THE ROLE OF EDUCATORS IN FACILITATING REFLECTIVE LEARNING IN STUDENTS

by

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DECLARATION

I declare that THE ROLE OF EDUCATORS IN FACILITATING REFLECTIVE LEARNING IN STUDENTS is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

25 February 2014

Kannagi Naicker
Full name

Date
ABSTRACT

Over the last 20 years the nursing profession has widely accepted reflective practices and reflective learning as effective measures to help students provide care in a frequently changing context. The purpose of the study was to explore and describe the role of nurse educators in the facilitation of reflective learning in students. The objectives were to explore the reflective teaching practices of nurse educators, describe the learning activities that could promote reflective learning in student nurses and to determine whether the learning environment is conducive to promote reflective teaching and learning. A quantitative, explorative, descriptive study was conducted in nursing education institutions in Gauteng. A total of 121 nurse educators completed a structured questionnaire. The findings revealed that, although nurse educators agree with the importance of reflective practices in the teaching and learning environment they do not necessarily place emphasis on developing their own reflective practices. Reflective learning was not identified as a formal learning approach in the programmes the nurse educators facilitated but the educators did attempt to include reflection in the teaching and learning activities planned. Not enough emphasis is placed on the creation of a teaching and learning environment that will enhance reflection in a non-threatening context. The deeper understanding of reflective learning comes with continued personal reflective practices. Nurse educators should be taught how to facilitate reflective learning activities and how to create an environment conducive to reflection. Through reflective teaching practices students could be supported in developing into critical thinkers hence reflective learning should be a formal teaching and learning approach in nursing curricula.

Key terms:
Reflection; reflective learning; reflective learning environment; reflective practices; reflective teaching.
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Abbreviations

CHE Council for Higher Education
HEQC Higher Education Quality Committee
NEIs Nursing Education Institutions
NQF National Qualifications Framework
SANC South African Nursing Council
SAQA South African Qualifications Authority
Unisa University of South Africa

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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Education, in South Africa and internationally, has undergone much change over the past years, with the focus moving from rote learning to higher-order thinking; from teacher-centred to student-centred approach and from lecturing as a method of teaching to more interactive and participatory methods such as group discussions. Students are required to take responsibility for their own learning, which includes evaluating and assessing their own understanding, actions, experiences and performance. Reflective learning is a learning approach adopted by education institutions, including nursing education institutions, to assist students to effectively review, evaluate and learn from their own learning. This type of learning approach requires the educator to be a facilitator of learning who supports and guides the students in their learning process (Bruce, Klopper & Mellish 2011:111).

According to Rolfe, Jasper and Freshwater (2011:196), “At the heart of a reflective model is the development of knowledge from experience”; that is, the individual tries to make sense of encountered experiences and situations. A reflective “supervisor”, who internalises the need to perform self-assessments by reflecting on own teaching practice, is better able to know when to use certain types of learning activities to help students (Rolfe et al 2011:124).

The researcher sought to conceptualise the assumption that educators are expected to facilitate reflective learning in students, but are not necessarily prepared to effectively deliver learning activities that promote reflective learning. The study also sought to determine the extent to which educators use reflective teaching in their own practice, because reflective teaching is an invaluable approach educators should use to continuously find better ways to improve their practice and assist students in their learning (Jacobs, Vakalisa & Gawe 2011:54). Finally, the study explored the role that education institutions play in promoting reflection.
1.2 BACKGROUND TO THE STUDY

1.2.1 The source of the research problem

The reflective learning approach was introduced at the nursing college where the researcher was an educator, by instituting reflective journals for students. The Gibb’s Reflective Cycle was selected to guide students; each student received a copy of this model with a journal. The researcher discovered that the students did not automatically take to recording their thoughts about nursing and their experiences in the clinical practice area. To expect the students to use reflective learning without the appropriate support and facilitation from their educator was presumptuous. Kolb (cited in Bruce et al 2011:127), in his experiential learning theory, states that reflection is inherent; hence, everyone has the ability to reflect. An individual can change, adopt or alter a learning approach with adequate motivation and facilitation (Bruce et al 2011:129). Students, however, find reflection on actions difficult, mainly owing to lack of experience with the reflective learning process; hence it is the educator’s responsibility to assist and facilitate students to become reflective thinkers. This can be achieved by creating opportunities for the students to experiment with reflection and to learn to reflect effectively (Kuiper, Persut & Kautz, 2009:76).

Simply reading about reflective learning does not equip educators to facilitate reflective learning effectively. The educator needs to practise reflection to gain a better understanding of the reflective process by reflecting on his or her own teaching style and approaches used. This is reflection on action, and will help in assisting students more effectively in their reflective learning. Educators also need to understand the different learning activities that may be used to enhance the students’ ability to learn from reflection (Brockbank & McGill 2007:18) as well as using a wide range of teaching styles that will support and promote reflective learning. The learning environment must be such that it is conducive for students to feel no threat of retribution and be comfortable with reflecting on personal actions and experiences (Taggart & Wilson 2005:6).
1.2.2 Background to the research problem

Over the last 20 years the nursing profession has widely accepted reflective practice and reflective learning as effective measures in developing competent nurse practitioners. In an attempt to help students correlate nursing theory with practice, education institutions have adopted learning by reflection as a learning approach to encourage self-awareness and promote evaluation of own practice (Foster & Greenwood 1998:165; Kuiper et al 2009:76). The aim of education therefore should be to prepare practitioners to apply theory to practice in the real world. Many education institutions identify reflective learning as a learning strategy to attain this goal (Grant, Kinnersley, Metcalf, Pill & Houston 2006:379; Geber & Nyanjom 2009:894).

Like their international counterparts, education institutions in South Africa also promote the development of reflective practitioners (Friedrich-Nel 2010:24; Ross & Kitching 2009:91), based on similar issues of poor integration between theory and practice in nursing. The controlling bodies of nursing education in South Africa (the South African Nursing Council (SANC), South African Qualifications Authority (SAQA) and the Council for Higher Education (CHE)) endorse course outcomes for students that include abilities such as critical thinking, problem solving and lifelong learning. For instance, SAQA (2010:1) provides “level descriptors” that must be met by a student on completion of a qualification. These outcomes are meant to develop the individual as a lifelong learner. Education institutions that introduce reflective learning in their programmes do so with the aim of helping the students meet the stipulated qualification outcomes (Jacobs et al 2011:332). Curricula that adopt reflective learning as part of the learning activities must allow adequate time for reflective activities; otherwise the measure will be pointless, as numerous closely spaced activities will block reflective contemplation. So education institutions that include reflective learning activities in their curricula need to promote a reflective culture within the institution and promote a collaborative environment that encourages reflective practice by all concerned (Platt 2002:33). In order for reflection to be effective as a learning approach, the learning environment should be safe, with no fear of judgement and punishment.

Educators are expected to assist and guide students to reflect on clinical practice with the aim of improving the students’ own performance. To be successful in achieving this, educators themselves must be supported and assisted by colleagues and management
to practise reflection on action, for instance by having group reflective sessions at the education institution (Karban & Smith 2006:4). Educators need to understand the different teaching activities that promote effective reflective learning by the students (Josten 2011:24). Necessary resources should also be readily available to aid in using the teaching activities effectively. Using critical reflective thinking measures in education will be beneficial to both educator and student; however, to ensure effectiveness, the practice of reflection must be developed, facilitated and utilised by both student and educator (Brockbank et al 2002:18; Karban & Smith 2006:4). Without adequate training of educators in the practice of reflection, and understanding the learning activities that promote the development of reflective thinkers, the training of students to use reflection as a learning approach will be limited, and probably neglected, in nursing education (Levett-Jones 2007:112). Educators need to have a strong commitment to developing themselves as reflective practitioners, which will promote their understanding and recognition of the need to structure processes and methods to support reflection and the development of reflective practitioners (Farrell 2004:5). Educators who have practised reflective learning during their own training are more likely to promote reflective learning in their students, because of personal experience and understanding.

In fact, in South Africa the general basic teaching programme includes reflective teaching as an important outcome of the curriculum (Jacobs et al 2011:54); thus the importance of reflective teaching is acknowledged and promoted by teacher training institutions. The educator as a facilitator needs the right attitude and must be open to developing and challenging his or her own beliefs and practices, in order to be successful in facilitating reflective learning. Reflective teaching helps the educators to connect with the students and to find ways to assist students to learn better (Carroll, Curtis, Higgins, Nicholl, Redmond & Timmins 2002:13; Jacobs et al 2011:54–60).

1.3 RESEARCH PROBLEM

The research problem is derived from the focus of the researcher, which in this study is on reflective learning and reflective teaching. Reflective learning plays an important role in helping students to critically analyse and learn from their actions and experiences, and to apply knowledge gained from previous experience to current practice situations and learning activities. Educators need to be skilled in the use of diverse learning activities that are known to encourage reflective learning, such as role playing,
simulation and problem-based learning activities. The educator responsible for facilitating the development of reflective students has to be suitably prepared and supported in this role in order to create and maintain an environment that is conducive to reflective learning (Farrell 2004:36). Educators themselves should regularly practise reflection by reviewing and evaluating their own teaching practices and methods to ensure an optimum and effective learning environment for students.

The question that arose from the above discussion was what the role of the educator within the learning environment is in facilitating reflective learning in students?

1.4 PURPOSE AND OBJECTIVES OF THE STUDY

The overall intention and more specific outcomes the researcher hoped for from the study are as follows:

1.4.1 Research purpose

The purpose of the study was to explore and describe the role of educators in the facilitation of reflective learning in students.

1.4.2 Research objectives

The objectives for this study were to

- explore the reflective teaching practices of educators
- describe the various types of learning activities educators use to promote reflective learning by students
- determine whether the learning environment is conducive to promoting reflective learning and teaching

1.5 SIGNIFICANCE OF THE STUDY

There is a significant amount of literature available on the value of reflective learning as a learning approach (Bruce et al 2011:143–154; Kuiper et al 2009:76; Thorpe 2004:327). There are a number of studies on the value of reflective teaching (Farrell
2004:5; Karban & Smith 2006:4; Levett-Jones 2007:112). However, the researcher had difficulty in finding information on the views of educators, specifically nurse educators, on the value of reflective teaching on their own practice, as well as in facilitating reflective learning by students. By focusing on the reflective practice of educators, this study aimed to contribute data that would provide more understanding of the value nurse educators place on reflective teaching, especially when facilitating reflective learning.

This study may also contribute to the increased awareness by education institutions of their role in supporting and promoting a reflective practice environment and culture. This study could contribute further by providing the information needed to create guidelines to assist educators in their understanding of reflective learning, of the learning activities that may be applied, and the use of reflective teaching to promote reflective learning. Finally, this study may add to the body of knowledge on reflective learning and reflective teaching in education by providing new and relevant information that may assist educators in their practice.

1.6 DEFINITIONS OF TERMS

The following are the key concepts identified in the study:

1.6.1 Learning

The ability to learn is to internalise information obtained and memorise it for future use. The *Oxford Dictionary* (2009:529) definition of *learn* is “gain knowledge or skill through study or experience”. It is an active process of creating knowledge by developing meaning from experiences (Bruce et al 2011:122). Synonyms for learn are to grasp, absorb, take in, familiarise or memorise. Learning therefore refers to the knowledge and/or skills gained from experience and studying (*Oxford Dictionary* 2009:530).

1.6.2 Student

A student is an individual who is in the process of gaining knowledge from formal learning of a subject/s. Synonyms for student are novice, amateur or learner (*Oxford Dictionary* 2009:923). A student generally adopts one or more learning approaches in
the learning process. For the purpose of this study, the term student will be used. Furthermore, in this study the students referred to, will be those registered in the South African Nursing Council programmes R425 and R687 (SANC 1985).

1.6.3 Educator

An educator is a person who teaches at a school or college with the aim of improving the mind and character of the students (Oxford Dictionary 2009: 294, 953). Synonyms are teacher, facilitator, and tutor. A nurse educator is a registered nurse who has successfully completed the course of study “Registration of the additional qualification in nursing education” means that the person has complied with all the requirements for the qualification and has current active status with the SANC (SANC 1987). For the purpose of this study, the term educator is used. Furthermore, the educators in this study are those employed at universities and private and public education institutions in the Gauteng Province of South Africa.

1.6.4 Nursing education institution

An education institution is an academic organisation, establishment or school serving to educate the public (Oxford Dictionary 2009: 294, 486). As per the SANC (SANC 2013) a nursing education institution “means a founded establishment or organization consisting of a building or complex of buildings and its associated resources for the specific purpose of offering nursing education and training programmes”. An accredited nursing education institution “means the act of granting credit or recognition with respect to a nursing education institution that complies with the Council’s prescribed accreditation requirements, criteria and standards for nursing education and training”. For the purposes of this study the above definition will apply to the nursing education institution referred to. The terms education institution and nursing education institution may be used synonymously in the study depending on the context and author preference.
1.6.5 Learning approach

A learning approach is a “plan of action” that the student adopts or is assisted with to develop the knowledge, skills and attitude required by the programme of study (Bruce et al 2011:123).

1.6.6 Facilitation of learning

To facilitate is to make something easier, to assist or promote (Oxford Dictionary 2009:334). The educator actively assists the students to participate in their own learning by providing activities that help students to tap into and assimilate existing knowledge and create new knowledge (Bruce et al 2011:111). This type of role by the educator allows the student control and responsibility for learning achieved, with the ultimate aim of individual growth and development and the internalisation of knowledge gained. The educator has to use a variety of teaching and learning activities, resources and opportunities to effectively promote learning, because the educator does not relinquish the responsibility of setting the outcomes and leading the education process (Bruce et al 2011:194). For the purpose of this study facilitation refers to the educator actively assisting students to participate in reflective learning.

1.6.7 Reflection

The Oxford Dictionary (2009:773) definition of reflection states that it is the individual’s “serious thought”. Synonyms are consideration, contemplation, pondering and deliberation. Reflection is a natural process of thinking about one’s experiences, feelings and understandings of a situation (Bowden 2003:28). Everyone has the ability to reflect; the degree of reflection varies from individual to individual. To reflect on a situation, event, idea or thought means that the individual does not jump to hasty conclusions but rather thinks carefully, based on factual information (Bruce et al 2011:155).

1.6.8 Reflective learning

Reflective learning is the articulation of knowledge in a more meaningful way, resulting in the construction of new and deeper understanding of the experience (Ip, Lui, Chien,
Lee, Lam & Lee 2012:253). Reflection is a “natural human thinking process” and reflective learning is a “systematic and deliberate” reflective process with the aim of learning (Carroll et al 2002:13; Grant et al 2006:379). Reflective learning is valuable in helping students, especially adult students, to correct their mistakes and misunderstandings from their previous learning (Thorpe 2004:327). This form of learning is not merely a mental process but involves both cognitive and emotive processes and requires active participation, involvement and commitment from the student, resulting in the student’s acting on convictions and being able to validate own actions by using higher-order thinking processes: that is, at a meta-cognitive level of thinking (Levett-Jones 2007:119). Finally, reflective learning is a learning approach that encourages students to weigh facts by a process of inner dialogue and to draw conclusions based on this review (Bruce et al 2011:143–154).

1.6.9 Reflective practice

Schon (cited in Josten 2011:24) coined the terms “reflection in action” and “reflection on action” to explain the practitioner’s knowledge that is intrinsic to his or her practice. Reflection in action means that the practitioner reflects, while in a current situation, on previous experiences and actions to assist in effectively carrying out the task or action. In reflection on action, the practitioner, after the experience or situation has occurred, thinks back on the related actions, events and feelings and how they were handled or could be handled differently, and the additional knowledge needed to improve future practice. Reflective practice, according to Thorpe (2004:327), is an extension of reflection where the individual thinks deeply about an event, problem or experience, resulting in gaining more knowledge to apply in and improve on practice. A reflective practitioner is therefore an individual who uses reflection as a tool for revisiting experiences to learn from and for making sense of the problems encountered in professional practice (Mann, Gordon & Macleod 2009:595).

1.6.10 Reflective teaching

Reflective teaching is a continuous striving to improve, change or update one’s programme delivery by a process of self-assessment, self-awareness and discussions about one’s practice (Jacobs et al 2011:54–60). Reflective teaching is an extension of reflective practice which involves a teacher/lecturer/educator reflecting on own practice,
in order to improve teaching and assist learners in achieving full potential (Thorpe 2004:327). Reflective teaching is more than correcting one’s mistakes; it is a continuous review of own teaching, both alone and by peers.

1.7 FOUNDATIONS OF THE STUDY

A conceptual framework was used as the theoretical basis of the study.

1.7.1 Conceptual framework

The following framework was established to explain the underlying rationale for this study:

![Conceptual Framework Diagram]

Figure 1.1 Conceptual framework

An educator who is a reflective practitioner will be able to use reflective teaching when facilitating student learning. Reflective teaching will assist educators to facilitate reflective learning by the students (Frick, Carl & Beets 2010:421). A student who is a
reflective learner will be able to reflect on his or her own practice with the aim of developing and improving on knowledge and skills (Richard 2010:24). Students who apply reflective learning in their studies will be able to continue this ability after completing their training as reflective practitioners. The learning environment in which reflective learning and reflective teaching occur must be a non-threatening, non-judgemental environment that supports and promotes reflective practice.

1.8 RESEARCH METHODOLOGY

Research methodology refers to the research design, sampling of data, collection of data, the analysis of data collected and the rigour of the study. An overview of the research design and methods used in this study is given below. Chapter 3 covers a more comprehensive discussion of the research methodology.

1.8.1 Research paradigm

A research paradigm is a set of philosophical assumptions that guide the researcher’s inquiry (Polit & Beck 2012:761). The frame of reference for this study was the positivist paradigm, which focuses on the use of orderly, disciplined procedures with tight controls and an objective view. The research approach selected was the quantitative approach which, according to Polit and Beck (2012:763), is the study of phenomena by way of “precise measurement and quantification involving a rigorous and controlled design”. The quantitative approach supported this study by providing statistical data with regard to the role educators play in facilitating reflective learning.

