: Reasons why participants selected the strategies they used for teaching

	Frequency	Percent		
Facilitates integration of knowledge	13	18.3		
Other reasons	13	18.3		
Promotes problem solving skills / higher order thinking skills	12	16.9		
Encourages active participation in class/ promotes self directed	7	9.9		
learning				
Engages students in a dialogue/ facilitates integration of knowledge	5	7.0		
Learners are able to recall information	4	5.6		
Promotes problem solving skills	3	4.2		
Encourages active participation in class 3				
Promotes master learning	2	2.8		
Promotes development of higher order thinking skills	2	2.8		
Enhances development of decision making skills	2	2.8		

I able to engage my class in a dialogue during the teaching	2	2.8
Stimulates learners to think through unfamiliar situations	2	2.8
Promotes self directed learning	1	1.4
Total	71	100.0

# 4.2.2.6. Factors facilitating the promotion of reflective thinking

Several factors were identified as promoting reflective thinking. The percentage of respondents who indicated each factor is shown in Figure 4. Note that the total percentage may be greater than 100% as participants often indicated more than one factor. Sufficient contact time with learners was the most frequently indicated factor for promoting reflective thinking 21 (29.2%), while available resources was a close second 20 (27.8%). The fact that creativity was encouraged 18 (25%) was also an important factor, as was the participative nature of the learners 16 (22.2%).



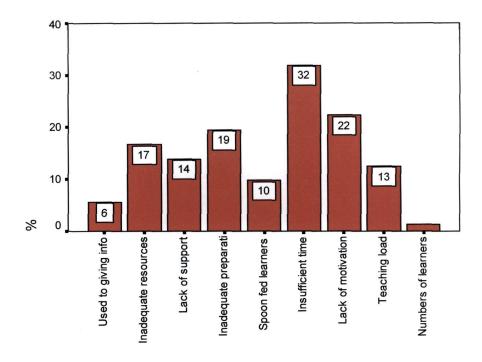
Factors that facilitate reflective thinking

Figure 5: Factors which facilitate the promotion of reflective thinking

# 4.2.2.7. Factors that hinder reflective thinking

According to the findings in this study, insufficient time allocated to teaching periods, a lack of motivation, inadequate preparation and a lack of support were the factors that hindered the promotion of reflective teaching.

Figure 5 shows that insufficient time was the factor most often blamed for hindering reflective thinking 23 (31.9%). This was followed by lack of motivation from staff 16 (22.2%), and inadequate preparation 14 (19.4%).



Factors that hinder reflective thinking

Figure 6: Factors which hinder the promotion of reflective thinking

# 4.2.2.8. Factors associated with use of reflective thinking teaching strategies

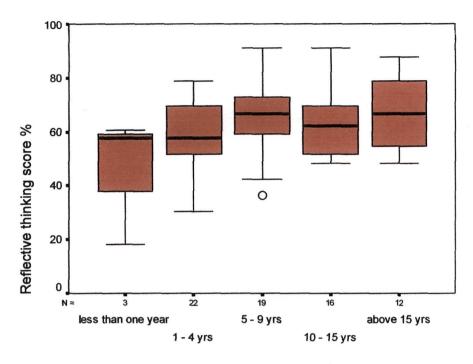
In order to answer this question, ANOVA was used to test the hypothesis that the mean score for reflective thinking teaching was associated with certain demographic factors. The factors chosen were length of time working as a nurse educator, and the programme that they are teaching.

Null hypothesis: Time working and experience as a nurse educator does not affect reflective thinking teaching practices.

The mean score for reflective thinking teaching showed a difference between the categories of time having worked as a nurse educator. Those who had worked as a nurse educator for less than a year had the lowest mean score (45.45) meaning that they did not use reflective thinking techniques a lot in their teaching. The mean score increased as experience increased in general, and was highest in those with the most experience -above 15 years (66.92). Figure 4 shows this trend graphically.

Table 9: Mean reflective thinking score by experience category.

Working as a nursing			
educator	Mean	N	Std. Deviation
less than one year	45.45	3	23.667
1 – 4 yrs	58.95	22	13.862
5 – 9 yrs	63.00	19	13.498
10 – 15 yrs	61.36	16	11.632
above 15 yrs	66.92	12	13.519
Total	61.32	72	13.933



Working as a nursing educator

Figure 7: Boxplot of reflective thinking score by experience

Table 10 shows the results of the ANOVA test which was used to compare the mean score between the experience categories. There was no significant difference overall between the experience categories (p=0.148). Thus the null hypothesis is not rejected, and the conclusion is that experience does not affect reflective teaching score. However, in the light of the trend observed in Table 9, it is possible that a type II error was made due to low statistical power (small sample size).