1.8.2 Research design

Polit and Beck (2012:765) define research design as the overall plan to answer the research question and ensure the study’s integrity. The research design selected for this study was an exploratory and descriptive design.

1.8.2.1 Explorative research design

Explorative research design is used to investigate the nature of a phenomenon, how it manifests itself and the factors related to it (Polit & Beck 2012:20). Babbie (2010:92)
further states that this design is used to examine new interests and gain new insights. This design helped the researcher explore the nurse educators’ understanding of reflective learning and their reflective teaching practices.

### 1.8.2.2 Descriptive research design

This research design is an example of a typical/univariate/classic descriptive research design. The classic descriptive research design is a non-experimental study that describes variables as they naturally occur, with no manipulation of variables or setting and no attempt to determine the relationship between variables (Burns & Grove 2009:237–245). This design enabled the researcher to collect original data from the sample at multiple sites that might be true for the study population at large. The design helped the researcher describe the various teaching and learning activities educators use in facilitating reflective learning by students.

### 1.8.3 Target population

This is the complete set of people, objects or events that have common characteristics and meet the sampling criteria of the proposed study (Botma, Greeff, Mulaudzi & Wright 2010:123–131; Polit & Beck 2012:337–341). The target population of this study was all nurses registered with the SANC as nurse educators and currently practising at a nursing education institution registered with the SANC.

### 1.8.4 Accessible population

These are the elements or basic units of a study that meet the eligibility or inclusion criteria for the research study and are available as participants of the study (Botma et al 2010:123–131; Polit & Beck 2012:337–341). The accessible population for this study was educators practising at nursing education institutions in Gauteng, South Africa.

The eligibility criterion used for the purpose of this research was that the educators had to be practising at nursing education institutions that offered a programme/course leading to registration as a nurse, R425 and R687, with the SANC (SANC 1985), in Gauteng, South Africa.
1.8.5 Sample and sample framework

1.8.5.1 Sample

A sample is a subset or portion of the accessible population elements that participate in the research study. The sample comprised educators practising at Nursing Education Institutions (NEIs) that offered a programme/course leading to registration as a nurse with the SANC.

1.8.5.2 Sample frame

The sample frame is the list of all elements which meet the inclusion/eligibility criteria are accessible to the researcher and from which the sample is drawn (Botma et al 2010:123–131; Polit & Beck 2012:337–341).

There was no specific sample frame available for nurse educators in Gauteng. However, there were 89 NEIs in Gauteng registered with the SANC (SANC 2010); therefore a sample of NEIs was drawn from this total.

1.8.5.3 Sampling and sampling procedure

Sampling is the process of selecting a subset/portion of the accessible population that represents the entire population (Polit & Beck 2012:765). The probability sampling method, which is described by Polit and Beck (2012:762) as sample selection using random procedures, was used. To ensure representativeness of the sample, the sampling technique selected for this study was stratified random sampling. This method allows the random selection of elements from two or more strata of the population (Polit & Beck 2012:767; Botma et al 2010:128).

Thereafter, to select the actual education institutions from each stratum, the researcher used an unrestricted random sampling method, also known as selection with replacement. This probability sampling method allowed all elements in the sampling frame an equal chance of being selected (Burns & Grove 2009:349; Botma et al 2010:127). Finally, all educators at the randomly selected nursing education institutions were included in the study.
1.8.6 Data collection

Data collection is the capturing and translating of data so that the data can be analysed (Polit & Beck 2012:367). For this study the structured data collection approach was selected. The structured approach ensured that data were quantifiable by the use of numerical values.

The data collection method selected for this study was a self-report method, which is a data collection method that collects data directly from either a sample or the accessible population (Polit & Beck 2012:766).

The data collection instrument of choice for this study was a structured questionnaire. The questionnaire was a good choice for this study, as it provided greater uniformity in responses, which promoted the processing and analysing of data collected (Babbie 2010:255; Burns & Grove 2009:406).

1.8.7 Data analysis

Descriptive analysis was the data analysis method of choice for this study design. This was mainly because the study focused on exploring and describing the data available so that the information could be organised in a meaningful way and occurrences examined from different angles (Burns & Grove 2009:470; Polit & Beck 2012: 558). A statistician assisted with the data analysis, using the SAS JMP version 10.1 computer programs.

1.9 VALIDITY AND RELIABILITY

A researcher reports on the validity and reliability of the study to enhance the quality of a quantitative research study.

1.9.1 Validity

Validity refers to the degree to which a measurement validates the conclusions made in a study and the degree to which the conclusion can be drawn that the independent variable is responsible for the change in the dependent variable (Botma et al 2010:174;
159; Polit & Beck 2012:286). The research supervisor and statistician assisted the researcher in ensuring the content validity of the instrument/questionnaire. Content validity refers to the extent to which the items in the instrument represent the concepts being measured (Polit & Beck 2012: 750). A comprehensive literature review was done to ensure that the study was based on facts and evidence, hence promoting the content validity.

The face validity of the questionnaire was evaluated by the research supervisor and statistician to ensure that the questions were readable and clear and that the sequence of items ensured consistency with the correct language and formatting used.

1.9.2 Reliability

Reliability refers to the degree of consistency with which the data collection instrument measures an attribute or characteristic. Reliability therefore measures the quality and accuracy of the data collection instrument (Botma et al 2010:177). The reliability of the questionnaire was increased by including more items that covered the same concept but in different forms. The researcher pre-tested the questionnaires with educators who met the eligibility criteria but were not part of the study sample. The researcher also requested the assistance of a statistician to ensure the clarity and appropriateness of the questions.

1.10 ETHICAL CONSIDERATIONS

Ethical considerations refer to the protection of the rights of all those involved or affected by the research study.

1.10.1 Protecting the rights of the participants

The three ethical principles of beneficence, respect and justice were upheld to ensure that the respondents’ rights were protected. The right to protection and freedom from harm and discomfort was considered. The right to self-determination and full disclosure was ensured. The right to fair treatment and privacy was also given due consideration. A letter was attached to the questionnaire that aimed to assure the respondents of their rights and how the researcher sought to protect their rights (see Annexure B).
1.10.2 Protecting the rights of the institution

Ethical clearance was granted by the Higher Degrees Committee of the Department of Health Sciences, University of South Africa (Unisa) on 29 October 2012 (see Annexure A). The researcher ensured that the institution received a copy of the ethical clearance certificate and the research proposal with the request for permission to conduct the study at the institution (see Annexure C).

1.11 SCOPE AND LIMITATIONS OF THE STUDY

The study focused on the reflective teaching practices of educators that facilitate reflective learning in the classroom. The accessible population for this study was educators who practised at education institutions that offer registered nurse training programmes, in the Gauteng Province of South Africa.

To try to prevent theoretical limitations, the researcher used multiple references in developing the above aspects of this research and the study was reviewed by an appointed supervisor as well as a statistician, who assisted the researcher as needed.

The use of questionnaires is limited to the response rate of subjects. The researcher delivered questionnaires to the nursing education institutions, and explained the purpose and benefits of the study to the educators by attaching a letter to each questionnaire. The response rate of returned questionnaires was over 50%.

1.12 STRUCTURE OF THE DISSERTATION

The study consists of the following five chapters, set out as follows:

Chapter 1 Orientation to the study
Chapter 2 Literature review
Chapter 3 Research design and method
Chapter 4 Analysis, presentation and description of the research findings
Chapter 5 Interpretations, conclusions, limitations and recommendations of the study
1.13 CONCLUSION

This chapter was a summary of the research process followed by the researcher. A quantitative approach was selected for this study, using a descriptive explorative research design. The data collection instrument of choice was a structured self-administered questionnaire. The accessible population selected were all educators practising in nursing education institutions that offered registered nurse training programmes and were located in the Gauteng Province, South Africa. Permission from the eligible nursing education institutions was obtained in writing prior to the nurse educators being approached to participate in the study. The data analysis was completed with the assistance of a statistician. The chapter that follows is a detailed review of some of the literature available on reflection and its practice.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The new qualification framework and restructuring of the controlling bodies has resulted in the formation of the three quality control councils of education in South Africa. The Council for Higher Education (CHE) includes the Higher Education Quality Committee (HEQC), which is responsible for ensuring that higher education institutions deliver appropriate, effective, quality programmes. This forces higher education institutions to evaluate the delivery of their programmes and makes it imperative that educators reflect on and revisit teaching and learning approaches and practices they use to ensure quality standards are maintained.

The healthcare industry nationally and internationally has changed and become more cost conscious and quality conscious, hence demanding that practitioners be efficient, be able to work under less than optimum conditions and be flexible and highly competent (Frick et al 2010:421). The quality of nurse training is therefore receiving more academic attention, as students need to be trained to deal with this complex reality. The challenge for educators is that they have to prepare students to function in an ever-changing global healthcare environment (Richard 2010:24). Therefore educators need to be lifelong learners in order to understand and be up to date with the changes and challenges in the healthcare industry. Keeping up to date will help educators to implement appropriate teaching and learning approaches that will help the students to relate and adapt their learning to dynamic real-world situations.

Over the last 20 years the nursing profession has widely accepted reflective practice and reflective learning as effective measures to help students provide care in a frequently changing context and to develop as competent practitioners (Kuiper et al 2009:76). The academic world has embraced the concept of reflection as a valuable measure for self-awareness, the development of critical thinking and insight (Epp 2008:1379). This is a huge responsibility for educators to embrace and manage; hence the researcher has recognised the need to determine how educators perceive their role.
The purpose of this study was to explore and describe the role of educators in the facilitation of reflective learning by students. Current literature in education also refers to the importance of educators' reflecting on their own practice in order to help improve and promote student learning (Bowden 2003:28; Friedrich-Nel 2007:24; Frick et al 2010:421). This suggests that educators should not only promote reflective practice in their students but should themselves be reflective practitioners. The researcher therefore reviewed literature available on the concepts of reflective learning, reflective teaching and the role the learning environment plays in promoting a reflective culture.

The conceptual framework for the study as it appears in Chapter 1 guided the literature reviewed. The researcher was assisted by the librarian in obtaining primary sources, but did experience difficulty in finding an adequate number of more recent articles. The researcher also found that some of the older articles had data that contributed significantly to the review; hence such references were included. More recent secondary sources also provided appropriate and relevant information and were referenced in the review.

2.2 REFLECTIVE LEARNING

Reflective learning promotes the development of higher order thinking skills, which empower students or practitioners to learn how to learn, to understand and know what they already know, and what they do not know or need to know (Richard 2010:24). Reflective learning is a structured and controlled form of reflection in which the students learn from thoughtful consideration of experiences and actions, resulting in new or revised knowledge being created (Grant et al 2006:379). Reflective learning is regarded as a powerful tool that promotes self-directed learning (Foster & Greenwood 1998:165; Kuiper et al 2009:76), and is an effective approach in preparing practitioners to apply theory to practice in the real world (Betts 2004:239; Epp 2008:1379; Frick et al 2010:421).

The role of reflective learning in developing self-awareness and in the evaluation of practical skills and knowledge is frequently encouraged as an effective and possibly vital approach to learning and development in a dynamic global environment and context. The purposeful evaluation of current knowledge and abilities leads to change, better understanding of one’s abilities, capabilities and competencies, and the
development of higher order thinking skills like problem solving and critical thinking. In the modern student and practitioner these qualities are vital, as real world situations are ever changing and vary in complexity, requiring the student and practitioner to adapt skills to meet specific needs – in fact think on their feet. Ip et al (2012:253) state that in reflecting, the nurse is able to develop a new and deeper understanding of experiences and to articulate knowledge in a more meaningful way. Ip et al (2012:253) also recommend that in helping student nurses develop reflective skills, the facilitator should aim to achieve the level of critical reflection. Reflection, if viewed as a learning strategy, can be very useful in helping students connect new and existing knowledge and skills and integrate the affective aspects of learning (Mann et al 2009:595).

### 2.2.1 Levels of reflection

Researchers and authors refer to different levels of development of purposeful reflection. These different levels of reflection are referred to by various names and definitions as it applies to the authors’ model and is beyond the scope of this study. (Frick et al 2010:421; Kane, Sandretto & Heath 2004:283; Pierson 1998:165). However, the significant trend within all the models is that the ability to reflect critically and constructively is developed over time, with practice and perseverance and is not always easy, as it is emotionally and psychologically stressful. It is easier to conform and accept what is, rather than critique and question one’s actions and beliefs. A study by Kane et al (2004:283) notes that the majority of study participants (16 of the 17) practised at a technical reflection level, which was the lowest level on continuum used in the study. Only three of the 17 participants in the study practised critical reflection, which was the higher meta-cognitive level of reflective practice, where the participants looked beyond the personal and considered the effects of their actions on a broader scale, including social, economic and political perspectives.

It is therefore significant that educators not only understand the different levels of reflection, but identify their role in creating activities that will help the students advance their reflective abilities. Frick et al (2010:421) suggest that teachers focus on creating reflective learning opportunities so that students develop at all three levels of reflection. For example Schaub-de Jong, Schonrock-Adema, Dekker, Verkerk and Cohen-Schotanus (2011:155) suggest that the use of reflective learning groups promotes the development of higher order skills. In order to avoid a singular approach to reflection,
which may focus on technical reflection or developing individual identity only, Mann et al (2009:595) support the use of reflective groups and state that the development of reflective abilities is deliberately stimulated in this educational context.

2.2.2 Theory-practice integration

In an attempt to help students correlate theory with practice, education institutions have adopted learning by and from reflection as a learning approach, hereby helping students to improve their own performance and understand their practice better by self-evaluation (Frick et al 2010:421; Grant et al 2006:279). Reflection on practice or in practice, as proposed by Schon (cited in Josten 2011:21), assists the students or practitioners to identify their practice knowledge and skill with the aim of identifying the gaps that they need to improve or develop on.

Newton (2004:155) states that professional practice is constantly modified to adjust to the frequently changing healthcare system. The ability to reflect meaningfully may help the practitioner or student who struggles to remain competent and up to date in a fast-changing professional environment. Riksaasen Hatlevik (2011:868) recommends that reflective skills be included in a nursing programme as a “mediator” for theory-practice integration, after finding in a study that there was a definite coherence of both skills and knowledge following the introduction of a structured reflective programme for students. Reflective practice assists registered nurses’ professional development, as it was found to be a key factor in helping the nurses bridge the gap between theory and practice (Riksaasen Hatlevik 2011:868). Epp (2008:1379) cautions that if nurses in the current context of healthcare do not reflect while planning and evaluating care, the theory-practice gap will be widened. De Swardt, Du Toit and Botha (2012:1) also endorse reflection in the form of guided reflection as resulting ultimately in a positive influence on quality patient care.

2.2.3 Reflective learning included in education programmes

Internationally, for example in the United Kingdom, United States of America and Australia, the regulatory bodies endorse the concept of reflective practice (Mann et al 2009:595). Even in Canada reflective practice is a compulsory competence of a registered nurse (Epp 2008:1379).
In South Africa the controlling bodies of education (South African Nursing Council (SANC), South African Qualification Authority (SAQA) and CHE) recognise the need to develop reflective practice skills to assist the students to relate theory to practice. These controlling bodies promote the development of reflective practitioners by endorsing course outcomes for training that include abilities such as critical thinking, problem solving and lifelong learning.

SAQA, the gatekeeper of all registered qualifications, provides “level descriptors”, which are broad outcomes related to the level of the qualification on the national qualification framework and must be met by a student on completion of a qualification. The following level descriptors are meant to develop the individual as a lifelong student (SAQA 2010:1):

- A learner is able to demonstrate an ability to assess his/her performance or the performance of others and to take appropriate action where necessary, to take responsibility for his/her learning within a structured learning process and to promote the learning of others.
- Autonomy of learning is the extent to which a learner can undertake action of learning independently, the extent to which a learner takes responsibility for his/her learning and the extent to which the learner is self-reflexive about and can evaluate the quality of his/her learning and eventually that of others.

The SANC, which is the professional body governing nursing, states in the draft Charter of Nursing Practice (SANC 2004:4) that some of the challenges for nursing education are to

- create nurses that are lifelong learners and critical thinkers
- develop in every nurse the ability to evaluate the quality of his/her practice

This suggests that the SANC endorses the development of critical reflective thinking practitioners as a central yet challenging task of educators.

The SANC Regulation 425 (SANC 1985:3), which refers to a four-year registered-nurse training programme, stipulates as one of the course objectives that the student “is able to evaluate personal practice continuously and accept responsibility for continuing
professional and personal development”. Again it appears that the SANC endorses reflection as essential for professional development. Nursing education institutions and nurse educators are expected to structure their programmes and lessons to promote reflective learning. Lessons need to be designed such that abstract theory is translated into tangible, real-world subject matter that the student can relate to, based on current and past experiences. Ip et al (2012:253) in their study introduced a structured programme for improving self-reflection skills of student nurses, and found that the programme was helpful in improving the students’ reflective skills.

The educator needs to understand the aims and outcomes stipulated by the national bodies that govern nursing education and practice and the role reflection will play in meeting these aims. It is important for educators to be aware of the limitations that may be unwittingly imposed as a result of focusing on certain aims or outcomes only. Some education institutions include reflective learning in their curriculum with the focus on developing competence in skills (i.e. use of reflection to look back on one’s actions with the aim of improving). Betts (2004:239) states that some institutions may use reflection to help practitioners conform to the visions and goals of the institution. In using reflection to help the practitioner understand and embrace the institutional requirements, the benefit to the institution is a practitioner who is more productive and motivated to meet the institutional requirements. The overall success of reflection depends on everyone at the institution’s collaborating and working towards a shared reflective philosophy (Richard 2010:24).

2.2.4 Critical thinking and reflection

Critical thinking, according to Bruce et al (2011:154), “is the art of reflecting on our own thinking”; hence, reflection is interwoven with critical thinking. In referring to students having the ability to think critically, the researcher assumes that the SAQA is suggesting more specifically that students should be developed as critical reflective thinkers. It is therefore up to the education institutions and educators to implement teaching and learning approaches and activities that promote the achievement of the outcomes above.

Kane et al (2004:283) describe critical reflection as developing a “habit of mind”. Practitioners like educators who habitually review their work critically are able to make their facilitation sessions worth attending. Ross and Kitching (2009:91) refer to the
critical assessment of self which leads to the understanding of oneself better, as well as understanding oneself in relation to others. It would seem that critical reflection is not just asking “how” and “what” questions, but rather asking these questions in a way that takes on a broader perspective: looking at the self or practice through a different lens. Critical reflection is considered the highest form of reflection, the one that all reflectors should aim for (Ip et al 2012:253).

2.2.5 Development of self-awareness

The role of reflection in assisting students and practitioners to become more aware of themselves, their values, beliefs and motivation, is well recognised by experts. Self-awareness in fact supports the development and use of other forms of reflection. Betts (2004:239) refers to this as a therapeutic form of reflective practice, which results in the individual’s developing more self-confidence, assertiveness and empathy; so self-awareness is about self-growth and not a mere observation of oneself in order to meet the expectations of others. This is supported by Ross and Kitching (2010:91), who state that through greater awareness of self, relationships and contexts the student will become more flexible when dealing with challenges and changes. Insights gained through self-awareness promote an inner self-knowledge that emerges with action, and a change of attitude resulting in better and more effective practitioners.

Geber and Nyanjom (2009:894) state that critical reflection on the self increases the ability of mentors of practitioners to use their own experiences and skills more effectively. Mentoring that promotes self-assessment and reflection results in students or mentees being more conscientious. Hubbs and Brand (2005:60) also support the view that practitioners who are self-aware or “self-discovered” are more effective and competent practitioners. In fact, some may assume that the development of self-awareness is what reflection is all about, but purposeful and constructive reflection is broader and more holistic.

Educators should therefore embrace the importance of reflective self-discovery and create opportunities for students to practise and develop this skill (Hubbs & Brand 2005:60). Student success in reflective learning depends on their attitude to reflection as well. If students find reflection useful they will exhibit a positive attitude and seek the outcomes of reflection (Ip et al 2012:253).
2.3 THE ROLE OF THE EDUCATOR IN ESTABLISHING A REFLECTIVE LEARNING ENVIRONMENT

This section explores the role the learning environment plays in promoting effective reflective learning in students.

2.3.1 Role of the education institution

Education institutions that include reflective learning in their curricula need to promote a reflective culture within the institution and promote a collaborative environment that encourages reflective practice by all concerned (Platt 2002:33; Pultorak 2010:137). Education institutions and the educators need to understand what reflective learning is and how it may assist in improving the students’ cognitive abilities. Educators need to acknowledge their responsibility to improve teaching practices and the learning environment (Josten 2011:24). Reflection should not be an “add on” to the curriculum, but should be an integral part of all aspects of learning (Karban & Smith 2006:4). The educators therefore will need support and help from the institution and colleagues to ensure their own self-development in order to establish a conducive reflective learning environment for students.

2.3.2 Time allocated for reflective learning

Adequate time must be allowed for practising reflective activities (Montshiwa 1999:20; Pultorak 2010:73), or the measure will be pointless. As has been said, numerous closely spaced activities will block students from being able to contemplate on actions and experiences fully in order to be able to learn from them. Epp (2008:1379) suggests that students be allowed formal or dedicated time at the end of a clinical day to reflect, emphasising that reflective learning is a learned skill, and needs to develop over time. Reflective learning requires deep thinking and more teacher-student interaction; therefore education institutions that have large numbers of students in classrooms, for instance, will be challenged in ensuring that reflective learning is successfully facilitated as a learning approach (Platt 2002:33). This usually results in reflection being unplanned or at times not happen at all. Educators and students need time to reflect, so reflection has to be intentionally planned and built into the daily programme and the educators’ work day (Montshiwa 1999:20; Pultorak 2010:73). Ip et al (2012:253)
recommend, following their study, that adequate time should be allocated for student reflective learning, as the students in their study cited limited time as a barrier. A number of researchers echo Mann et al (2009:595) in stating that reflection is an ongoing process that needs time to develop.

2.3.3 Educator self-awareness

The educator should constantly evaluate his or her facilitation of reflective learning, such that the students’ practice of true reflection is not restricted or impeded. It is accepted that reflection aids theory-practice integration, but the educator must always be aware that he or she may, in an attempt to meet the goals or outcomes set out, limit the reflective learning activities selected and promoted to reaching these outcomes, thereby preventing the students’ holistic development as reflective practitioners.

In order for reflection to be effective as a learning approach, the learning environment should be safe, with no fear of judgement and punishment (Pultorak 2010:137), where both students and educators are able to expose and challenge their beliefs and practices with a sense of being supported and respected. Both students and educators should feel comfortable with reflecting on previous actions and experiences among peers, with no threat of retribution (Taggart & Wilson 2005:6).

According to Betts (2004:239), educators need to understand their own beliefs and intentions when facilitating the practice of reflection, and to understand that although reflection is a natural ability, not everyone has the ability to reflect critically. Practitioners also use reflection for different purposes, such as the development of competence or self-awareness or for the assessment of practice. Educators need to understand this and be aware of their own reasons for using and facilitating reflection. The importance of this is that educators who fail to understand their own beliefs, their own reflective practice abilities and the possibly restrictive effect of a programme to meet the institutional needs, may consequently limit the true reflective practice abilities of their students.

Coward (2011:883) cautions that forcing students to reflect as a form of assessment in the curriculum leads to negativity and the lack of true internalisation of reflective practice. Educators who use reflection as a teaching and learning strategy must first
understand the basic concepts of reflection to effectively promote student reflection (Coward 2011:883).

2.3.4 Establishing a conducive environment

According to Rogers (2001:37), the role of the facilitator of student reflection should be as a mentor, a coach and a role model of reflective practices, in order to create a conducive environment and provide feedback and stimulation. Teachers should help students to make their experiences more tangible and clear, and assist students to investigate the emotions that impact on their professional behaviour (Boerboom, Jaarsma, Dolmans, Scherpier, Mastenbroek & Van Buekelen 2011:615). Teachers should also encourage students to develop reflective skills and self-awareness by establishing a positive, trusting and safe environment.

In reflective group exercises, Schaub-de Jong et al (2011:155) suggest that facilitators create an open and trustworthy learning environment, stimulate students to share their views and actively plan, monitor and evaluate their learning processes, and ensure the involvement of all students in the group.

Rogers (2001:37) suggests that an environment that is conducive to reflection is one where individual and environmental factors are controlled, such that there is a balance of challenge and support. An environment that lacks autonomy, appropriate challenge and constructive feedback, will not promote effective reflection.

Mann et al (2009:595) also hold a similar view on the role of the facilitator by stating that the factors that lead to successful facilitation of reflective practice are a safe environment, mentorship and supervision, peer support and adequate time allocation.

Establishing a conducive reflective learning environment therefore requires the facilitators of reflective learning and the education institutions to have a clear understanding of reflective learning, personal views and beliefs, as well as striving to establish a reflective culture at the institution and in the classroom.
2.4 REFLECTIVE LEARNING ACTIVITIES

The role of the educator is to assist and guide students to practise reflective learning with the aim of improving the students’ performance. But educators also need support and assistance to ensure their facilitation of reflective learning is effective, so that the students are able to engage in a higher level of thinking (Karban & Smith 2006:4). Literature on reflective practice tends to focus on reflective journals and accounts of occurrences, however, Karban and Smith (2006:4) state that reflection is more than this; therefore, learning activities, for instance group dialogue and case studies from real practice, may be more effective.

Using various learning activities to promote reflective learning requires the educator to have access to necessary resources and be able to appropriately use these to aid in reflective learning activities. Educators who are used to a teacher-centred approach need a change of attitude, since reflective learning is a learner-centred approach. These educators need to move away from being technical deliverers of information to valuing their role in transmitting and sharing knowledge. Ross and Kitching (2009:91) state that the educator needs to create various opportunities that prompt the students to take ownership for their learning. Students should be helped to find meaning in their learning through reflection.

2.4.1 Reflective journaling

Reflective journaling is a common example of a reflective learning activity and its values have been widely researched and promoted. Reflective journals are seen as a structured way of helping educators guide students towards a deeper, integrated and more insightful way of learning (Grant et al 2006:379; Hubbs & Brand 2005:60). However, although reflective journaling has been shown to be effective in promoting reflection, educators also need to develop the necessary skills and understanding to effectively use other reflective learning activities such as role play, problem-solving activities; discussion groups and simulation. Reflective learning may be enhanced by more than writing/recording alone; educators should also take into consideration that not all students are receptive to journal writing. (Bruce et al 2011:199; Grant et al 2006:379; Newton 2004:155). Reflective writing skills improve over time, although the skill is also dependent on the abilities of the educator to incorporate reflective processes.
into education and to establish a trust relationship (Epp 2008:1379). Epp (2008:1379) also suggests that educators use various tools and strategies for facilitating the students’ growth into reflective practitioners, since there is limited evidence supporting reflective journaling as the most appropriate tool for reflective learning. Larrivee (cited in Forrest 2008:229) recommends three practices that support critical inquiry and self-reflection, the first step of which is to set time aside to reflect and to keep a journal to ensure daily reflection. Forrest (2008:229) also suggests that writing is a way of making the thoughts and discussions tangible and helps the reflective process.

Journals may also be used in group reflective sessions where the students share their written reflections with the group. The group then assumes a dialogue by sharing ideas and experiences (Hubbs & Brand 2005:60). Group sessions may also help students who struggle with reflection to learn from their peers.

2.4.2 Group reflective sessions

Betts (2004:239) asks the question, “If we believe knowledge to be constituted in a social context, why not ask people to reflect at least some of the time in groups?” Reflection in a group allows the integration of different knowledge and legitimises individual knowledge. The outcomes are beneficial to all, as collective interaction and motivation towards achieving the outcomes occurs (Ross & Kitching 2009:91). Individuals are usually guided by their own habits, biases and frame of reference, which affect decision making and the way in which they perceive experiences. This in turn may block them from embracing new methods and attitudes towards their own practice. Reflection in isolation can be limiting; therefore reflective group discussions between practitioners or students give both practitioners and students the opportunity to listen to the views and insights of the others, resulting in even deeper self-reflection (Pultorak 2010:137). Reflection in groups also encourages the students to be more aware of themselves in relation to others.

Guided reflection is a strategy that may be used to assist novice reflectors to reflect on action. The educators or facilitators participate with the students in a structured form of reflection. The dialogue is guided by the use of a data collection instrument and the experiences are recorded in writing. De Swardt et al (2012:1) found a definite
transformation in their students’ ability to integrate theory and practice and to deal with uncomfortable ethical issues after the introduction of guided reflection.

Ross and Kitching (2009:91) encourage educators to challenge their students to reflect critically on themselves in relation to others and their contexts. Educators should encourage participation in group reflection to explore different learning contexts.

Friedrich-Nel (2010:24) states that students are “co-producers of their learning”, which means that the facilitator still has to take responsibility for providing clear outcomes and guidelines and create learning activities that will assist the students to meet these outcomes. Ross and Kitching (2009:91) support this statement, asserting that group dialogue that comprises the students and facilitator results in a joint exploration of the problem and plan of action to be taken. Friedrich-Nel (2010:24) further suggests that facilitators request feedback on facilitation when in dialogue with students. This feedback is of great value to the reflective facilitator who tries to develop and improve current practice.

Geber and Nyanjom (2009:894) suggest the use of dialogue as a reflective learning activity, focusing more specifically on the dialogue between mentor and mentee, where the mentor assists the mentee in identifying problems and actively seeking solutions. Geber and Nyanjom (2009:894), however, caution the mentor/facilitator to ensure that questions are asked in a non-threatening manner and that the mentor allows adequate time for the student/mentee to deliberate and answer. Dialogue, whether in the form of group dialogue or between facilitator and student, helps the individual discover solutions to his or her problems. Students who have insight into what they know and how they learn will be better equipped to direct their own learning effectively.

2.5 REFLECTIVE TEACHING

Reflective teaching is a systematic, structured process of looking at aspects of teaching and learning in one’s practice with the aim of improving (Farrell 2004:40). It is a process of making informed and logical decisions about educational matters.

Reflective practice is at the heart of developing teaching excellence. A study by Kane et al (2004:283) concluded that there are five qualities/dimensions that make an effective
teacher: subject knowledge, skills, interpersonal relationships, research/teaching nexus and personality of the teacher. Reflective practice is the link that integrates all five qualities and helps the teacher develop each quality individually and as a whole, resulting in effective teaching and excellence.

2.5.1 Educator training and development

Institutions that train educators or introduce reflective learning in their curricula should create opportunities for educators to grow and develop as reflective practitioners. The value of reflective learning in educator training is emphasised in literature and can be traced as far back as the works of John Dewey (1933) (cited in Farrell 2004:50). Educator training programmes must build a positive attitude in student educators towards reflective thinking, because reflection coupled with experience results in professional growth (Pultorak 2010:97). Unless educators are trained to practise reflection and understand which activities promote the development of critical reflective thinkers, the training of students to use reflection as a learning approach will be limited and probably neglected in education (Levett-Jones 2007:112).

Educators who are able to practise reflective teaching before qualifying may become role models of reflective learning. In fact, in South Africa the general basic teaching programme includes reflective teaching as an important outcome of the curriculum (Jacobs et al 2011:54).

Newton (2004:155) questions the notion that it is up to the education institution to include reflection in the curricula for nurse training and educator training. Newton (2004:155) states that reflection does not have to be part of a curriculum in order to be used in learning. The educators who acknowledge the value of reflection in developing critical thinking and problem solving skills should persevere in promoting and facilitating reflective learning by their students, even if this is not the recognised standard practice at the institution.

2.5.2 Value of educator self-reflection

Using critical reflective thinking measures in education is beneficial to an educator. The right attitude is needed, and openness to developing and challenging his or her own
beliefs and practices, in order to be successful as a facilitator of reflective learning. According to Taggart and Wilson (2005:01), reflective practice requires three attitudes: open mindedness, wholeheartedness and intellectual responsibility. Nevertheless, to ensure the effectiveness of reflective practice, the ability to reflect must be developed, facilitated and consistently utilised by both student and educator (Brockbank & McGill 2007:18; Day 1993:83; Karban & Smith 2006:4).

Since the value of reflection is acknowledged as effective for the educator and student practice, Fox (2011:70) suggests that reflection sessions should involve both educators and students, where they are co-learners engaged in reflection; the educators need to actively participate in the learning process. By practising reflection with their students, educators may be able to enhance and strongly influence their students’ learning and reflective practice. Students need to see and hear their facilitators reflect, in both the classroom and in individual sessions, thus role-modelling reflection. This requires facilitators to practise reflection on a daily basis to become comfortable with the process and be able to reflect in the presence of others and with others (Rogers 2001:37).

2.5.3 Reflecting on practice

Educators should have a strong commitment to developing themselves as reflective practitioners (Farrell 2004:5), which will promote their understanding of what reflection is and how reflection can help them improve their practice and the learning environment. The educator who is intellectually and emotionally receptive to reflection is aware that questioning one’s intentions, methodology and actions constantly improves one’s practice and promotes the development of clinical practitioners who can function in a dynamic global healthcare setting. Educators themselves should reflect on their roles and actions to assist them to provide effective quality facilitation (Brockbank & McGill 2007:18; Karban & Smith 2006:4). Reflective teaching helps the educators to connect with the students and helps the educators find ways to assist the students to learn better (Carroll et al 2002:13; Jacobs et al 2011:54–60).

It is not easy to be a reflective educator, as it takes one into the deepest recesses of oneself where entrenched beliefs, actions and emotions reside, resulting in insecure and fearful feelings and thoughts. This is even more so when reflection takes place in a group, where the educator possibly opens himself or herself to rejection and criticism. It
is, however, evident that it is worth the effort, as the development of reflective practice is the “hallmark of professional competence” (Pultorak 2010:138) and empowers the educator to take control of the quality of teaching delivered. Deliberate self-evaluation and purposeful self-monitoring promote change and progression (Richard 2010:24). A progressive educator will be more able to produce responsible, proactive students who are prepared for a career in an ever-changing healthcare delivery environment. Reflective practice also improves the relationship between teachers and students and ultimately improves the quality of teaching (Mann et al 2009:595).

2.5.4 Peer reflection

Structured dialogue by groups of practitioners/peers at an institution is valuable in the development of reflective practice, as all share the same challenges but have different perspectives on how to manage these challenges, so they can assist and learn from one another (Montshiwa 1999:20; Pultorak 2010:137). Learning about alternative teaching methods from peers will assist teachers in the practical application of knowledge in their own practice. Peer group reflection promotes more critical reflection, resulting in more concrete plans for change (Boerboom et al 2011:615).

2.6 CONCLUSION

Nurse educators need to empower students to take charge of their own learning, and need to empower themselves with the right skills, knowledge and attitudes to adequately assist students in their self-directed learning. The overall empowerment depends on everyone’s coming together and working towards a shared philosophy: on reflective practice.

In this chapter the researcher traced the literature on the role of educators in facilitating reflective learning. The value of reflective learning by students, including student educators, was explored. The role of a conducive, reflective learning environment was recognised and acknowledged as important in promoting a reflective culture. The understanding and ability to create learning opportunities that promote reflective learning was described and acknowledged as being important for effective reflection to occur.
Finally the importance of educators’ reflecting on their teaching was described and identified as effective and helpful. Reflective teaching allows the educator to interact at an interpersonal level with students, as well as creating appropriate learning activities based on insight and better understanding.
CHAPTER 3
RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

The general problem identified in Chapters 1 and 2 is that educators are expected to facilitate reflective learning in the classroom without the necessary formal training and experience. The reality is that for reflective learning to be effective, the educator has to be skilled in using diverse learning activities that promote reflection, and has to be prepared and supported in creating a conducive learning environment. Moreover, the educators themselves have to practise reflection.