Table 10: ANOVA test to compare mean score between experience categories

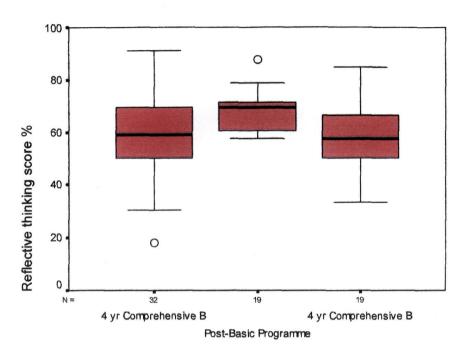
Sum of Squares	df	Mean Square	F	p value
1308.145	4	327.036	1.756	0.148
12475.015	67	186.194		
13783.160	71			
	1308.145 12475.015	1308.145 4 12475.015 67	1308.145 4 327.036 12475.015 67 186.194	1308.145 4 327.036 1.756 12475.015 67 186.194

Null hypothesis: The programme they teach on does not affect the reflective thinking teaching practices of nurse educators.

The mean score for reflective thinking teaching showed a difference between the programmes that the nurse educators were teaching on. Those who were working on the Comprehensive Basic Programme had lower mean scores (59.38 and 58.53%) than those working on the Post Basic Programme (67.62%). Figure 5 shows this trend graphically.

Table 11: Mean reflective thinking score by programme.

			Std.
Teaching Programme	Mean	N	Deviation
4 yr Comprehensive Basic Nursing Programme	59.38	32	16.452
Post-Basic Programme	67.62	19	7.696
4 yr Comprehensive Basic Nursing Programme and Enrolled	58.53	19	13.516
Nursing Programme			
Total	61.39	70	14.126



Teaching programme

Figure 8: Boxplot of reflective thinking score by programme

Table 12 shows the results of the ANOVA test. The p value was 0.075, thus the null hypothesis was not rejected, and the conclusion was that there was no real difference in mean score between the three groups. However, it is possible that the type II error was made, since the differences in mean score between the groups was fairly large (Table 11).

Table 12: ANOVA test to compare mean score between programme

	Sum of Squares	df	Mean Square	F	p value
Between Groups	1023.344	2	511.672	2.690	0.075
Within Groups	12744.989	67	190.224		
Total	13768.333	69			

Therefore none of the factors associated with using reflective thinking teaching strategies in this study were statistically significant. However, the study may have been underpowered due to small sample size and type II errors were a possibility. The differences in use of reflective thinking teaching strategies observed between the groups may have been important, yet the study failed to detect them as statistically significant.

Nurse educators were asked to give their views about what could be done to assist nurse educators to promote reflective thinking in their teaching practice. Only 40 of the 72 participants answered this question.

#### Responses were as follows:

- Nurse Educators should attend workshops and in-service training on reflective thinking.
   There should be increased support from management
- Change the attitudes of learners and break the cycle of being "spoon-fed" and promote
   problem-based learning and case studies so that learners participate actively.
- Tutors should not only focus on the covering the topics for examination purpose.

- Certain subjects like Anatomy and Physiology only lend themselves to lecture method.
- Allow Nurse Educators to specialise in this method of teaching rather than teach across the board.
- Learners should be given topics to present so that they have sufficient time to do case studies and apply reflective thinking during class sessions.
- Learners should not be used as workforce in the clinical area and the main focus should be on the educational development of the learner – in this way reflective thinking can be promoted amongst learners.
- More teaching time be allocated because it was felt that 45min per period is insufficient to complete the theory and allow the learner to reflect on past experiences.
   Alternatively a decrease in the workload or an increase in the number of nurse educators would mean that sufficient time could be spent on reflection.
- Study Guides should be made available so that learners and Nurse Educators were able to spend more time in reflective thinking.

# **CHAPTER 5**

# 5. <u>DISCUSSIONS OF FINDINGS, RECOMMENDATIONS AND</u> CONCLUSION

#### **5.1 INTRODUCTION**

This chapter presents a discussion of the most significant findings of this research study, the conclusions drawn, as well as the recommendations made for nursing education and for further research. The purpose of the study was to explore and describe how reflective thinking is promoted by nurse educators in a nursing college in KwaZulu-Natal. The research objectives were:

- a) to identify teaching strategies used by nurse educators to promote reflective practice; b) to analyse the characteristics of the strategies used to promote reflective practice;
- c) to identify factors that facilitates the promotion of reflective practice in nursing education;
- d) to identify factors that hinder the promotion of reflective practice in nursing education and;
- e) to determine how the conditions that encourage promotion of reflective thinking in nursing education could be improved.

The findings will be discussed in relation to the research objectives and the conceptual framework used in this study as well as the literature and previous studies on this topic.

#### **5.2 DISCUSSIONS OF THE FINDINGS**

In this study, the majority of nurse educators indicated their use of some teaching strategies that facilitated the promotion of reflective teaching. However, it seemed that the increased workload and the calibre of students who are not able to cope with self-directed learning, placed an immense strain on the nurse educators. About 61% of the nurse educators' teaching philosophy supports the promotion of reflective teaching and the majority viewed teaching as a life-changing process, teaching learners and raising learners' consciousness. Many nurse educators stated that the purpose of education was to develop learners academically, personally and professionally. This is in line with the views of the proponents of Constructivists theory, according to Constructivists 'making meaning' is the goal of the learning process; it requires articulation and reflection on what we know.