Therefore in this study the researcher attempted to answer the following research question: What the role of the educator and the learning environment is in facilitating reflective learning in students?

An explorative, descriptive research design was selected to assist in answering the question, as the researcher wanted to determine the more generalised practices and views of educators at nursing education institutions in Gauteng, South Africa. This chapter describes the research process followed.

3.2 RESEARCH DESIGN

The overall plan for addressing the research question follows:

3.2.1 Research paradigm

The paradigm selected for this study was the quantitative approach which, according to Polit and Beck (2012:763), is the study of phenomena by way of using a rigorous and controlled design resulting in precise measurement and quantification of data. The quantitative approach supported the purpose of this study by providing statistical data with regard to the degree of understanding and application of reflective learning by educators. The concepts or variables of this study were measured by attaching
numerical values to the concepts. A characteristic of the quantitative approach is that the focus is on aspects of behaviour that are measurable (Brink, Van der Walt & Van Rensburg 2012:10).

The researcher, using the quantitative approach, was able to determine by way of deductive reasoning the more specific phenomena related to the general statements made by the researcher about educators and reflection. Deductive reasoning is being able to determine more particular or specific predictions or explanations from general beliefs or statements through scientific investigation (Burns & Grove 2009:605; Polit & Beck 2012:750).

This approach is also characterised by a logical set of steps that are pre-set in a plan of action; the study comprised a problem statement and research objectives that directed the steps of the research, based on certain assumptions made by the researcher. A quantitative research approach begins with a question and ends with an answer (Polit & Beck 2012:64). This study began with the research question: What is the role of the educator within the learning environment in facilitating reflective learning in students? The researcher opted for a quantitative approach to answer the question; hence the focus of the study was predetermined.

The aim of quantitative research is to generalise the findings. Generalisation is the degree to which the findings from the sample of study can be extended or related to the population of study as a whole (Burns & Grove 2009:702). This study aimed at determining if educators in Gauteng, South Africa, had common practices and views with regard to facilitating reflective learning in students, and whether the findings might be generalised to the greater population of educators in South Africa.

3.2.2 Research design

The research design selected for this study was an explorative descriptive design. This design is an example of a typical or univariate or classic descriptive research design. In a broad sense it is a non-experimental study that describes variables as they naturally occur, with no manipulation of variables or setting and no attempt to determine the relationship between variables (Burns & Grove 2009:237–245; Brink et al 2012:102–104). This type of design is best used for descriptive, explanatory or exploratory
purposes, since it allows for original data that describe the population to be collected, especially when the population is too large to observe directly (Babbie 2010:253).

3.2.2.1 **Explorative research design**

An explorative design is used when the aim of the study is to explore a topic of which there is little knowledge, and to generate new knowledge about the phenomena or variables. The design usually involves the examination of a single sample of the study population. Explorative descriptive studies are also used to identify or justify current practices, as in the case of this study, where one of the research objectives was to explore the reflective teaching practices of educators. This research design allowed the researcher to explore if, and to what degree, educators practise reflection on their teaching, what methods of reflection they use and the value the educators place on reflective teaching. The researcher explored authentic information about the characteristics and practices of educators in a single sample (educators in Gauteng, South Africa) and the frequency of occurrence of these characteristics: that is, how general or common these characteristics are to all educators (Botma, Greeff, Mulaudzi & Wright 2010:113–114; Polit & Beck 2012:274).

3.2.2.2 **Descriptive research design**

Burns and Grove (2009:237–245) comprehensively define a typical descriptive study as the identification of a phenomenon and the related variables. It includes the development of conceptual and operational definitions for the variables, in order to “discover new meaning, describe what exists” and determine the frequency of occurrence of the variables. This research design supported the objective of the study, to describe the various types of learning activities educators use to promote reflective learning by students. The researcher was able to obtain information to describe the educators’ understanding of appropriate reflective learning activities, the variety of learning activities they used that promoted reflection, and the importance the educators placed on the selection of learning activities to promote reflective learning.

The explorative descriptive research design also supported the third research objective of the study: to determine whether the learning environment was conducive to reflective learning and teaching. The researcher was able to explore the views and opinions of the
educators regarding the learning environment, as well as describe the importance of support and guidance needed to create a conducive learning environment.

Explorative descriptive studies require large samples in order for the study to be generalised to the entire population of study. The researcher was able to select elements of the study from multiple sites, which would not have been possible if a direct observation design had been used.

3.3 RESEARCH METHODS

This section describes the techniques used to gather and analyse the specific study data.

3.3.1 Population and sampling

The process for selecting a portion of the population as a representative of the population is outlined below:

3.3.1.1 Population

Population universum

This is the total accumulation of people, objects or events with common characteristics that the researcher is interested in. The population of this study was all registered nurses that had an additional qualification as nurse educators with the SANC.

Target population

An element is the single unit of study that meets the sampling, eligibility or inclusion criteria of the study. It is the most basic unit that makes up the population about which the data is collected (Polit & Beck 2012:338).

The target population of this study was all nurses registered with the SANC as nurse educators and practising at nursing education institutions registered with the SANC. The
SANC is the professional body and the education and training quality assurance body that governs the nursing profession in South Africa.

Accessible population

The population available as participants in the study were registered nurses registered with the SANC as nurse educators who were currently practising at registered nursing education institutions in Gauteng, South Africa. Eligibility criteria (also known as inclusion criteria) are the exact characteristics used as a basis for the sampling process by determining the elements that will be included in the population and sample. Exclusion criteria are the criteria or characteristics that the elements do not or should not possess (Botma et al. 2010:123–131; Polit & Beck 2012:337–341). The eligibility criterion used for the purposes of this research was that the educators must be practising in Gauteng, South Africa, at nursing education institutions that offered a programme/course leading to registration as a nurse (R425, R687) with the SANC.

The researcher drew the study sample from the accessible population, but aimed to generalise the findings to the target population.

3.3.1.2 Sample

A sample is made up of the most basic unit of the population that meets the inclusion or sampling criteria of the study. The sample must be a close representative of the population in order for the findings to be generalised to the population. A sample is representative when the key characteristics or criteria are comparable to those of the population (Botma et al. 201:201). The greater the sample representativeness, the greater will be the chances of generalising the study results (Polit & Beck 2012:376). Therefore the study sample was selected from multiple sites.

The sampling frame is the list of all elements which meet the inclusion/eligibility criteria and are accessible to the researcher and from which the sample is drawn (Polit & Beck 2012:344).

The sampling frame for all nurse educators in South Africa was 11 834, according to the 2011 published statistics by the SANC (2012b). The researcher was unable to obtain
the total number of nurse educators that practise in Gauteng, as the SANC does not compile specific regional statistics. Further statistics obtained from the published data showed that there were 89 nursing education institutions in Gauteng registered with the SANC (SANC 2010).

As there was no SANC sampling frame for nurse educators in Gauteng, the researcher opted to draw a sample from the NEIs, for which there was a sampling frame. Thereafter the researcher included all educators teaching at the selected education institutions. The probability sampling method was selected for the study as there was a sampling frame available. The researcher was able to allow all the NEIs a chance of being included in the sample. This method ensures a greater possibility of the sample being representative of the population (Botma et al 2010:127; Polit & Beck 2012:344).

The sampling frame consisted of different types of nursing education institutions, however, the number of institutions within each type was not proportional in size. To ensure representativeness of the sample, the sampling technique selected for this study was stratified random sampling. In stratified random sampling the researcher identifies population strata (subdivisions) aimed at duplicating important characteristics of the population in the sample, and then samples by random selection from each stratum (Botma et al 2010:128; Polit & Beck 2012:346). This sampling method was appropriate for the study, as the researcher was able to obtain a more precise final sample and more reliable information.

### 3.3.1.3 Sampling procedure

The 89 NEIs were reviewed according to the eligibility criteria for the study, and 23 of these institutions were identified as offering programmes that led to registration as a nurse. The 23 institutions were divided into three strata based on type of institution. The NEIs were divided into three (3) types of institution: private colleges, universities and public colleges.
Table 3.1 Number and percentage of institutions in strata of a population and sample

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Number (%) in eligible population</th>
<th>Number in sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private colleges</td>
<td>12 (52%)</td>
<td>6</td>
</tr>
<tr>
<td>Universities</td>
<td>4 (17%)</td>
<td>1</td>
</tr>
<tr>
<td>Public colleges</td>
<td>7 (31%)</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>23 (100%)</td>
<td>9</td>
</tr>
</tbody>
</table>

In Table 3.1 the sample was calculated based on the percentage representation of each stratum in the eligible population (e.g. private colleges make up 52% of the total). The same percentage of the stratum in the total population was used to calculate the sample per stratum: for example, for private colleges the sample was 52% of 12, which were 6. In this way the researcher ensured that there was appropriate representation of the different types of institution in the sample. The researcher used the guidelines in Polit and Beck (2012:346) and Botma et al (2010:128) to calculate the sample size in each stratum.

Thereafter, to select the actual NEIs within each stratum, the researcher used an unrestricted random sampling method, also known as selection with replacement. This is a most basic probability sampling method that allows all elements in the sampling frame an equal chance of being selected (Burns & Grove 2009:349; Botma et al 2010:127). Selection with replacement further ensures that each element has an equal chance of being selected, as the total number in the stratum remains constant. When each element is drawn it is noted and replaced before the next element is drawn (Burns & Grove 2009:349). The institutions within each stratum were listed and the name of each institution written on a separate slip of paper and placed in a container. A slip of paper was randomly selected and the institution name on the slip noted. The slip of paper with an institution name was then returned to the container and the name of the next institution drawn and noted. This allowed each institution an equal chance of being selected. The researcher followed the above steps until the total quota sample for the stratum was obtained. The same process was applied to each of the three strata until the total sample had been drawn.

A letter requesting permission to conduct the research at the selected nursing education institution (refer to Annexure C) was compiled according to guidelines in Polit and Beck.
(2012:425) and Burns and Grove (2009:20). The letter was then sent to the principal or head of department of the institutions selected, together with a copy of the ethical clearance certificate and research proposal. The researcher experienced some challenges with the original group of institutions selected within the private college stratum. Three of the six institutions selected refused permission to conduct the research at the institution, and one institution’s contact details had changed and had not been updated on the SANC website and internet. The researcher had to repeat the selection process to replace the four institutions that had fallen out. The same selection with replacement process was used, but if an institution that had refused was selected, the slip of paper was returned. The researcher continued the process until four new institutions had been selected.

Finally all educators at the nine randomly selected NEIs were included in the study and were asked if they would complete the questionnaire. A complete sampling frame for these educators was obtained. Table 3.2 depicts the numbers of educators identified for the study.

Table 3.2 Number of institutions in sample and number of educators per type of institution

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Number in sample</th>
<th>Number of educators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private colleges</td>
<td>6</td>
<td>97</td>
</tr>
<tr>
<td>Universities</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Public colleges</td>
<td>2</td>
<td>113</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>231</td>
</tr>
</tbody>
</table>

3.3.1.4 Ethical issues relating to sampling

The respondents’ right to fair treatment and equality was upheld by the selection of respondents based on the research sampling technique and not on the researcher’s preference. The use of random sampling techniques: stratified random sampling and selection with replacement, gave each respondent an equal chance of being selected. Stratified random sampling prevented sampling bias as a result of over or under-representation of one or more of the three groups.
3.3.2 Data collection

The formal procedure for guiding the collection of the study data is described as follows:

3.3.2.1 Data collection approach and method

There are two data collection approaches, structured and unstructured; the degree of structure required determines the difference between the data collection approaches (Polit & Beck 2012:371).

For this research study the structured approach was the most appropriate approach, as the research design was descriptive and exploratory and a larger sample of the population was planned. The structured data collection approach allowed the researcher to develop a plan that spelled out what and how information was gathered. A structured approach sets out predetermined questions in a specific sequence that allows for data to be quantified (Polit & Beck 2012:372). Uniformity of questions and answers minimises bias and promotes objectivity.

An unstructured data collection approach, on the other hand, is flexible, allowing the data collector to formulate questions based on the situation. This results in less emphasis on objectivity and consistency, and usually a smaller population is used (Polit & Beck 2012:414).

The data collection method selected for this study was a self-report method. This was the method of choice for the study, as the data collected described the population more fully and also provided quantitative data that gave the researcher more opportunity to generalise the findings to the accessible population. This method also allowed the respondents privacy when answering the questions and more assurance of maintaining their anonymity.

Self-reports are commonly used in structured data collection approaches, as these reports are used to collect and report on data on people’s beliefs, thoughts, knowledge, and attitudes. The respondents are given predetermined written questions which are answered directly either in writing or verbally. The type of self-report used depends on the purpose of the study (Brink et al 2012:146; Botma et al 2010:133; Polit & Beck
2012:415). Questionnaires and interviews are usually the self-report instruments of choice in descriptive and exploratory studies (Burns & Grove 2009:245).

3.3.2.2 Development and testing of the data collection instrument

The study data collection instrument of choice was a structured questionnaire. A questionnaire is a self-report form or document designed to obtain data or responses from subjects or respondents in a written format, in response to questions or items created to bring forth information that can be analysed. The questionnaire’s value is in providing greater uniformity in responses that can thus be more effectively processed and analysed (Babbie 2010:255; Burns & Grove 2009:406). Questionnaires are ‘self-administered’ when the respondent is able to read a question and write down an answer on a predesigned form (Polit & Beck 2012:324). A well designed questionnaire is understandable to the respondent, who has no or little difficulty completing the form, but is usually difficult to develop. The questionnaire may comprise closed and open-ended questions. Questionnaires present questions that are constant, thereby lessening the opportunity for bias (Burns & Grove 2009:406).

The questionnaire was a good choice for this study as it provided actual information from a number of people across a wide geographical area. The respondents remained anonymous and there was more control of the data collection. A disadvantage was that the information received might have been somewhat superficial, and the researcher could not probe further for more specific answers or clarification. To allow respondents adequate opportunity to elaborate on their responses, space was provided under the question for further comment. The researcher ensured that the questions and responses were designed to address the objectives of the research and answer the research question. The questionnaire was designed to obtain data that described the population variables as they naturally occurred, with no attempt to determine relationships between the variables: thus to provide an overview rather than in-depth data on individual behaviour and understanding.

3.3.2.2.1 Pre-test of data collection instrument

A pre-test is used to test some aspects of the measuring instrument and data collection forms. A few participants that meet the inclusion criteria are used, but the data is not
included in the main study (Botma et al 2010:275). Pretesting of the instrument allowed the researcher to get feedback from respondents on the clarity and appropriateness of the questions, as well as the time taken to complete the questionnaire. The instrument was tested by five nurse educators who were not part of the study sample but met the eligibility criterion of the study. The educators were requested to complete the instrument and evaluate it in terms of time, clarity, and level of sensitivity of questions. The average time for completion was 20 minutes and the feedback on clarity of questions, the answers to questions and additional written feedback given by the educators were taken into consideration and the questions amended. None of the questions was considered highly sensitive, though one respondent did feel uncomfortable with the self-awareness questions.

3.3.2.3 Characteristics of the data collection instrument

The researcher was assisted by the supervisor and a statistician (see Annexure E) in developing the questionnaire (see Annexure D).

The development of the questionnaire was guided by:

- The research problem
- The research purpose and objectives
- The literature review

The questionnaire comprised the following sections:

- Section A: Responses to demographic and personal information
- Section B: The educators’ reflective practices
- Section C: The facilitation of reflective learning and learning environment

Section A comprised the responses pertaining to the respondents’ demographic details (age, marital status and gender); responses pertaining to their educational qualification (number of years of experience as an educator, type of qualification obtained in education) and type of institution employed at. This comprised items 1 to 6 in the
questionnaire. All items were closed-ended, and the respondent had the option of selecting the most appropriate responses from the options provided.

Section B comprised the responses related to the respondents’ experience with reflective practice. These included items 1 to 8, and all items were closed questions. A Likert type scale was used, where the respondent had a choice of one of the following responses: Always, Sometimes, Rarely, Never or Undecided, to each of the items. The development of these items was guided by the research objective: to explore the reflective teaching practices of nurse educators and the literature review.

Section C focused on the respondents’ facilitation of reflective learning by students. The research purpose, research objectives and the literature review guided the development of the items in this section. There were open-ended and closed-ended items included, allowing the respondent to elaborate on or explain responses further in the additional space provided for comments. This section comprised items 1 to 11.

3.3.2.4 Data collection process

The method of distribution of the questionnaire planned was “home delivery”, which is where the researcher delivers the questionnaires to the respondents personally and returns at a later agreed-upon date to collect. This method has a higher return rate (percentage of returned questionnaires) than a straightforward mail survey, probably as the subjects get to interact with the researcher. The main problem with mailing the questionnaires is that it is impersonal and answering the questionnaire can be easily seen as being too much trouble and hence ignored, resulting in an unpredictable return rate (Babbie 2010:270).

A consent letter for the respondent (see Annexure B) was compiled, detailing the purpose, the significance, the ethical considerations of the study and requesting the respondent’s assistance in completing the questionnaire. The letter also included the researcher’s contact details if the respondent needed additional information. The letter to the respondent was attached to each questionnaire, as the researcher did not meet educators in person. The researcher visited the selected institutions and met with the appointed contact person (the contact person was established on receipt of permission to conduct the research at the institution). The exact number of questionnaires was left
with the contact person for distribution to the educators at each institution. The researcher also provided sealed slotted boxes in which the respondents could place the completed questionnaires. The researcher returned to the institution at an agreed upon time and collected the boxes. This was to protect the confidentiality of the respondents.

A total of 231 questionnaires were handed out, according to the number of educators at each of the nine NEIs in the sample. The number of questionnaires issued per institution was recorded to allow the researcher to monitor the return rate of questionnaires; each questionnaire received was given an identification number that was assigned serially and according to the type of institution. The researcher kept a record of the varying rates of return by logging the number of questionnaires handed out and received on an on-going basis. This assisted the researcher in controlling and monitoring the data collection process.

In using the “home delivery” method the researcher hoped to reduce the non-response bias associated with this data collection method and ensure representativeness of the data collected. There was a 52% return rate on the questionnaires handed out, with the poorest return being from the university (see Table 3.3).

Table 3.3  Number of questionnaires returned per number of educators per type of institution

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Number in Sample</th>
<th>Number of questionnaires issued</th>
<th>Number of questionnaires returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private colleges</td>
<td>6</td>
<td>97</td>
<td>64</td>
</tr>
<tr>
<td>Universities</td>
<td>1</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Public colleges</td>
<td>2</td>
<td>113</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>231</td>
<td>121</td>
</tr>
</tbody>
</table>
3.3.2.5 Ethical considerations related to data collection

3.3.2.5.1 Protecting the rights of the respondents

Right to respect for human dignity

The respondents’ right to self-determination was protected by the researcher. Information on the nature of the study was provided in a letter to the respondent that was attached to each questionnaire. The letter included the choice of participating and of withholding information if they so wished. Respondents were assured that they might withdraw from the study at any time and expect no discrimination. The respondents were not coerced to participate by threatening or offering them any form of reward. The researcher’s contact details were left at each institution for respondents that had further questions. The researcher informed the respondents in the letter of the extent and general circumstances of sharing of the information (e.g. that the researcher was a student and had to share information with her supervisor as needed).

Right to justice

The respondents’ right to fair treatment and equality was upheld by basing the selection of respondents on the research sampling technique and not the researcher’s preference. The researcher respected the privacy of the respondents by ensuring their anonymity and keeping the information provided confidential. All questionnaires were coded after they were returned and the respondents’ names or the institutions they belonged to did not appear on the questionnaires. The researcher placed a sealed, slotted box at each venue for completed questionnaires to be dropped into, so that even the researcher could not identify the respondents. The researcher always took cognisance that sensitivity and respect towards respondents should be paramount. If the respondents trusted the researcher, they would be more willing and more likely to complete the questionnaires authentically.

Right to non-maleficence

The study was intended to provide information that would benefit education and the educators, with no intention of harming the respondents. An explorative and descriptive
study was proposed; hence no manipulation of variables was planned. This study was
intended to benefit the respondents in terms of exploring their own reflective practices,
although the researcher did bear in mind that any research runs some risk of harming
the respondents, if not physically then possibly psychologically. The researcher was
therefore sensitive to the wellbeing and experience of the respondents. In planning the
questions for the questionnaire the researcher bore in mind that some questions might
force the respondents to think about aspects that they would not normally have
considered, which could result in some form of distress or self-esteem issues.

The questions in the questionnaires were carefully constructed; “covert” questions, such
as questions on the respondents’ lifestyle orientation, were avoided. The respondents in
the pre-test were specifically asked to evaluate the questions in terms of their sensitivity
and possible harm. In addition the study was closely monitored by an expert researcher
(the researcher’s supervisor) to ensure that harm was avoided.

3.3.2.5.2 Protecting the rights of the institution

The autonomy of the NEIs selected for the study was protected by the researcher’s
requesting permission, in writing, to conduct the research with the staff at the institution.
The researcher provided all relevant information requested by the institution in order for
an informed decision to be made. The decisions of the institutions that refused to allow
the research to be conducted were accepted. The personnel were only approached
after the researcher received permission from the institution. The researcher also
followed each institution’s process for requesting permission for research to be done at
the site, for instance by completing required documentation, as stipulated by the
institution.

Confidentiality was maintained by ensuring the names of the institutions did not appear
on any of the returned instruments, and all information was coded on receipt. The
names of the institutions were also not mentioned in the research findings. The
institution’s right to fairness was acknowledged, as all NEIs and their educators in the
Gauteng Province had a fair chance of being selected for the study by the use of
random sampling techniques. The report on the findings of the research will be shared
with all participating institutions, but the identities of the respondents and institutions will
remain anonymous so that no data can be directly related to either institution or
respondent. The research will be of benefit by providing information that could improve education practice, and the researcher remained alert to any aspect that might put the NEI at risk. The institutional requirements, such as those regarding feedback and dissemination of results, will be adhered to as agree upon.

3.3.3 Data analysis

The type of analysis selected depends on the level of measurement used. Levels of measurement indicate how variables are measured. The following is a brief explanation of the four levels of measurement used in analysing the data collected (Polit & Beck 2012:556):

Nominal levels measure characteristics or attributes of a variable that are grouped into categories and given numbers. The numbers are added up and the frequency of the characteristic occurring within the category is determined. This is the simplest form of measurement level.

In ordinal measurements, the characteristics are not only categorised but are also placed in order of ranking. Each rank is allocated a number, allowing the researcher to determine the relative ranking of the characteristic or attribute for the subjects. This level of measurement provides both frequency counts and percentages.

Interval level of measurement specifies both ranking order and the equivalent distance between the ranks. This allows for the differences between ranks to be determined, resulting in averages being calculated.

The highest level of measurement is the ratio, which is distinguished by a meaningful zero. This measurement level provides information about the frequency of occurrence, the interval between characteristics and the magnitude or strength of the characteristic.

Descriptive analyses are done in any study that records numerical data. The researcher was able to organise the data collected in meaningful ways that allowed for the examination of occurrences from different angles. These statistics are often used to summarise the characteristics of a sample that meets the research objectives of a study, and are seldom used in studies that want to answer research questions.
Descriptive statistics may be in the form of univariate descriptive statistics (describing single variables), bi-variate descriptive statistics (describing the relationship between two variables) and multi-variate descriptive statistics (describing the relationship between multiple variables) (Burns & Grove 2009:470; Polit & Beck 2012:558). The researcher used the following descriptive statistical measures in this study:

*Frequency distribution* is univariate descriptive analysis in which numerical values are arranged from lowest to highest, and the number of times the value occurs is added up. The data may be calculated per category and/or per group. The occurrence is shown in relation to the sample/population responses and a percentage of occurrences may be determined. The scores may also be shown graphically, especially for interval and ratio data (Burns & Grove 2009:470; Polit & Beck 2012:556). Measures of central tendency are univariate descriptive analyses that are used to calculate the average of the distribution of values. According to Burns and Grove (2009:471), this is the “most concise representation of the location of data”. There are three types of central tendency measures (Burns & Grove 2009:471; Polit & Beck 2012:558):

- The mode is the measure of central tendency for nominal data, as it indicates the most frequently occurring score/value in a distribution. But this measure does not indicate the midpoint/centre of the data set.

- The median is used to analyse mostly ordinal data but also interval and ratio data. Scores of ungrouped data are placed in rank order and the score at the exact midpoint or centre of the distribution is obtained. If an even number of scores present in the distribution, the average of the two middle scores is taken. This is the measure of choice in distributions that are skewed.

- The mean is the most common measure used to calculate the average score. It is used for interval and ratio data level of measurements. A formula is used to calculate the average score, which is affected by every score in the distribution. The mean is known as the best measure for summarising a distribution.

Measures of dispersion/variability are univariate descriptive analyses that determine how spread out or dispersed the scores are within a distribution. They provide more
insight into the nature of the data, as the extent of deviation in scores from one another is determined.

The standard deviation is used to analyse the relationship of a score to the distribution and is used for interval and ratio data. It determines how much a score deviates from the mean, hence indicating the degree of error when a mean is used to describe the population. Standard deviation is also a stable estimate of a parameter (population data), as it describes a distribution as well as interpreting the individual scores (Burns & Grove 2009:474; Polit & Beck 2008:565).

3.4 INTERNAL AND EXTERNAL VALIDITY OF THE STUDY

Validity confirms that the conclusion of the study is justified, based on the research design and interpretation of findings. Threats to validity suggest that the conclusion may be incorrect therefore the researcher must provide adequate evidence that validates the inferences made in the study (Botma et al 2010: 174). Threats to validity can occur internally at any point in the research design and method, and externally due to factors outside the study (Botma et al 2010:174).

3.4.1 Internal validity

Internal validity is the degree to which the results of the study are due to the study itself and not attributable to extraneous variables.

Construct validity refers to the degree to which an intervention is a good representation of the underlying concept that is theorised. Construct validity also refers to the study instrument (Polit & Beck 2012:287). The focus is not on the instrument in itself, but rather to the appropriateness of the instrument for the specific study group and purpose (Burns & Grove 2009:381). In this study the researcher promoted the validity of the instrument by ensuring that the questions referred to and covered all the research objectives and were aligned with the purpose of the study. The researcher also had expert supervision and guidance from a statistician and supervisor in developing the instrument to ensure that the questions were valid and appropriate for the study. The instrument was also pretested by five members of the population who were not part of the sample. The pre-test of the instrument ensured that the time to complete and the
Face validity is the extent to which the measuring instrument looks as if it is measuring what it purports to measure (Polit & Beck 2012:753). Face validity was evaluated by the statistician and the respondents in the pre-test to ensure that the questions were readable and clear and that the sequence of items ensured consistency. The instrument was also evaluated to ensure that the correct language and formatting was used.

Content validity is the degree to which the items in the instrument adequately represent the concept being measured (Polit & Beck 2012:750). Content validity was ensured by a comprehensive literature review, done to validate the study based on facts and evidence. The main concepts were defined in detail, such that the meaning of each as it applied to the study was clear and there was no ambiguity, thereby reducing threats to the results of the study.

Selection bias is a common threat to internal validity in non-experimental designs, which was prevented by precautions such as careful planning of the logistical and practical requirements of the study, such as a good representative sample and questionnaire. A stratified random sampling method and unrestricted random sampling method were used, with the aim of reducing selection bias during the sampling process. In designing the questionnaire the researcher aimed to ensure that the instrument applied to all the respondents in terms of the biological variables, experience and opinions.

Consistency in the distribution of the questionnaires is important; therefore, one distribution method was selected for this study, namely the home delivery method.

3.4.2 External validity

External validity refers to the degree to which the study results may be applied to other populations: the degree to which conclusions about relationships hold true in various settings, persons, time and measures of the outcome (Botma et al 2010:177; Polit & Beck 2012:301).
The researcher ensured representativeness of the study by ensuring that the sample adequately represented the population and that the accessible population selected characterised the target population and other similar populations. The researcher used a stratified random sampling technique for this study to ensure a good representation of the different types of nursing education institutions from which the respondents were selected. This technique was repeated when the initial response rate from the institutions was poor, to ensure consistency and promote representativeness.

The eligibility criteria for the sampling were selected to ensure that the sample was a good example of the population construct of this study. This allowed the researcher to select a more homogeneous population as a means of controlling extraneous variables. This also has a positive implication for the interpretation of the results. Multiple sites or institutions based on type of NEI as well geographical areas within Gauteng were selected for the study to ensure that the population was broadly represented, thereby increasing the chances of generalisation.

3.5 CONCLUSION

A quantitative approach was selected for this study, which enabled the researcher to obtain numerical data. An explorative descriptive design was considered the most appropriate design to identify current facilitation practices among educators and to describe the educators’ views on reflective practice. A probability sampling method was chosen, the accessible population being nurse educators registered with the SANC and practising at a nursing education institution that offers a programme leading to registration as a nurse. All NEIs in Gauteng that met the inclusion criterion were included in the stratified random sampling method that was selected. A simple random with replacement method was used to obtain the sample from the sample frame. All educators at the NEI in the sample were included in the study. The researcher opted for the structured data-collection approach, which provided the numerical data required for the study design and approach. A structured questionnaire was handed to all educators at the institutions that gave permission to conduct the study. The questionnaires were collected using a “home delivery” approach; anonymity and confidentiality of the institutions and educators were maintained by coding the questionnaires on receipt. The data received were consolidated and data analysis completed by a statistician using descriptive analysis measures as described in the next chapter.
CHAPTER 4

ANALYSIS, PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

The previous chapter discussed the methodology of the study. In this chapter the focus is on analysing and interpreting the findings. The purpose of the study was to explore and describe the role of educators in the facilitation of reflective learning in students. The objectives established for the study were to

- explore the reflective teaching practices of educators
- describe the various types of learning activities educators use to promote reflective learning in students
- determine whether the learning environment is conducive to promote reflective learning and teaching

A structured questionnaire was designed and aligned with the above objectives for data collection (see Annexure D).

4.2 DATA MANAGEMENT AND ANALYSIS

The questionnaire comprised three sections, with Section A focusing on the demographic and personal information of the respondents, Section B on the respondents' reflective practices and Section C on the respondents' facilitation of reflective learning by students. The questionnaire was distributed to 231 educators working at public colleges, private colleges and universities in Gauteng, South Africa.

Three types of nursing education institutions were selected: public colleges, private colleges and universities. A stratified random sampling method was used to select the sample of institutions, as there was a distinct difference in the number of
institutions per category. In the final selection two public colleges, six private colleges and one university made up the sample of institutions.

Based on the number of educators available at each institution, 113 questionnaires were handed out at the public colleges, 97 at the private colleges and 21 at the university.

A total of 121 completed questionnaires were received back from the respondents. The return rate on the questionnaires was 52%, which is considered good. As indicated in Chapter 3, a disadvantage of using the self-reporting method is the risk of a poor response rate. The responses from the educators at the different institutions were as follows:

- Public college 42% (n=51)
- Private colleges 53% (n=64)
- Universities 5% (n=6)

There was a good response rate from the public and private colleges but a very poor response rate from the university.

4.3 FINDINGS OF THE STUDY

Data were analysed with the assistance of a statistician, using the SAS JMP version 10.1 computer program. The findings are presented as the total number of responses per item and percentages in the form of graphs and tables. Therefore the missing values are not indicated. The conventions for Chapter 4 are as follows:

N=total number of respondents
n=total number of responses

The data were supplied in fractions and for this study were rounded off to the nearest whole percentage. Cross-tabulation in the form of contingency tables was done in Sections B and C, where the frequency of two variables is compared. Variables in section B and C were also subjected to the Chi-square test. The Chi-square test is
used to determine if there is a significant difference between proportions or, specifically in this study, if there is an association between the proportion of the responses and the different institutions. It is important to note that the Chi-square test only informs whether two variables are related or dependent, but does not give the magnitude of dependency. The probability value (p value) is produced, and if this calculated p value is smaller than 0.05 it indicates statistical significance at a 95% level of confidence.

4.3.1 Section A: Biographical information

4.3.1.1 Age analysis

![Figure 4.1](image-url)

**Figure 4.1 Analysis of the age groups of educators (N=121)**

Forty percent (n=49) of the respondents were over 50 years of age and 18% (n=22) were between 46 and 50 years old. With 59% (n=71) of the educators being over 45 years old, this is a direct indication that respondents are an ageing population. Only 8% (n=10) of the respondents were between 26 and 30 years old. From these findings, it seems that nurses tend to become educators when they are older or at a later stage in their career.
The above results are supported by the statistics released by the South African Nursing Council (SANC) in 2012. The age analysis of persons on the register and rolls indicated that 40% of registered nurses are 50 years of age and over, and 30% of registered nurses are between the ages of 40 and 49. Based on these results it may be concluded that registered nurses, under which category the educators fall, who are 40 years old and over make up 77% of the total number of nurses registered with the SANC (SANC 2012b).

4.3.1.2 Marital status analysis

![Marital status analysis chart]

Figure 4.2 Analysis of the marital status of educators (N=119)

Fifty-nine percent (n=71) of the respondents were married; 21% (n=25) were single, with no specific age range. In 20% of the total responses, the marital status was given as divorced, widowed or separated.
4.3.1.3 Gender analysis

Figure 4.3 Analysis of the gender of educators (N=119)

Of the 119 responses only 2% (n=3) were male, with 97% (n=116) being female respondents. Two (2) respondents failed to indicate their gender. It may be concluded that nursing, including nursing education, is a female dominated profession.

In the national statistics released in 2012 the gender of nurses registered with the SANC was as follows: Female: 11 917, and Male: 483 (SANC 2012b); hence the results in this study are in keeping with the national statistics in terms of the gender of nurses in South Africa. Nursing education appears to be a female dominated profession in South Africa.
4.3.1.4 **Number of years of experience as an educator**

![Bar chart showing distribution of years of experience](image)

**Figure 4.4 Analysis of the number of years of experience as an educator (N=117)**

Thirty-one percent (n=36) of the respondents had less than 5 years of experience as an educator, and 54% (n=63) of the 117 respondents had less than 10 years’ experience as an educator. Only 17% (n=22) of the respondents had 20 or more years of experience.

If the above is compared with the age analysis done in 4.3.1.1, and in view of the majority of the educators being over 45 years old, it could be an indication that most nurses enter nursing education at the latter end of their career, closer to retirement.
4.3.1.5 Type of nursing education qualification

![Chart showing distribution of respondents' type of nursing education qualification](chart.png)

**Figure 4.5 Analysis of the educators' type of nursing education qualification (N=120)**

Fifty-eight percent (n=69) of the 120 respondents had a bachelor's degree including nursing education; 17% (n=20) had a diploma in nursing education and only 14% (n=17) had a master's degree, while 5% (n=6) had no educational qualification. Only 3% (n=2) indicated “other” as an option, but on further analysis the respondents actually had no educational qualification.

In the light of the changes in the National Qualifications Framework (NQF) (SAQA 2008), the new nursing qualifications are pegged higher on the NQF; therefore the minimum qualification for an educator teaching the bachelors' degree will be a master's degree; for an educator teaching the diploma in nursing it will be a bachelor's degree. This is supported by the document *Criteria for programme accreditation* by the CHE released in 2004, which cites the following: “Academic staff of undergraduate programmes has relevant academic qualifications higher than the exit level of programme, but at minimum a degree” (CHE 2004).
It is evident that about 25% (n=30) of the respondents will need to obtain a higher education qualification in order to continue to teach at least the Diploma in Nursing when the new nursing qualifications commence in 2015. Overall, 86% (n=104) of the respondents will not be able to teach the Bachelors in Nursing or any higher qualification based on their current educational qualifications.