A small percentage believed that teaching was the transmission of worthwhile bodies of knowledge. Contradictory to this, authors Jonussen, Davidson, Collins, Campbell and Haag (1995) are of the opinion that reflection is an important teaching strategy that may enhance, develop insight, heighten cognitive awareness and engender personal transformation.

Statistically significant was the finding when comparisons were made of the experience of nurse educators. It emerged in this study, that nurse educators teaching the Basic Nursing Programme had a lower mean score than those teaching the Post Basic Programmes. This may be attributed to the fact that learners in the Basic Programmes are much younger. This supports the findings by Brookfield (1993) that students under

25 years of age may lack both the cognitive readiness and the experience necessary for mature critical reflection.

# 5.2.1 STRATEGIES USED TO PROMOTE REFLECTIVE THINKING

As noted in the study, a fairly high percentage of nurse educators used the lecture method as the teaching strategy and textbooks as the main source of information. About 92.9% of the participants in the study also indicated that they encouraged learners to memorise information. As suggested by Freire, (1972), there is a need for educators to move away from the 'banking' mode of teaching to a problem solving approach, drawing on experiences and knowledge developed both in and out of school. As stated by authors Syrijala (1996) and Tom (1985) this can only occur when teachers and learners engage in dialogue which emancipates learners to experience higher levels of learning and learn to reflect on their experiences. However, the lecture method is recommended when introducing new concepts or teaching beginning learners, but not withstanding the above views 92.9% is a relatively high response rate. The other rationale for using the lecture method may be attributed to the fact that some students write the South African Nursing Council Examination (content-driven curriculum) namely Bridging Programme and Nurse Educators attempt to push or cover large content.

However a number of teaching strategies assumed to promote reflective thinking were reported to be used, for example case presentations, problem-solving exercises, case studies, work-based learning projects, group discussions, reflective sessions, small group, peer group learning, group presentations which are conducted by giving presenters the opportunity to reflect on how they prepared for class and how they presented the information to a group.

What emerged in the analysis of the teaching strategies is that a significant percentage of nurse educators utilised strategies that promoted reflection, namely, encouraged learners to step back;

- think about how to solve problems and what they would do differently in future;
- provided opportunities to engage learners in gathering information to look for possible solution;
- provided questions that prompted students to consider alternatives and implications of their ideas;
- provided questions that prompt students to consider alternatives and implications of their ideas, provided opportunities for students to choose and implement the best alternative and encouraged learners to reevaluate their results and findings.

Though the reflective models were not utilised in the cyclic process as presented in the experiential models of Dewey, Schon, Kolb, Driscoll and Gibbs, it is not very clear if all the steps of these models were applied. However, the participants still used these strategies help to connect past experiences to new content through the process of reflection,

Studies by Hunt (1996) and Smith and Russel (1991) support the use of case studies and case presentation as they promote reflective thinking. However, Lee and Sabitino (1998) and Ecclestone (1996) do not share the same opinion. They state that classroom should be more practice-oriented. Burnard (1991) reported that case studies proved to be far more time-consuming than expected, but the strength of this lies in the depth of information that can be explored.

About 79.7% of the respondents in this study indicated that they encouraged learners to step back, think about how to solve problems and what to do differently in the future. This is supported by Bengtsson (1994) and Molander (1993), also echoed by Kolb (1984), that in the process of learning, the actor becomes more detached from the action, moves to the role of reflective observer, creating a new form of experience that becomes the subject for reflection at each stage of the cycle. Schon (1987) in describing Reflection-on -action recommends the use of reflective diaries to record observations which allows one to step back from that practice, see patterns over time and to come to better conclusions and about how they might proceed.

About 78.5% of respondents also indicated that they encouraged learners to use problem-solving activities and encouraged them to provide reasons based on their personal judgement and another 95.9% probed learners instead of giving them answers and asked them to give reasons for their responses. To support this theory reference is made to Freire's work, where he places emphasis on problem posing and dialogue and Duckworth (1983) who engaged learners in dialogue to emancipate students to experience higher levels of learning.

### 5.2.2 <u>CHARACTERISTICS OF THE STRATEGIES USED TO PROMOTE</u> REFLECTIVE PRACTICE

It is evident from the responses that nurse educators do use teaching strategies that promote reflective thinking namely;

- encourages active participation from learners;
- it facilitated integration of knowledge;

- encourages collaborative learning (eg group discussions and conducting self-evaluation at the end of each session);
- it promotes problem-solving skills;
- promotes higher order thinking skills;
- enhanced decision-making skills; learners engage in dialogue and teachers are facilitators of learning who probe and apply problem-posing questions.

These findings are in keeping with research studies and the views of authors. Ojanen (1993) support the idea of teachers as being coaches/facilitators. Carrol et al. (2002) noted the importance of reflection' suggested the inclusion of critical thinking and problem-solving within the curriculum and Mezirow, (1991) stated that reflection is a complex task which necessitates the use of higher order mental processes such as inferences, generalisations, analysis, discernment and evaluations as well as feeling, remembering and problem-solving.