4.3.2 Section B: Educators’ reflective practices

This section comprised a Likert scale with eight (8) items in which the respondent had to select one of five options: Always, Sometimes, Rarely, Never or Undecided. All items, except 1 and 7, focused on the previous and current reflective practices of the educators. Items 1 and 7 focused on the educator’s facilitation of reflective learning in the classroom.

4.3.2.1 Educators’ prior use of reflective learning

Refer to items 2 and 4 in Section B in Annexure D.

![Figure 4.6 Educators who studied reflective learning as a teaching and learning approach in training as an educator (N=120)](image)
Forty-six percent (n=55) of the respondents indicated that they had studied reflective learning as a teaching and learning approach in their educator training programme; 37% (n=44) had exposure to reflective learning in their educator training, whereas 16% (n=19) had never learnt about reflective learning. It was therefore concluded that only 46% of the respondents could say with certainty that they had studied the use of reflective learning as a teaching and learning approach.

Educators need to understand reflective learning and all the different methods available for the practice of reflection, and to structure the development of student reflection based on individual learning styles and best means of learning to reflect, such as reflective writing, reflective dialogue and storytelling (Atkins & Schutz 2013:27).

Many experts view the development of reflective practice as the hallmark of professional competence in teachers. A significant measure of success in teacher preparation is that the programme of study includes reflective practice to help build a positive attitude and the ability to reflect on best practices in teaching and learning (Pultorak 2010:97).

![Figure 4.7 Educators who applied a reflective learning approach in own basic or post-basic education (N=120)](image)

**Figure 4.7** Educators who applied a reflective learning approach in own basic or post-basic education (N=120)
Figure 4.7 on the previous page shows the application of the reflective learning approach in educators’ own training.

Most respondents (63%) did not consistently use reflective learning as a learning approach in their own studies; 37% (n=44) of the respondents did have consistent experience with reflective learning in their own studies.

The Chi-square test analysis done provided some insight in terms of difference between the responses per type of institution (see Table 4.1).

**Table 4.1 Educators who applied reflective learning in own basic or post-basic education**

<table>
<thead>
<tr>
<th></th>
<th>Public college</th>
<th>Private college</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Always</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>21</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Total %</td>
<td>17.65</td>
<td>15.13</td>
<td>4.20</td>
</tr>
<tr>
<td>Col %</td>
<td>41.18</td>
<td>29.03</td>
<td>83.33</td>
</tr>
<tr>
<td>Row %</td>
<td>47.73</td>
<td>40.91</td>
<td>11.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>44</td>
</tr>
<tr>
<td><strong>Sometimes/rarely/never</strong></td>
<td>30</td>
<td>44</td>
<td>1</td>
</tr>
<tr>
<td>Count</td>
<td>25.21</td>
<td>36.97</td>
<td>0.84</td>
</tr>
<tr>
<td>Total %</td>
<td>58.82</td>
<td>70.97</td>
<td>16.67</td>
</tr>
<tr>
<td>Col %</td>
<td>40.00</td>
<td>58.67</td>
<td>1.33</td>
</tr>
<tr>
<td>Row %</td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>42.86</td>
<td>52.10</td>
<td>5.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>119</td>
</tr>
</tbody>
</table>

The findings indicate that 83% of the respondents at the university had used reflective learning in their own basic/post-basic education. Less than 50% of the respondents at the public colleges consistently used reflective learning in their own studies, and only 41% of the respondents at the private colleges always used reflective learning in their own studies.

<table>
<thead>
<tr>
<th>Test</th>
<th>Chi-square</th>
<th>Prob&gt;ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood ratio</td>
<td>7.586</td>
<td>0.0225</td>
</tr>
<tr>
<td>Pearson</td>
<td>7.598</td>
<td>0.0224</td>
</tr>
</tbody>
</table>
The probability value of \( p=0.02 \) indicates a significant association between application of reflective learning in own basic and post-basic education and type of institution, because a \( p \) value of less than 0.05 shows significance at a 95% level of confidence.

The above significant association indicates that the respondents at the universities had more consistent experience with reflective learning than the educators at the other institutions. Respondents at the private institutions had the least consistent experience with reflective learning. The overall 37% (n=44) of respondents that always used reflective learning in their studies indicates that the majority of the respondents have had little personal experience with reflective learning, as it was not a formal teaching and learning approach in their programme of study.

Atkins and Schutz (2013:27) stress the importance of role modelling reflection in order to effectively teach students to reflect. The skills of self-awareness, description, critical analysis, synthesis and evaluation that are needed for effective reflection can only be taught if these are understood and practised personally by the facilitator. Rogers (2001:37) supports the need for educators to be role models, but acknowledges that many educators have never received any formal training in practising reflection themselves.

4.3.2.2 Educators’ application of reflection to own current practice

Refer to items 3, 5, 6 and 8 in Section B in Annexure D.

![Figure 4.8 Educators who set aside time in their day for self-reflection (N=121)](image)
Thirty-four percent (n=41) of respondents always set aside time for daily self-reflection; 63% (n=76) did set aside time in their day for self-reflection, but not as a regular practice.

Closer analysis of responses to this item per institution is illustrated in Table 4.2 below:

Table 4.2 Educators who set aside time in day for self-reflection

<table>
<thead>
<tr>
<th>Count</th>
<th>Public college</th>
<th>Private college</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>24</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>19.83</td>
<td>11.57</td>
<td>2.48</td>
</tr>
<tr>
<td></td>
<td>47.06</td>
<td>21.88</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td>58.54</td>
<td>34.15</td>
<td>7.32</td>
</tr>
<tr>
<td>Sometimes/rarely/never</td>
<td>27</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>22.31</td>
<td>41.32</td>
<td>2.48</td>
</tr>
<tr>
<td></td>
<td>52.94</td>
<td>78.13</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td>33.75</td>
<td>62.50</td>
<td>3.75</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>64</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>42.15</td>
<td>52.89</td>
<td>4.96</td>
</tr>
</tbody>
</table>

Fifty percent (n=3) of the respondents at universities always set aside time in the day for self-reflection, and at least 47% (n=24) of the public college respondents also set aside regular time in their day for self-reflection.

<table>
<thead>
<tr>
<th>Test</th>
<th>Chi-square</th>
<th>Prob&gt;ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood ratio</td>
<td>8.861</td>
<td>0.0119</td>
</tr>
<tr>
<td>Pearson</td>
<td>8.767</td>
<td>0.0125</td>
</tr>
</tbody>
</table>

The probability value of $p=0.01$ indicates a significant association between setting time aside for self-reflection and type of institution because a $p$ value of less than 0.05 indicates statistical significance at a 95% level of confidence.
It could be concluded that the majority of respondents do not regularly set aside time in their day to reflect, although the respondents at the universities appear to be more consistent in their daily self-reflection than those from the other institutions.

Mann et al (2009:595) in their literature study noted that reflection on action on a day-to-day basis is considered essential for continued professional development.

Figure 4.9 shows that forty-six percent (n=55) of respondents always reflect on their own teaching practices and methods. For the majority of the respondents (54%, n=45), reflecting on their teaching practices and methods is not a regular practice. Overall, only 2% (n=2) of the respondents never reflect on their practice. It may be assumed that respondents do reflect on their practice and methods, but this is not a constant, regular practice.

The findings are consistent with evidence found by Mann et al (2009:595) in their literature study, that professionals practise reflection but this does not occur in all instances or as a constant, and that the ability to reflect varies with the individual. It is
also recommended that teachers act as a role model of reflective practice, and collaborate with students by reflecting with them. Atkins and Schutz (2013:23) also stress the importance of facilitators’ role modelling and being a reflective practitioner themselves.

Figure 4.10 depicts the following: Thirteen percent (n=16) of respondents use a reflective journal when evaluating their teaching sessions and planning the next teaching session; 36% (n=44) do use the reflective journal, but infrequently, and 31% (n=37) never use a reflective journal when evaluating their own practice. It could be concluded that use of a reflective journal is not the preferred method for the respondents’ reflective practice.

According to Newton (2004:155), diary writing is acknowledged as a skill needed for constructive structured reflection. Writing helps the individual to analyse and rationalise his or her actions or experiences more effectively.
Most respondents (70%, n=95) do not regularly ask their peers to evaluate their practice; only 21% (n=26) of the 121 respondents responded that they always ask for peer evaluation of their practice, and 9% (n=11) of the respondents never seek their peers’ appraisal (see Figure 4.11 above).

Further analysis of the findings per institution is illustrated in Table 4.3 below:

Table 4.3 Educators who ask their peers to assist in evaluating their lessons

<table>
<thead>
<tr>
<th>Count</th>
<th>Public college</th>
<th>Private college</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>18</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>14.88</td>
<td>6.61</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>35.29</td>
<td>12.50</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>69.23</td>
<td>30.77</td>
<td>0.00</td>
</tr>
<tr>
<td>Sometimes/rarely/never</td>
<td>33</td>
<td>56</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>27.27</td>
<td>46.28</td>
<td>4.96</td>
</tr>
<tr>
<td></td>
<td>64.71</td>
<td>87.50</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>34.74</td>
<td>58.95</td>
<td>6.32</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>64</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>42.15</td>
<td>52.89</td>
<td>4.96</td>
</tr>
</tbody>
</table>
The university respondents preferred not to seek the advice of their peers regarding their lessons (n=0) as a routine. The respondents at the public colleges appeared to make the most attempts to ask their peers to evaluate their lessons (35%, n=18). The respondents in private institutions did not place much emphasis on peer evaluation of their lessons, with only 13% (n=8) stating that they always asked their peers to evaluate their lessons.

<table>
<thead>
<tr>
<th>Test</th>
<th>Chi-square</th>
<th>Prob&gt;ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood ratio</td>
<td>11.474</td>
<td>0.0032*</td>
</tr>
<tr>
<td>Pearson</td>
<td>10.469</td>
<td>0.0053*</td>
</tr>
</tbody>
</table>

There appears to be a significant association between the perception that respondents ask their peers to evaluate their lessons and type of institution (p=0.005). It may be concluded that asking one’s peers to evaluate one’s practice is not a common practice among the respondents, although the respondents at the public colleges do appear to be more consistent in seeking their peers’ opinion.

According to Boerboom et al (2011:615), peer reflection enhances the quality of reflection, as it provides teachers with the opportunity to discuss alternative teaching methods and to develop more concrete plans to change methods as needed.

Mann et al (2009:595) found in their literature study that there is much support for “shared reflection”, which is said to promote the individual’s exposure to multiple sources and perspectives.

Structured dialogue by groups of practitioners/peers at an institution is valuable in the development of reflective practice, as all share much the same challenges but have different perspectives on how to manage these challenges, thereby assisting and learning from one another (Montshiwa 1999: 20; Pultorak 2010:137).

4.3.2.3 Educators’ facilitation of reflective learning in the classroom

Refer to items 1 and 7 in Section B in Annexure D.
Figure 4.12 provides data on the educators’ use of a reflective learning approach in the classroom.

![Bar chart showing use of reflective learning approach in the classroom](chart.png)

**Figure 4.12 Educators’ use of reflective learning approach in the classroom (N=121)**

Only 45% (n=54) of respondents use the reflective learning as a teaching and learning approach in the classroom consistently; 47% (n=57) use the approach infrequently. The overall findings indicate that 98% (n=118) of respondents use the reflective learning approach in the classroom but fewer than 50% use reflective learning as a standard, consistent approach.

Including reflective measures early in the students’ education and training improves the integration of theory and practice, as reflection acts as a mediator between theory and practical coherence (De Swardt et al 2012:591; Riksaasen Hatlevik 2011:868).

Figure 4.13 shows the data related to keeping a journal for the duration of their programme.
Seventeen percent (n=20) of the respondents always required students to keep a reflective journal through the duration of the programme; 41% (n=50) of the respondents did not consistently require students to use reflective journals, and 36% (n=44) did not use reflective journals as a reflective learning method. The conclusion can therefore be drawn that the respondents do not use reflective journals as a method of choice for promoting reflective learning by students. Literature available promotes the value of using reflective journaling, but not necessarily as the only method of choice for reflective learning.

According to Coward (2011:883), reflective journals not only provide students with the opportunity to explore the meaning of situations experienced but also promote the concept of “learning to write and writing to learn”. Yet Epp (2008:1379) suggests that educators use various strategies for promoting student reflective practice, and not limit them to reflective journals only.
4.3.2.4 Comparison of educators’ use of reflective journals and requiring their students keep a reflective journal for the duration of the programme

The responses to B6 (related to the educator) and B7 (related to the student) in the questionnaire (see Annexure D) both questions appear to be similar. Fewer than 20% (n=16) of respondents always use reflective journals in their own practice and also always require their students to keep a reflective journal during their programme of study. Over 30% (n=37) of respondents never use a reflective journal and never require their students to do so either. It may therefore be assumed that reflective journals are not the respondents’ method of choice for their own and their students’ reflective practice.

Literature cited in section 2.4.1 do promote the benefit of reflective journaling and specifically Epp (2008:1379), who states that reflection becomes more effective and beneficial at different levels of cognitive development over a period of time. Reflective journaling tends to promote reflection at a lower level and may not be as effective if adequate time and good educator facilitation skills are not present. It could therefore
be further concluded that inadequate experience and skill with reflective journaling, as indicated by the low (13%) consistent use of reflective journals by educators, may contribute to the infrequent use of reflective journaling by students.

4.3.3 Section C: The facilitation of reflective learning

This section focused on the facilitation of reflective learning by educators in terms of the teaching and learning activities and the learning environment established to promote reflective learning by students.

4.3.3.1 Reflective learning adopted as a teaching and learning approach in the programme the educator is currently teaching or facilitating

![Figure 4.15 Reflective learning adopted as a teaching and learning approach in programme the educator is currently facilitating (N=119)](image)

Figure 4.15 Reflective learning adopted as a teaching and learning approach in programme the educator is currently facilitating (N=119)

Sixty-one percent (n=72) of 119 responses indicated that reflective learning was an approach applied in the nursing education programme. The respondents were requested to comment further on how reflective learning was integrated in the programme; based on their comments it appeared that reflective learning was not a formal approach in the programme curriculum, but that the respondents included reflection in their teaching and learning activities. However, 39% (n=47) facilitated programmes that did not include reflective learning as a teaching and learning approach.
approach. Most of this 39% (n=47) of respondents stated that reflection was not included in the programme curriculum but that the educators included reflective activities in the lessons. Some of the educators stated there was no time in the programme to allocate for reflective practice.

Against this, in the literature review in section 2.3.2 national and international education bodies promote the inclusion of reflective learning as a vital professional/individual outcome. The formalisation of reflective learning in a curriculum is supported by Karban and Smith (2006:4), who state that reflection should not be an “add on” to the curriculum but should be an integral part of all aspects of learning. Yet Newton (2004:155) states that there is no need for reflection to be part of a curriculum; respondents that believe in the value of reflective practice should include it in the delivery of their programme/classes.

It is therefore evident that the reflective learning approach was not formally included in any of the programme curricula, but that the respondents did attempt to include reflective learning activities in lessons planned.

4.3.3.2 Availability of necessary resources for various learning activities that help students develop reflective practice

![Graph showing availability of resources](image)

*Figure 4.16 Necessary resources are available for use in reflective learning activities (N=113)*
Sixty-four percent (n=72) of 113 responses indicated that adequate resources are available for respondents to include different learning activities that promote students’ reflective practice. Some of the resources referred to were the availability and size of a venue that would allow for group sessions, simulation manikins, case studies, whiteboard and PowerPoint equipment. Of the respondents, 36% (n=41) indicated that there were not adequate resources available. Comments from these respondents were mainly the lack of internet and computer access, as well as a lack of clarity on what the various resources would be.

4.3.3.3  Formal time allocated in the programme schedule for reflective learning by students

![Bar chart showing formal time allocated in programme schedule for reflective learning]

Most respondents indicated that formal time was not allocated for students’ reflective learning (n=68). The reasons provided were mainly the lack of time due to a full block programme covering theory content. However, 41% (n=48) of the 116 responses indicated that they allocated formal scheduled time for reflective learning. The respondents provided the following examples of time allocated for reflective learning: during feedback or academic support meetings, at the end of a contact session, after
lunch during class day, at the beginning and end of theory block period, and reflective activities in study guide.

It is evident that the 41% of respondents actually allocate informal time for reflective practice, based on opportunities available. This is consistent with the respondent responses in 4.3.3.1, in that none of the programme curricula appeared to allocate time for the reflective learning approach.

According to some researchers (Montshiwa 1999:20; Pultorak 2010:73; Epp 2008:1379), because educators and students need time to reflect, reflection must be intentionally planned and built into the daily programme to be effective.

4.3.3.4 Educators’ selection of the learning activities that could assist students with reflective learning

The respondents were required to select from the list provided the teaching and learning activities that might be used to develop student reflective learning. The respondents were also given the opportunity to add other activities that were not included in the list.

![Figure 4.18 Educators’ selection of the learning activities that could assist students with reflective learning (N=121)](image)

Figure 4.18 Educators’ selection of the learning activities that could assist students with reflective learning (N=121)
Eighty-three percent (n=101) of respondents would use small-group activities to promote reflective learning by students; 79% (n=95) chose problem-solving activities and 69% (n=83) would also use role play to develop student reflective learning skills. Fewer than 60% (n=71) of the respondents would use simulation and presentation activities to promote reflective learning by students. Most respondents (74%, n=89) did not consider large-group activities for assisting students' reflective learning. Only 47% (n=57) of the respondents would use demonstrations; 49% (n=59) would use projects for reflective learning activities. Case studies were commonly chosen, with 71% (n=86) of respondents including case studies as a reflective learning activity. Lectures were not commonly chosen, but a fair number of respondents (51%, n=51) did use lectures to promote reflective learning by students. The use of journal clubs was not supported by respondents, with 74% (n=89) not selecting this activity. The respondents were divided in their selection of reflective journals as a reflective learning activity, with only 51% (n=62) selecting the activity. Only 5% (n=6) of respondents included the use of other reflective learning activities, which included debates, seminars, research and community engagement.