The majority of the participants indicated that they presented learners with scenarios to analyse, provided less structured learning environment that prompted learners to explore what they thought was vital, provided emotional support and a socially supportive learning environment such as peer group and small group activities to allow learners to see other points of view. As stated by Schon (1988), the development of reflective practice cannot be left to chance, therefore part of the coaching function is to create and develop practicums in which this integration can be developed. He further adds that the onus is on the teacher to control structure and order the learning environment using his or her expert knowledge.

# 5.2.3 FACTORS THAT FACILITATE THE PROMOTION OF REFLECTIVE PRACTICE

Only 21 respondents (29.2%) indicated that sufficient contact time with learners was a factor which facilitated the promoting reflective thinking while available resources was a close second 20 (27.8%). The fact that creativity was encouraged 18 (25%) was also an important factor, as was the participative nature of the learners 16 (22.2%).

A relatively small percentage (38.2%) of the participants encouraged learners to keep diaries in which they reflected on their own learning. Theory and research support the concept that learning is improved and memory is enhanced when memory elaborates information. Yinger and Clark (1981) argue the importance of the cognitive activity involved in writing reflective journals. They are of the opinion that it allows one to express knowledge in a form different from what was originally represented in memory. Authors, Clarke (1986), Kemmis and McTaggart (1988), Maas (1991), Gore (1991) and many others have advocated the use of reflective journal writing. Maas felt that journals forced thought into a given form and Roderick (1986) stated that writing dialogue journals enables persons to solve problems, develop a sense of audience and share personal meanings.

Fisher (1996) states that journal writing acts as a reminder and a more in depth analysis of what went on in practice. The efficacy of journaling is similarly praised by Kolb (1984) and Schon (1983) particularly noted the usefulness of having a written account of the experiences upon which to build strategies for future action. Cartwright (1997), Journal allows learners to

converse with the situation and make inferences which are often drawn from previous experiences (Cartwright 1997). For these reasons, journal writing and diaries have proven to be particularly effective in developing reflective teaching.

# 5.2.4 <u>FACTORS THAT HINDER THE PROMOTION OF REFLECTIVE</u> PRACTICE

Insufficient time was the factor most often blamed for hindering reflective thinking 23 (31.9%). This was followed by a lack of motivation from staff 16 (22.2%), and inadequate preparation 14 (19.4%).

Participants also indicated that large numbers of learners and increased workload hindered the promotion of reflective thinking in the classroom. It seems that these problems are not uncommon, this is supported by Foley (1995) and Millar (1991) who state that teaching strategies promote critical reflection are labour intensive. Teachers complained that about the large class size, insufficient time, busy work schedules and the demands of the curricula which all made it difficult to use teaching strategies which promoted reflective thinking. According to Schon (1987), there are numerous institutional constraints that increase the complexity of teachers' work such as the lack of time, high teacher-pupil ratios, and pressure to cover a required and broadly defined curriculum. The point often made is that teachers do not have the time to reflect because of the necessity for them to act quickly in this fast-paced and constraining environment. This aspect is strongly supported by James and Clarke (1994) and Scanlan (1995) that nurses require time to reflect and training in reflection. Atkins and Williams (1995) and Haddock (1997) endorse that lack of training is clearly responsible for the

nurse educators' lack of knowledge and skills on both how to reflect and how to assist students to reflect. One very important and significant point raised by Ramsamy (2002) was the issue of dealing with language inadequacy. This is current and relevant to the present day dilemma in the province of Kwa Zulu-Natal.

### 5.2.5 CONDITIONS THAT ENCOURAGE THE PROMOTION OF

#### REFLECTIVE THINKING IN NURSING EDUCATION

In response to the open – ended question, participants expressed their views of what should be done to promote reflective thinking in the institutions. In addition to those factors mentioned in the last paragraph, participants expressed the need for workshops, in-service training on reflective thinking and the need for a change in attitude of learners to participate actively in class rather than be 'spoon-fed' These issues have also been expressed by authors over the past decade, and a growing interest in teacher preparation programs has been noted (Berliner, 1984; Beyer and Zeichner, 1985; Koehler, 1985; Calderhead, 1988; Doyle, 1985; Lasley, 1980 and Stone,1987). This is also supported by Rich and Parker (1975) that tutors and students need to be supported and prepared for structured reflection in the classroom and clinical areas.

#### **5.3 RECOMMENDATION**

Reflective practice is a mode that integrates or links thought and action, involves critically thinking about and analyzing one's action with the goal of improving one's professional practice. Reflective thinking is an important skill that nurse educators need to possess in order to develop critical thinkers and problem solvers. While limited knowledge may restrict the use

of reflection, or at least the ways in which it is used by the less experienced, the complexity of the skills should not be seen as a barrier.