It could be concluded that the most common activities used by the respondents to promote and develop reflective learning by students are small-group discussions, role play, problem-solving activities and case studies. According to Rogers (2001:37), common methods identified across various theoretical approaches to reflection are asking of questions, reflection alone and in groups, using critical incidents, journals and role modelling. Authors such as Dewey, Mezirow and Schon (cited in Rogers 2001:37) include in their reflective theories and model the concept of “problem identification” as part of the reflective process. The reflector follows the steps in problem solving by identifying the problem, seeking relevant data, planning the action and reflecting on the actions to be taken.

According to Schaub-de Jong et al (2011:155), reflective learning in small groups promotes the development of reflective skills of students by allowing them to compare and analyse their theory and professional practice. This is supported by Mann et al (2009:595), who suggests that group reflective experiences foster the modelling of professionalism.
A number of respondents also used simulation and presentations but to a lesser degree than the above activities. Rogers (2001:37) also found that the “use of structured experiences” is suggested in many theories and models as a method of reflection. This is where students are exposed to challenging situations and have to analyse and plan actions using their experience to help them. Examples of how this can be used are in role play, case studies and simulation.

Just over 50% (n=51) of respondents indicated the use of lectures, which is consistent with the findings of Maddison and Sharp (2013:121), who state that lectures may be used to initially introduce reflective practice so that students understand the concept and how to relate to knowledge conception and its relation to the technical/practice.

Just over 50% (n=62) of respondents also use reflective journaling as an activity, with 57% of the respondents requiring students to keep a reflective journal, either always or sometimes which is consistent with the results in 4.3.2.3.

Most of the respondents (74%, n=89) did not select the use of large groups. This is consistent with the literature, which discourages large groups, as it is difficult to ensure that all group members interact fully and that each member gets the opportunity to engage and time to narrate comfortably and at ease (Carter 2013:93; Pultorak 2010:73; Epp 2008:1379).

Fewer than 50% (n=57) of the respondents supported the use of demonstrations, whereas both Dewey and Schon (cited in Rogers 2001:37) support the use of demonstrations in the form of “observations and recitations” and by “listening, telling, demonstrating and imitating” in promoting reflective practice.

4.3.3.5 The impact of reflective learning on students’ learning

The respondents were given four options and had to select one that described the type of impact they felt reflective learning had on their students’ learning.
There appears to be unanimous agreement among the respondents that reflective learning has a positive effect on student learning (91%). None of the 119 respondents thought reflective learning had a negative effect, although 8% (n=10) did not know the effect and 1% (n=1) did not think reflective learning had any effect on student learning. It is evident that educators acknowledge the value of reflective learning by their students.

According to Coward (2011:883), nurses cannot be totally confident that they have acquired all the relevant skills and knowledge to practise confidently in any situation; hence the ability to reflect on experiences is vital for their success in future situations. But Betts (2004:239) cautions that educators tend to assume the value of reflective practice but do not evaluate or judge these assumptions.

4.3.3.6 Role as a facilitator of reflective learning

This was an open-ended question in the instrument and there were some common themes that stood out in the responses:
• To facilitate the reflective process
• To guide students by asking questions
• To encourage and motivate application to practice by giving examples, assist with coming to terms with experiences
• Make time for students to reflect
• Use appropriate teaching strategies

The conclusion could therefore be drawn that the respondents have a good understanding of their role as a facilitator of reflective learning by students, except that they do not emphasise the need to create a non-threatening, safe and trustworthy environment for students in which they can feel comfortable enough to share their thoughts, beliefs and experiences, as referred to in section 2.3.4. The respondents also do not allude to being role models of reflective practice, which is consistent with the findings in 4.3.2.2 that the respondents do not themselves consistently reflect on their practice.

4.3.3.7 The value of reflection in evaluating and/or improving an educator’s practice

![Graph showing the value of reflection in evaluating and improving an educator's practice (N=118)](image)

**Figure 4.20** The value of reflection in evaluating and improving an educator’s practice (N=118)
The responses from the respondents (94%, n=111) were almost unanimous that there is value in using reflection in their practice, though 6% (n=7) of the respondents did not think reflection added value to their practice, but did not provide any further explanation.

The findings are not consistent with the respondents' responses in 4.3.2.2, where they attested to practising reflection infrequently and inconsistently, despite the above evidence that they value reflective practice highly.

4.3.3.8 Successfully able to create a learning environment that is conducive for students to practise reflective learning

Figure 4.21 Successfully create a learning environment conducive to students’ reflective learning (N=118)

Sixty-eight percent (n=80) of respondents responded in agreement that they did create a learning environment for students that was conducive to reflection. The respondents' comments focused on the use of reflective learning activities like problem-based learning and case studies (and one educator mentioned storytelling). The other 32% (n=38) of the respondents responded that they could not successfully create a conducive environment due to the lack of time and ability to facilitate reflective learning.
It could be concluded that the respondents believe in creating activities that support reflective practice and they are adequately establishing a suitable reflective learning environment. As in 4.3.3.6, the respondents do not allude to establishing a safe and trustworthy environment, but they do refer to making time available in already full programmes to reflect.

Ensuring adequate time does play a role in establishing a conducive environment for reflection. According to researchers (Montshiwa 1999:20; Pultorak 2010:73), adequate time must be allowed for practising reflective activities; otherwise the measure will be pointless, as numerous closely spaced activities, for example, will block students from being able to contemplate on actions and experiences fully in order to be able to learn from them.

These findings are not consistent with the literature review in section 2.3.4; according to Schaub-de Jong et al (2011:155), essential for effective reflective learning is an open and trustworthy learning environment.

4.6 CONCLUSION

In this chapter the data gathered were analysed and the findings presented. Where possible, evidence in literature has been provided to either support or refute the results that are presented. Chapter 5 will discuss the findings further and make recommendations.
CHAPTER 5

INTERPRETATIONS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS OF THE STUDY

5.1 INTRODUCTION

Chapter 4 described the realisation of the data collection and analysis. This chapter provides an integrated discussion on the interpretations and conclusions of the findings. Limitations are identified and recommendations made for nursing education and further research.

5.2 RESEARCH DESIGN AND METHOD

The purpose of the study was to explore and describe the role of educators in facilitating reflective learning by students. The research question that needed to be addressed was: “What is the role of the educator in facilitating reflective learning by students?”

The objectives of the study were to explore the reflective practices of educators, describe the various types of learning activities educators use to promote reflective learning in students and determine whether the learning environment is conducive to promote reflective learning and teaching.

A quantitative research approach was selected, using an exploratory and descriptive design.

5.3 INTERPRETATION OF THE RESEARCH FINDINGS

The interpretation of the findings is based on the research objectives in order to answer the research question.
5.3.1 Demographic data

Summing up the demographic data, it is evident that the majority of the respondents were over 45 years of age. When interpreting this finding together with the respondents’ number of years of experience, in that 31% (n=36) of the educators had less than 5 years of experience in nursing education, it appears that the majority of the respondents had entered nursing education later in their careers. These findings could also indicate that the respondents have years of experience and expertise in clinical practice, which supports their facilitation of student theory-practice integration. The educators should be able to facilitate the students’ understanding of theory by referring to a variety of personal experiences and examples in clinical practice that the students are more likely to relate to. Riksaasen Hatlevik (2011:868) recommends reflective practice as a key factor in bridging the gap between theory and practice. This in turn will also promote the educators and students practising reflection together by, for example, discussing experiences and actions taken.

Another significant finding was the level of the respondents' qualifications, with 86% (n=104) of respondents having less than a master’s degree in nursing. This raises a concern for the future of nursing education. In South Africa the nursing qualifications will from 2015 onwards be higher education qualifications that are monitored and evaluated by the Council on Higher Education (CHE 2004:9). This means that the educators who facilitate the new nursing qualifications should have qualifications higher than those they facilitate. The challenge for nursing education is that most current educators will need to obtain a higher qualification in order to facilitate the new qualifications.

5.3.1 Objective 1: To explore the reflective teaching practices of educators

According to the findings of this study, the factors that impact on the reflective practices of educators are: having had experience with reflective learning as a student; having studied reflective learning as a teaching and learning approach in training as an educator; being able to set aside time for daily self-reflection; practising reflection on their own teaching practices and methods; the use of a reflective journal; and requesting peers to assist with evaluation of lessons.
When asked to evaluate the effectiveness of reflective practice, the respondents were unanimous in their agreement that there was value in educators' reflecting on their practice; they felt that reflective practice helped educators to improve their teaching methods and practice. However, the respondents' responses to their current reflective practices indicated that they did not regularly practise reflection on their teaching practices and methods. Fewer than 40% (n=41) of the respondents set aside daily time for self-reflection, and fewer than 50% (n=54) could actually say with certainty that they were consistent in their reflective practices.

When exploring the possible reasons for the educators' irregular reflective practice, it was clear that a rather low number of respondents (37%, n=44) applied reflective learning as a formal learning approach in their own studies. The majority of the respondents had had little to no formal personal experience with reflective learning as a student. Findings also revealed that the majority of the respondents had not studied reflective learning formally as a teaching and learning approach in their training as an educator; only 46%(n=55) of respondents could say with certainty that they had formally studied this approach in their educator training.

Reflection becomes effective in helping an educator improve his or her practice only with the development of reflective understanding and experience over a period of time. The development of reflective practice skills over time through formal training and practice is supported by the literature (Atkins & Schutz 2013:27; Pultorak 2010:97; Rogers 2001:37). The ability to reflect does vary between individuals and is acknowledged in the literature. However, for the development of reflective skills, daily reflection on action is recommended (Mann, Gordon & Macleod 2009:595).

This study concluded that most respondents did not have the opportunity to learn and develop reflective skills through formal guidance and support during their own studies.

The findings also indicate that the higher the educators' qualifications, the greater the likelihood that the educator did study and practise reflection formally. Of the respondents based at universities, 83% (n=5) had consistent experience with reflective learning in their own studies. These educators had either a doctorate or master's degree as a qualification, which may indicate that the higher the educators' qualification,
the more experience they have with reflective learning. Some 58% (n=69) of the total number of educators in the study had a bachelor’s degree as their highest qualification.

Fifty percent (50%, n=3) of the respondents based at universities did set aside daily time to reflect. These educators have more personal experience with reflection, having practised reflective learning in their own studies; therefore it appears they place more emphasis on setting aside time for daily self-reflection. This is consistent with the findings in the literature review in Chapter 2 (Atkins & Schutz 2013:23; Mann et al 2009:595; Pultorak 2010:97).

The respondents at the universities, who have the most experience in reflection on their practice, actually placed the least emphasis on asking their peers to evaluate their lessons. The respondents at the colleges tended to readily seek the opinion of their peers, which could be due to their limited personal experience with reflection. They are less able to effectively evaluate their own practice, hence are more inclined to seek the advice of their peers. However, literature supports the use of peer reflection as an effective form of reflection in its own right, especially when reflecting on teaching methods and practice. Peer reflection not only enhances the quality of an individual’s reflective practice, but promotes the exposure to multiple sources, perspectives and opportunity to discuss, clarify and verify practices (Boerboom et al 2011:615; Mann et al 2009:595; Montshiwa 1999:20; Pultorak 2010:137).

A low number of respondents (13%, n=16) always recorded evaluations of their teaching practices and methods in a journal, which indicates that the 34% (n=41) of respondents that actually set aside time in their day to reflect did not always record their reflective processes in writing. Although some respondents did reflect on their teaching practices and methods on a daily basis, this might not necessarily be a formal structured process.

The first step to development of self-awareness is to set time aside to reflect, and to keep a journal to encourage daily reflection (Forrest 2008:229). However, other literature acknowledges that not all individuals are receptive to journal writing (Bruce et al 2011:199; Epp 2008:1379; Grant et al 2006:379; Newton 2004:155).
Having personal understanding and experience with reflective practice will aid the educator in facilitating the reflective learning approach, and this is recommended in the literature, as discussed in previous chapters.

5.3.2 Objective 2: To describe the various types of learning activities educators use to promote reflective learning by students

According to the findings in this study, the factors that impact on the types of learning activity educators use to promote reflective learning by students are the use of the reflective learning approach in the classroom, requiring the students to keep a reflective journal during the programme of study, the learning activities that educators believe assist students with reflective learning and the availability of necessary resources.

The respondents in the study did facilitate reflective learning by their students, but for the majority this was not a standard practice. The respondents attributed the limited use of reflective learning in the classroom to the lack of time, due to tight theory block schedules. However this may also be related to the educators’ own limited experience with reflection in personal practice and as a teaching and learning approach.

Just over half (51%, n=60) of the respondents were of the opinion that reflective journals do assist students with reflective learning. However, reflective journals were not the method of choice for promoting reflective learning by students. These findings are also aligned with the respondents’ limited personal use of reflective journals. In interpretation it appears that more than half of the respondents do value the use of reflective journals by students, but do not actually choose to use the method in the classroom. This could be related to the respondents’ limited experience with the use of reflective journals or the students’ lack of commitment to using the journals. Literature consulted indicated that reflective journaling does contribute positively to learning by allowing the student to record thoughts, ideas and experiences which will assist in making decisions and taking action, and will serve as future reference. However, the literature also proposes that the individual’s learning preference is considered, which may not be in the form of reading and writing (Atkins & Schutz 2013:27; Bruce et al 2011:122); Coward 2011:883; Epp 2008:1379).
Small-group discussions, role play, problem solving and case studies were the most common learning activities selected by the respondents to assist students in reflective learning. To a lesser extent the respondents also used simulation and presentations. Lectures were also used to introduce and discuss reflective learning to students. These activities are all supported by the literature as effective reflective learning activities (refer to section 2.4). For delivery of their lessons, the respondents appeared to select learning activities that also promote reflective learning; however, the respondents did not use the reflective learning activities more recently identified and supported by researchers as effective, for example storytelling, guided reflection and mind mapping, as well as reflective journaling.

The majority of the respondents (64%, n=72) who implemented teaching and learning activities that promote reflective learning indicated that they had access to the necessary resources. The importance of the appropriate venue and size of venue was emphasised by the respondents, which is consistent with the teaching and learning activities the educators most frequently used. The respondents commonly used small-group discussions and role play, which require adequate and appropriate venues to be effective. Ensuring adequate resources, including facilities, is promoted in the literature, and establishing small groups as opposed to large groups for discussion is also recommended (Josten 2011:24; Carter 2013:93).

5.3.3 Objective 3: To determine whether the learning environment is conducive to promote reflective learning and teaching

According to the findings in this study, the factors that impact on respondents’ establishing a conducive learning environment that promotes reflective learning by students are: reflective learning adopted formally as a teaching and learning approach in the programme; formal time allocated for reflective learning in the programme of study; the educators’ views on the value of reflective learning by students; their role as a facilitator of reflective learning and their ability to establish a conducive reflective learning environment.

The respondents (91%; n=108) were almost unanimous in their agreement that reflective learning has a positive impact on student learning. As in the respondents’ responses to their own practice of reflection, they acknowledged the value of reflection
on learning and practice. Their attitude towards the importance of reflective learning is supported by the fact that 61% (n=72) of respondents adopted reflective learning as a teaching and learning approach in the programme they were facilitating. The respondents themselves, in their delivery of the programme, made provision for reflective learning by including teaching and learning activities that promoted it. As depicted in the discussion of the findings in Chapter 4, it is clear, however, that the reflective learning approach is not allocated formal time in the programme curriculum that the respondents facilitate. The respondents mentioned in their comments that one of their main challenges was not having enough time available in a full theory block programme to effectively facilitate reflective learning. The literature reviewed supported the inclusion of reflective learning as a teaching and learning approach in the curriculum rather than using it as an add-on when delivering the programme. If reflective practice is unplanned it is not as effective, and may become a frustrating and annoying practice for students. Reflective learning is an on-going process and does not occur immediately (Epp 2008:1379; Mann et al 2009:595; Montshiwa 1999:20; Platt 2002:33; Pultorak 2010:73; Ip et al 2012:253).

Most respondents (68%, n=80) felt confident they were able to create a conducive reflective learning environment for students. The educators did attempt to create opportunities for student reflective learning; this despite the full, intense programme schedules, the fact that there was no formal time allocated in the programme curriculum for reflective learning, and the educators' limited personal experience with reflective practice.

When asked to describe their role as a facilitator of reflective learning, the respondents stated that they allowed time for students to reflect, and included in their lessons learning activities that promoted reflective learning. The respondents also viewed their role as being responsible for motivating and guiding the students to reflect and to create opportunities for students to reflect.

Two factors that are supported by the literature as important in the role of the facilitator (the affective role of establishing a psycho-social environment where students feel emotionally and psychologically safe to express their inner thoughts, views and experiences, and the facilitator’s role as a role model of reflective practice), were not mentioned by the educators. The researcher found strong recommendation that
educators need to be able to model reflective practice. Practising reflection allows the educator to facilitate reflective learning from experience (Atkins & Schutz 2013:37; Karban & Smith 2006:4; Rogers 2001:37; Taggart & Wilson 2005:01). Establishing a trusting, positive and safe yet challenging and stimulating reflective learning environment is proposed by the literature reviewed as vital for ensuring a conducive reflective learning environment (Boerboom et al 2011:615; Mann et al 2009:595; Schaub-de Jong et al & Cohen-Schotanus 2011:155).

This indicates a gap in the understanding of the importance of ensuring the above aspects for effectively promoting reflective learning by students. This understanding would be promoted by obtaining formal training and experience in self-reflective practices.