#### **5.3.1 TEACHING PRACTICE**

Engaging in reflective practice requires individuals to assume the perspective of an external observer in order to identify the assumptions and feelings underlying their practice and then to speculate about how these assumptions and feelings affect practice which was reported by some nurse educators. Learners need to obtain information to gain knowledge, but in order for information to be transformed into knowledge, there has to be a shift to a higher cognitive and affective understanding. Reflective journal writing and documentations in diaries allow learners to achieve this. As noted in this and previous studies, writing reflective journal and diaries were an effective strategy to promote reflective thinking and learners should be encouraged to keep diaries and journals in which they could document their experiences and reflect on them for future practices.

Journal and reflective learning diaries can assist students with exploring different options for handling daily experiences.

The use of group discussions, role plays, simulations and case studies also emerged in this study as strategies that were utilised to promote reflective thinking in learners. There is a need for all nurse educators to take cognisance of these and move away from the traditional lecture method. Nursing students should be encouraged to think critically and reflect on their actions so as to improve on their practices in future similar situations.

As stated by Pugach (1990), reflective practice requires teachers to intentionally engage students in dialogue, modelling the process and making them become consciously aware of reflective learning. Nurse educators need to promote reflective thinking in the classroom and in the clinical learning environment so that they can engage in reflective practices. Learner-centred collaboration and learning environments that enhance reflexive awareness facilitate knowledge construction are necessary. Students and teachers can build meaning, understanding and relevant practice together and go beyond the mere movement of information from instructor's mind to student's notebook to bedside nursing.

The process of reflection has the potential to encourage the reframing of a clinical circumstance. Nurse educators also need to utilise these and other strategies that best suit the content and at the same time promote reflective thinking.

#### 5.3.2 CURRICULUM DEVELOPMENT

The profession is on the threshold of major changes in the educational system and there has never been a more favourable opportunity to rethink all aspects of education. One such challenge would be utilise teaching strategies that would promote reflective thinking abilities amongst nurse practitioners.

Literature reviews and previous studies indicate the need for the inclusion of reflective teaching in the curriculum, but the researcher notes that this is a skill that nurse educators need to develop and not a content that needs to be included into the curriculum. This is supported by Carroll et al. (2002), that rather than isolate reflection as a distinct topic, the skills of reflection,

critical thinking, problem-solving and self-awareness be considered as important teaching strategies.

#### 5.3.3 STAFF DEVELOPMENT AREAS

A very significant request from a large percentage of respondents in this study was that they needed the support from management to ensure the facilitation of reflective thinking in classroom teaching and to provide in-service education, workshops and seminars that would provide some form of developing skills in reflective thinking skills. Nurse educators do need to be adequately prepared and equipped with the knowledge to facilitate reflective thinking.

Reflective teaching practices can be adapted into students' classroom teaching to assist with the bridging the gap between theory and practice.

However, what emerged significantly in this study is that there was no self-evaluation and a very small percentage invited peers to observe their classroom teaching. It must be noted that colleagues can provide feedback on performance that can be used to aid in professional development. The process of peer observation not only aids in personal reflection, but also reinforces the idea that teaching is about dialogue and learning from experience.

#### 5.3.4 RESEARCH

Research studies indicate the importance of reflective teaching and reflective practices in nursing. What emerged in this and previous studies is the need for nurse educators to take cognisance of the importance of determining appropriate teaching strategies that would aid in developing reflective thinking skills amongst learners.

#### **5.4 CONCLUSION**

In the historical roots of reflective thinking, it is important to note that early 20<sup>th</sup> Century educational philosopher Dewey made major contributions to educational thinking, and was one of the first educational theorists in the United States to view teachers as reflective practitioners, who as professionals can play important roles in curriculum development and educational reform. Building on the work of Dewey (1933), Donald Schon (1983, 1987) concentrated on the understanding and use of reflective practice in several fields.

It is evident that there are limiting factors that hinder the promotion of reflective thinking in classroom teaching, but as nurse educators we need to persevere and overcome the challenges to make a difference and improve the status quo. By gaining a better insight into and understanding of their own individual teaching styles through reflective practice, teachers can improve their effectiveness in the classroom.

Many researchers have, thereafter conducted studies on the issues of reflective thinking and reflective practices which has added considerable value to world of education. In this study, the researcher attempted to address the promotion and facilitation of reflective thinking in nursing education institution. The findings concluded from this study provide valuable information which could aid and assist nurse educators.

The majority of the nurse educators in the nursing colleges used in the study did indeed utilise teaching strategies that promoted reflective thinking and reflective practice. However, becoming a reflective practitioner requires time, practice and a supportive environment Teaching students to develop self-conscious habits of reflectiveness in order that they might ultimately become intuitive is critical to education and training. The important point to remember is that reflective practice is aimed at improving practice by consciously becoming aware of it. Reflection is more than just thinking, it is an intentional activity that focuses on improving future actions in clinical practice. Nurse educators therefore need to plan reflective exercises as part of their instruction. It gives the practitioners the opportunity to stop, think and legitimise their actions.

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### ANNEXURE A

**QUESTIONNAIRE** 

#### **QUESTIONNAIRE**

#### **RESEARCH TITLE:**

## HOW NURSE EDUCATORS PROMOTE REFLECTIVE THINKING IN A NURSING COLLEGE IN SOUTH AFRICA

## **SECTION A: DEMOGRAPHIC DATA**

How long have you been working as a nurse educator?

(Tick in a box)

Less than 1 year	
1 – 4 years	
5-9 years	
10-15 years	
Above 15 years	

### In which programme are you teaching?

4 Year Comprehens	ive Basic Nu	irsing Programme		
Post-basic Programm	ne			
Other (Specify)	ı			

## **SECTION B**

## Tick the most appropriate response

<u>what do you view as teaching (lick in a box – You can tick more than on</u>	<u>e item)</u>
1. Transmitting worthwhile bodies of knowledge to learners	
2. As a life changing process personally, academically and professionally	
3. Raising the learners consciousness to the wider social, cultural and political	
environment that impact on the health of individuals	
4. Teach learners how to learn	
5. Developing learners academically and professionally	

## Please rate yourself in the following teaching practices

	Always	Often	Seldom	Never
6. I use a lecture method when teaching			`	
7. I use textbooks as the main source of information				
8. I provide learners with opportunities to work or learn	n			
in groups				
9. I encourage learners to examine their attitudes, belie	f			
and assumptions about their practices				

	Always	Often	Seldom	Never
10. I encourage learners to step back, think about how				
they actually solved a problem and what they would		v		
do differently in future				
11. I use classroom activities that are relevant to real				
world situations			>	
12. Students collect information about certain cases and				
present those cases in class or to tutors				
13. I use simulations for learning purposes				
14. I use textbooks as one of the sources of learning the				
content				
15. I encourage learners to use textbooks to ground their				
arguments during group discussions				
16. I use case studies drawn from real life cases				
17. I encourage learners to memorize facts from				
textbooks				
18. I use work based learning activities for learning				
purposes				
19. Provide opportunities to engage learners in gathering		,		
information to look for possible solutions				
20. Provide questions that prompt students to consider				
alternatives and implications of their ideas				

	Always	Often	Seldom	Never
21. Provide opportunities for students to choose and				
implement the best alternative		36		
22. Encourage learners to reevaluate their results and				
findings				r.
23. I encourage learners to link their present learning to		-		
their past experiences				
24. I give students an opportunity to assess their				
performance an come up with ways of improving				
their learning				
25. I use group projects in my teaching				
26. I use demonstrations in my teaching				
27. I use ethical dilemmas for teaching purposes				
28. I use role-play in teaching				
29. Learners sit in rows with me standing in front of the				
class teaching				
30. Learners work together in groups, talking, sharing				
ideas and working out answers			0	
31. Learners do projects or presentations in groups				
32. Learners are grouped together with other learners of				
similar ability				
33. Learners are grouped together with other learners of				
different abilities so as to help each other				

	Always	Often	Seldom	Never
34. I question and answer techniques during my teaching				
35. I try and draw out answers from learners rather than				
giving them answers				
36. I give students an opportunity to conduct self				
assessments				
37. I provide students with an opportunity to recognize				
their own failings				
38. Share my teaching experiences during reflective				
sessions with my colleagues				
39. I view video recording of my own teaching to				
improve my teaching skills				
40. I invite other teachers to observe my classroom				
teaching				
41. I give students questionnaires complete at the end of				
the term regarding their learning and my teaching				
42. I use cross curricular themes-topics instead specific				
subjects				
43. I use teaching strategies encouraging learners to take				
an active role in their learning				
44. Students keep diaries in which they reflect on their				
own learning				

	Always	Often	Seldom	Never
45. I use problem solving activities where I				
encourage learners to provide reasons based on				
their personal judgement				
46. I encourage learners to give reasons for their				
decisions				
47. I probe learners instead of giving them answers				

## How often do you ask learners the following?

	Always	Often	Seldom	Never
48. What have you learned in this session				
49. How much have you learned in this session				
50. Why do you say you have learned in this session				
51. What has helped you to learn successfully in this				
session				- 10
52. What would you do differently in preparation for				
class				
53. What would you do differently regarding your				
classroom participation-contribution				

## How often do you do the following?

	Always	Often	Seldom	Never
54. Present learners with scenarios to analyze				
55. Make learners seek alternative solutions to				
problems				
56. Ask learners to compare and contrast two				
competing ideas or viewpoints				
57. Seek theoretical basis of or underlying rationale				
for answers provided				
58. Point out other possibilities to learners to				
stimulate their thinking				
59. Provide less structured learning environment that				
prompts students to explore what they think is				
important				
60. Provide explanations to guide student's thought				
processes during explorations				
61. Provide enough time for students to reflect on				2
their experiences				
62. Provide emotionally supportive environment				
63. Prompt reviews of the learning situations, what is				
known, what is not yet known and what has been				
learned				
64. Provide authentic tasks involving ill structured				

data to encourage reflective thinking during learning			A PRESENT
activities			
65. Prompt students reflection by asking questions			
that seek reasons and evidence		i. ' ' '	
66. Provide social learning environment such as			
inherent in peer group works and small group			
activities to allow learners to see other points of view			
67. What happens in class is more than what I have			
planned			

# What are reasons for selecting the strategies you use for teaching (You can tick more than one)

69	
70	
71	
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75	
	-
76	
77	
	70 71 72 73 74 75

78. Stimulates learners to think through unfamiliar situations	78
79. Facilitates integration of knowledge	89
80. Other reason(s) Specify	80
	10.7010101
How do you assess that learning has taken place (You can tick more to	han one)
81. Continuously throughout the course	81
82. Mainly at the end of the course	82
83. Mainly through tests, theory and practical exams	83
84. Assignments form part of assessment	84
	85
<ul><li>84. Assignments form part of assessment</li><li>85. Projects either individual or group projects form part of assessment</li><li>86. Students do case presentations</li></ul>	
85. Projects either individual or group projects form part of assessment  86. Students do case presentations	85
85. Projects either individual or group projects form part of assessment  86. Students do case presentations  87. Students work on case study tasks and I mark their work	85
85. Projects either individual or group projects form part of assessment 86. Students do case presentations 87. Students work on case study tasks and I mark their work 88. I use problem solving activities or examinations	85 86 87
85. Projects either individual or group projects form part of assessment 86. Students do case presentations 87. Students work on case study tasks and I mark their work 88. I use problem solving activities or examinations 89. Other methods or ways of assessment	85 86 87 88
85. Projects either individual or group projects form part of assessment 86. Students do case presentations 87. Students work on case study tasks and I mark their work 88. I use problem solving activities or examinations 89. Other methods or ways of assessment	85 86 87 88
85. Projects either individual or group projects form part of assessment 86. Students do case presentations 87. Students work on case study tasks and I mark their work 88. I use problem solving activities or examinations	85 86 87 88

## In your institution what facilitates promotion of reflective thinking in teaching

90	
91	······································
92	
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96	
97	
	91 92 93 94 95 96

Specify		

In your institution what hinders teachers from promoting reflective thinking in their teaching

(You can tick more than one).

98. Nurse educators who are used to giving information to students	98
rather than engaging students actively in their learning	
99. Inadequate resources	99
100. Lack of support from other staff members	100
1O1.Inadequate preparation for innovative teaching methods	101
102. Learners who are used to be spoon fed than playing and an active	102
role in their learning	
103. Insufficient time due to the amount of content that has to be	103
covered	
104. Lack of motivation from staff	104
105 Increased teaching load	105
106 Large numbers of learners	106
107 Other	117

Specify					
<del></del>					

108. In your view what could be done in your institutions to assist nurse educators in

promoting reflecting thinking in their teaching.	

#### **DOCUMENT ANALYSIS GUIDE**

#### Documents to be reviewed:

- ⇒ Post-basic and 4 year Comprehensive Basic Nursing Curricula
- ⇒ Course outlines
- ⇒ Lesson Plans

### **Focus of Document Analysis**

- 1. Programme outcomes
- 2. Nature of the curriculum
- 3. Course Outcomes
- 4. Teaching methods used
- 5. Nature of learning experiences
- 6. Methods of assessment
- 7. Conceptual framework

## **ANNEXURE B**

# ANALYSIS OF QUESTION 108 (QUESTIONNAIRE)

#### Analysis of question 108 (questionnaire)

The remaining analysis of items which determined the strategies nurse educators used to promote reflection. The findings were as follows:-

- 59 (94.3%) encouraged learners to examine their attitudes, belief and assumptions about their practices.
- 56 (79.7%) encouraged learners to step back, think about how to solve problems and what they would do differently.
- 65 (91.6%) used classroom activities relevant to the real world situations.
- 55 (77.5%) used simulations and 58 (80.5%) used studies drawn from real life cases and;
- 64 (88.9%) encouraged learners to use textbooks to ground their arguments during group discussions.

Problem-solving and decision - making were also assessed and the responses were as follows:-

- 60 (87%) provided opportunities to engage learners in gathering information to look for possible solution.
- 66 (95.6%) provided questions that prompt students to consider alternatives and implications of their ideas.
- 69 (85.6%) provided opportunities for students to choose and implement the best alternative.
- 62 (89.8%) encouraged learners to re-evaluate their results and findings.
- 66 (91.7%) used teaching strategies which encouraged learners to take an active role in their learning.

## ANNEXURE C

## **INFORMED CONSENT FORM**

INFORMED CONSENT TO PARTICIPATE IN RESEARCH PROJECT CONDUCTED IN PARTIAL FULFILMENT OF A COURSEWORK MASTERS DEGREE IN NURSING EDUCATION.

A research project on HOW NURSE EDUCATORS PROMOTE REFLECTIVE

THINKING IN A COLLEGE OF NURSING IN SOUTH AFRICA is being conducted by

M. Naidoo. The purpose of the study is to explore how nurse educators promote reflective
thinking in nursing education programmes in a college of nursing in South Africa. You are
being asked to take part in this study by completing the attached questionnaire. Completing this
form will take approximately 30 minutes of your time.

Please be aware that participation is voluntary, you are not compelled to participate in this research and you may discontinue your participation at any time. You may also omit any items on the questionnaire(s) you prefer not to answer. There are no foreseen possible risks associated with participation in this study. If you should experience any discomfort during the process of completing the questionnaire you may discontinue. Please be aware that you may contact Mrs M. Naidoo for assistance with the completion of the questionnaire.

Your responses will be provided anonymously to protect your privacy. Potential benefits associated with the study include better understanding of how nurse educators facilitate

reflective thinking in their teaching and your contribution will assist in developing nurse educators in this area of their practice. If you have questions regarding this study or would like to be informed of the results when the study is completed, please feel free to contact Mrs M. Naidoo (031 4596187 / 4596079). If you have questions or concerns regarding the manner in which the study is conducted, you may contact or Dr Mtshali (Research Supervisor) at 031 2602498.

If you agree to voluntarily participate in this research project as described, please indicate your agreement by completing and returning the attached questionnaire. Please retain this consent cover form for your reference.

## ANNEXURE D

## ETHICAL CLEARANCE

## ANNEXURE E

# LETTERS GRANTING PERMISSION TO CONDUCT STUDY

#### PROVINCE OF KWAZULU-NATAL

#### SPECIAL SUPPORT SERVICES

Natalia, 330 Longmarket Street, Pietermaritzburg, 3201 Private Bag X9051, Pietermaritzburg, 3200 Tel.: 033 395 2813, Fax.: 033 345 4433

Enquiries: Ms A. Kopman

Extension: 2813 Reference: 9/2/3/R

17 MAR 2006

Mrs M. Naidoo 90 Falcon Street KHARWASTAN 4092

Dear Madam

#### PERMISSION TO COLLECT DATA

Your letter dated 02 March 2006, refers.

Please be advised that authority is granted for you to collect data regarding "How nurse educators promote reflective thinking in a college of nursing in South Africa" at the following nursing colleges, R.K.Khan Campus, King Edward VIII Campus, Grey's Campus and Addington Campus provided that:-

- (a) Prior approval is obtained from the Heads of the institutions;
- (b) There is no disruption of service delivery;
- (c) Confidentiality is maintained;
- (d) The Department is acknowledged; and
- (e) The Department receives a copy of the report on completion.

Yours sincerely

HEAD: DEPARTMENT OF HEALTH

KWAZULU-NATAL

AJK/m.naidoo

## KZN College of Nursing R.K. KHAN HOSPITAL

3 March 2006

Mrs M. Naidoo R.K. KHAN CAMPUS

### **RE: DATA COLLECTION**

## HOW NURSE EDUCATORS PROMOTE REFLECTIVE THINKING IN NURSE EDUCATION INSTITUTION

- Your letter dated 27 February 2006 refers.
- Permission is hereby granted for the process of data collection from the Nurse Educators of R.K. Khan Campus.

MRS P. NAIDOO
CAMPUS PRINCIPAL

PN/rn Data Collection

## PROVINCE OF KWAZULU-NATAL DEPARTMENT OF HEALTH



# KWAZULU-NATAL COLLEGE OF NURSING

Addington Campus P.O. Box 977 DURBAN. 4000

Telephone: 031-3272999 Fax: 031-3272756

15 March 2006

Mrs M. Naidoo 90 Falcon Street KHARWASTAN 4092

Dear Mrs Naidoo

RE: DATA COLLECTION: HOW NURSE EDUCATORS PROMOTE REFLECTIVE THINKING IN NURSE EDUCATION INSTITUTIONS

Your letter received today refers.

Permission is granted for you to distribute and collect the above instruments among the tutors of this Campus.

Kindly contact me to facilitate the distribution of these instruments.

Yours sincerely

M.A. SISSING (MRS) CAMPUS PRINCIPAL

MAS/mvt

## DEPARTMENT OF HEALTH



## PROVINCE OF KWAZULU-NATAL GREY'S/NORTHDALE CAMPUS

Townbush Valley Road, Montrose, Pietermaritzburg Private Bag X9001, Pietermaritzburg, 3200 Tel.: 033:897:3503 Fax.: 033:897:3500 Email.:mmathebula@dohgreys.kzntl.gov.za

15th March 2006

Mrs. M. Naidoo 90 Falcon Street KHARWASTAN 4092

Re: Data Collection: How Nurse Educators promote reflective thinking in Nurse Education Institutions

Your letter received today refers.

Please note that permission is granted for you to distribute and collect these instruments among Tutors at this Campus.

Kindly contact me to facilitate the distribution of these instruments.

Yours faithfully

NG.Mathebula (Mrs.) Campus Principal



90 Falcon Street KHARWASTAN 4092

27 February 2006

The Principal K.E VIII Campus Congella 4013

Dear Mrs Naidoo

## RE: DATA COLLECTION M. CUR DEGREE

Permission is hereby granted for the collection of data from the Nurse Educators at King Edward VIII Campus towards your M. Cur Degree

I wish you success in your studies

Yours Sincerely

Dr. I. Manaka Mkhwanazi Campus Principal