5.4 CONCLUSIONS

The overall findings of the study indicate that the respondents did acknowledge the value of reflective practice but they did not actually practice reflection on their teaching practices and methods as regularly as they should. The findings indicate that this could be due to the respondents’ inadequate experience of reflective practice. The respondents may be inclined to be inconsistent in their reflective practices due to their inability to use reflection effectively to help improve their teaching practices and skills. In order to use reflective practice effectively, the concept has to be understood and developed over time with continuous practice. Without adequate training to facilitate reflective learning by students, the implementation of the approach will be limited (Levett-Jones 2007:112).

From the findings it is evident that respondents also valued the importance of reflective learning by students. Despite the challenges, the respondents did attempt to promote their students’ reflective learning abilities. The respondents used learning activities they were familiar with and which they used commonly in classroom facilitation. Although activities such as simulation, role play, problem solving and projects are endorsed as promoting reflective learning (Bruce et al 2011:199), more specific reflective learning activities, such as storytelling, guided reflection and journaling with dialogue are recommended by recent literature as more effective (De Swardt et al 2012:1; Ross & Kitching 2009:91). The limited use of more specific reflective learning activities may be
due to the respondents’ limited experience in or understanding of the facilitation of reflective learning. In addition, in all institutions in the study reflective learning was not a teaching and learning approach adopted in the programmes facilitated by the respondents, therefore formal time was not allocated for reflective learning.

The literature (Montiswa 1999:20; Pultorak 2010:73; Ip et al 2012:253) supports the belief that adequate time must be allocated for practising reflection if any learning is to take place from reflective activities. Newton (2004:155) states, however, that if educators value the use of reflective learning in facilitation of student learning, then reflective learning does not need to be included in the curriculum in order to be used. The respondents in this study have proved this point to be true, but the lack of allocated time may also contribute to the educators’ difficulty in including more specific reflective learning activities in the lessons.

It is also evident from the findings that the respondents acknowledged the important role they played in promoting students’ reflective learning. The responses indicated that, under the circumstances, they tried to motivate, encourage and create opportunities for students’ reflective learning in the classroom. Promoting reflective learning by students in the classroom promotes the students’ theory-practice integration and lifelong learning abilities. The educators have an advantage in facilitating theory-practice integration through reflection based on their advanced clinical practice experience (refer to section 5.3.1).

The respondents selected small-group discussions as the most common method used for promoting reflective learning; hence the importance of trust, confidentiality, safety and freedom from being judged is paramount. However, the respondents did not refer to their role in establishing a non-threatening, safe and trustworthy environment in which students could feel comfortable with practising reflection. Reflection is a sensitive and self-conscious exercise and especially difficult in the presence of others, therefore the educators have an important role as facilitators of a safe reflective learning environment. Finally, the respondents did not acknowledge the importance of being a role model of reflective practice. Reflective learning is best facilitated when the educator can engage with the students, and anticipate and understand the issues that arise from exploring the self and questioning one’s actions and beliefs. This deeper understanding of reflective learning comes with continued personal reflective practices and the
development of reflective skills which the educator can role model when facilitating students’ reflective learning (Atkins & Schutz 2013:27; Pultorak 2010:97; Fox 2011:70).

5.5 RECOMMENDATIONS

The following recommendations are made for educators, students and further research in terms of reflective teaching and learning and how educators could improve their practice when facilitating learning.

5.5.1 Recommendations for professional development of educators

The researcher aims to publish an article on the study that will make the study more accessible to a wider interest group, especially educators and managers of education institutions. The intention is to increase the awareness of reflective practice and possibly encourage more educators to explore and adopt reflection to improve their practice and to increase their use of reflective learning activities when facilitating student learning.

The researcher also aims to present the study at nursing education conferences. This will increase the awareness of reflective practice in nursing education and the value of reflective learning by students. In addition the presentation may encourage further discussion and ignite possible initiatives for further research.

Reflective learning should be included as a teaching and learning approach in the curriculum of the educator training programmes so that the educators are able to facilitate student reflective learning based on a good understanding of reflection, reflective activities and establishing a conducive reflective learning environment. More specific reflective learning activities like reflective journaling, reflective group sessions, storytelling, guided reflection, peer-group dialogue, and mind mapping should be included in the curriculum content. The physical and psychological factors that promote a reflective learning environment should also be covered. Educators who are trained in reflection as a teaching and learning strategy could contribute to more innovative ways of integrating reflection into the teaching and learning processes.
The practice of reflection should be included in the educator training programme, enabling the educator to develop self-reflective skills. The ability to practise reflection should also be an exit-level outcome of all educator training programmes or postgraduate programmes so that the educators may develop reflective skills and be able to role model reflective practice. There should be specific predetermined criteria for evaluating this outcome during the training programme.

The researcher further recommends that institutions establish training programmes for current educators to develop their facilitation of reflective learning skills. Nursing Education Institutions should also adopt a reflective culture, thereby supporting and promoting the reflective practices of educators.

5.5.2 Recommendations for student support

Learning to reflect as students promotes the development of future reflective nurse practitioners; therefore, reflective learning should be included as a teaching and learning approach in the undergraduate nursing programmes and be facilitated by educators who have had formal training in facilitating reflective learning. The programme curriculum should have formal time allocated for facilitation of reflective learning by students. For students to develop reflective skills and adequately apply these skills to improve their clinical practice, time to practise in a conducive environment is essential. Therefore the researcher recommends that a portion of the curriculum notional hours (credit-bearing hours) be allocated for reflective practice and that adequate and appropriate resources be made available to promote effective reflective learning activities, such as small-group discussion venues, reflective journals, supplies and equipment for role play and storytelling, technology and references for determining correct and best practices. Innovative reflective activities should be used during the teaching process to stimulate creative thinking and critical reasoning skills among students. These activities could include reflecting by using concept maps, action learning, storytelling and the use of critical incidents. The educators that facilitate reflective learning in students should therefore be appropriately trained and equipped.
5.5.3 Recommendations for future research

This study focused on the accessible population in Gauteng, South Africa, which limits the generalisation of the study to educators and nursing education nationwide. Therefore a recommendation for future research would be to expand the study to the total target population of educators in South Africa.

This study will be made available on the UNISA repository and will therefore be accessible to individuals interested in reflective learning and practice and to those who intend to research the topic further.

In order to provide meaningful student support, it is recommended that further studies be conducted focusing on student experiences in terms of the support and facilitation of reflective learning in the classroom. A qualitative study could provide an in-depth understanding of the needs of students on how to reflect within the learning process.

Educators who are currently implementing reflective learning activities in student facilitation should be provided with the assistance and training needed to make their facilitation of reflective learning more effective. The researcher suggests that Nursing Education Institutions, using an action research approach, determine the development needs of the educators and, based on their specific needs; establish a Continuous Professional Development (CPD) programme, a workshop or in-service programme to support, encourage and provide opportunities for self-reflection as well as use reflective learning activities to promote student reflective learning.

Further studies that focus on developing a training model or establishing structured activities to assist current educators to develop reflective practice skills and skills to facilitate reflective learning by students are also recommended.

The researcher also recommends a qualitative study to probe further the attitudes towards reflection and the challenges the educators experience in terms of their own reflective practices and the facilitation of reflective learning by students.

Finally the importance of the relationship between the educator and the student has been acknowledged in previous studies. The establishment of trust is needed, to
promote deep reflection through journaling and dialogue. The researcher therefore recommends a qualitative study with possibly a focus group approach to establish the factors that promote and impinge on developing a trusting and honest relationship between educator and student.

5.6 CONTRIBUTIONS OF THE STUDY

By focusing on the reflective practice of educators, this study has contributed data that will provide more understanding of the value nurse educators place on reflective teaching and the facilitation of reflective learning. This study should also contribute to the increased awareness of education institutions with regard to their role in supporting and promoting a reflective practice environment and culture. The study could contribute further by providing the information that might assist in the development of a training model to assist educators in their understanding of reflective learning, of the reflective learning activities and the facilitation skills that create a learning environment conducive to reflection. Finally this study may add to the body of knowledge on reflective learning and reflective teaching in education by providing new and relevant information that may assist educators in planning their development of reflective practice and selecting learning activities to promote their students’ development of reflective skills.

5.7 LIMITATIONS OF THE STUDY

The findings focused on the reflective teaching practices of 121 educators and their facilitation of reflective learning in the classroom. The accessible population for this study was educators that practise at nursing education institutions that offer registered nurse training programmes in Gauteng, South Africa. The study therefore may not necessarily be generalisable to the entire country, although the researcher did use the probability sampling method for selection to promote the generalisability of the study.

The method of data collection was limited to the use of structured self-report instruments, which prevented further discussion and clarification by the respondents of their responses. More clarification on some aspects would have been possible if the researcher had had the opportunity to clarify further and probe more deeply into some of the comments made by the respondents.
5.8 CONCLUDING REMARKS

The importance of developing reflective nurse practitioners is widely endorsed in literature as a means of helping nurses to adapt their practice to ever-changing situations and settings, yet remain competent in a dynamic healthcare environment. This study found that the reflective learning should be included formally as a teaching and learning approach in the nursing education and training programmes, thereby allowing adequate time for the students to explore and develop the necessary reflective practice skills. This study also found that the practice and facilitation of reflective learning should be included in educator training programmes, thereby assisting the educators to develop their own reflective practice skills and the necessary skills to effectively facilitate reflective learning by students.

Reflection may be most useful when viewed as a learning strategy. Used in this way, it may assist learners to connect and integrate new learning to existing knowledge and skills (Mann, Gordon & Macleod 2009:595).

BIBLIOGRAPHY


UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE

HSHDC/89/2012

Date: 29 October 2012           Student No: 536-470-1
Project Title: Role of reflective learning in nursing education.
Researcher: K Naicker
Degree: MA in Health Studies           Code: MPCHS94
Supervisor: Prof GH van Rensburg
Qualification: D Litt et Phil
Joint Supervisor: -

DECISION OF COMMITTEE
Approved ✓ Conditionally Approved

Prof L Roets
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MM Moleki
ACTING ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES
Letter to respondent

Research Title: Role of Reflective Learning in Nursing Education

Dear Colleague

I am an MA Health Sciences student at Unisa conducting a study on the role that nurse educators play in the facilitation of reflective learning by students. I hope the study will provide information needed to aid us nurse educators develop more competent, committed professionals for nursing practice.

I have selected an explorative descriptive study using a self-reporting questionnaire for data collection. Your institution was selected randomly from a list of nursing education institutions registered with the SANC in Gauteng. I would appreciate it if you would assist me with this study by completing and returning the attached questionnaire. You are not required to put your name or identify yourself in any way to ensure that you remain anonymous. I also be using a coding system to help ensure all information received is kept confidential and is not traceable back to you or your institution. I hope, therefore, that you will feel comfortable giving your honest opinion. Please do answer all the questions but if you prefer not to answer any particular questions, feel free to leave it blank.

You are under no obligation to complete the attached questionnaire but I hope that you do as your opinion and experience is very important and I would like to give an accurate picture on what nurse educators think about their role in facilitating reflective learning. You are free to withdraw from the study at any time with no harm to yourself or institution as your participation in the study is completely voluntary. By completing and submitting the questionnaire you will be granting your consent to participate in the study.

Ethical Clearance Certificate: HSHDC/89/2012

You welcome to contact me for further details and clarifications. My contact details are as follows:

Email: peggy.naicker@lifehealthcare.co.za

Tel: 011 2199052

Thank you in advance for your assistance and valuable time.

Yours sincerely,

Peggy K Naicker

Unisa student number: 0536 7401
25 June 2013

TO WHOM IT MAY CONCERN

Dear Madam/Sir

RE: Permission to conduct research at Ann Latsky Nursing College

Research Title: Role of Reflective Learning in Nursing Education

Introduction: I am a MA in Health Sciences student at Unisa and I have decided to research the above topic for my dissertation. I have received ethical clearance from Unisa, evidenced by the following: Ethical Clearance Certificate: HSHDC/89/2012

Participant status: In giving permission to the researcher to use your nursing education institution as a location for delivery and collection of the research questionnaires, you will allow the researcher to obtain information from the nurse educators at Ann Latsky Nursing College. The researcher will use a self-report questionnaire and all the information obtained will be used for research purposes only.

Study purpose: The purpose of the study is to explore and describe the role of educators in facilitating reflective learning by students. Academic literature supports the use of reflective learning in developing practitioners that are able to function in the ever changing global healthcare industry and adapt to and meet the challenges that spring up on a daily basis. The researcher is interested in the role that nurse educators play in promoting reflective learning.

Type of data: A structured questionnaire will be used, aimed at obtaining non sensitive data on nurse educator practices in facilitating reflective learning as well as the role of the learning environment in supporting reflective practices.

Data collection process: The planned data collection method will be as follows:

1. The researcher will visit the institution and drop off the questionnaires for nurse educators to complete.
2. The researcher will identify one person at the institution to coordinate the process and ensure that the daily functioning of the institution is not disrupted in anyway.
3. The researcher will place a sealed slot box at the institution for placement of completed questionnaires.
4. The researcher will return on an agreed upon date to collect the box with completed questionnaires.

Participant selection: A stratified random sampling method was used to select the nursing education institutions (NEI) for the study. This method allowed the researcher to select a sample that is representative of all 3 types of NEI in Gauteng i.e. private, public and universities that offer nursing programmes that lead to registration as a nurse.
**Potential risks:** There are no foreseeable physical, psychological, social or economic risks to either the institution or the nurse educators. Nor are there any foreseeable discomforts to the nurse educators that participate in the study.

**Potential benefits:** The overall value this study may have is to aid the growth of nursing education in the 21st century and to provide more information to nurse educators and nursing education institutions on reflective learning and its possible value in developing competent, committed professionals for nursing practice.

**Confidentiality pledge:** The researcher pledges the assurance that privacy of both the institutions and nurse educators participating in the study will be protected at all times. The researcher pledges to uphold anonymity and confidentiality by not mentioning the name of or relate any findings to the institution. This will be ensured by using a coding system for data collection hence the name of nurse educators or institution will not be used. The study design promotes the lowest possible risk to person and institution.

**Voluntary consent:** Participation is strictly voluntary and failure to participate will not result in any negative retribution or loss of benefits.

**Right to withdraw or withhold information:** Allowing permission to conduct research places the institution under no obligation and the institution may withdraw from the study at any time. No information will be obtained about the institution directly but the nurse educators will be allowed to withdraw from the study or withhold information if they choose.

**Contact details:** You welcome to contact me for further details and clarifications. My contact details are as follows:

Email: peggy.naicker@lifehealthcare.co.za

Tel: 011 2199052/0741956846

Included with this letter please find a copy of the ethical clearance certificate and research proposal and data collection instrument.

Yours sincerely,

Peggy Kannagi Naicker

UNISA student number: 0536 7401
Title: The role of reflective learning in nursing education

Instructions for completion of questionnaire:

1. Tick (✓) in the appropriate box if the question provides pre-determined options.

2. If the lines provided for the open ended questions are insufficient, you may add a page but be sure to indicate the correct question number.

3. Please place the completed questionnaire in the sealed, slotted box that has been provided at your institution.

Section A

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3. Gender

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5. Type of qualification in nursing education obtained:

|   | Diploma | Advanced diploma | Bachelor’s degree | Master’s degree | None | Other |

Please specify if you selected ‘other’:
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6. Type of nursing education institution employed at:

|   | Public college | Private college | University |

Section B

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<tr>
<td>5</td>
<td>Do you practice reflection on your own teaching practices and methods?</td>
<td></td>
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<tr>
<td>6</td>
<td>Do you keep a reflective journal to record your evaluation of your session and plan for next sessions?</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>7</td>
<td>Are your students required to keep a reflective journal for the duration of the programme?</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>Do you ask your peers to assist in evaluating your lessons?</td>
<td></td>
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</tr>
</tbody>
</table>

**Section C**

1. Is reflective learning adopted as a teaching and learning approach in the programme you are currently teaching or facilitating?

   YES [ ]   NO [ ]

2. If your answer to item 1 is yes, please indicate how it is integrated in the programme.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
3. If your answer to item 1 is no, please indicate how you do/could integrate reflective learning into the programme.
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

4. Do you have the necessary resources available to use various learning activities that help students develop reflective practice?
YES [ ] NO [ ]
Please explain further:
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

5. Is there formal time allocated in the programme schedule for students to practice reflective learning?
YES [ ] NO [ ]
Please substantiate your answer:
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

6. Select from the options below, learning activities you believe assist students with reflective learning: (you may select any number of options by ticking (✓) in the box next to activity):

<table>
<thead>
<tr>
<th></th>
<th>Small group discussion</th>
<th>7</th>
<th>Demonstration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Problem solving exercises</td>
<td>8</td>
<td>Case Studies</td>
</tr>
<tr>
<td>3</td>
<td>Role playing</td>
<td>9</td>
<td>Lectures</td>
</tr>
<tr>
<td>4</td>
<td>Simulation</td>
<td>10</td>
<td>Projects</td>
</tr>
<tr>
<td>5</td>
<td>Large group discussions</td>
<td>11</td>
<td>Journal club</td>
</tr>
<tr>
<td>6</td>
<td>Presentations</td>
<td>12</td>
<td>Reflective journal</td>
</tr>
<tr>
<td></td>
<td>Other (please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. In your view does reflective learning impact students’ learning in a way that is:

<table>
<thead>
<tr>
<th>Positive</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>No effect</td>
<td></td>
</tr>
<tr>
<td>Do not know</td>
<td></td>
</tr>
</tbody>
</table>

Please comment further on your response above:

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

8. Describe your role as a facilitator of reflective learning.

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

9. In your view does reflection have any value in evaluating and/or improving an educator’s practice?

YES [ ]          NO [ ]

Please comment further on your response to the question above:

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

10. In your opinion would you say you are successfully able to create a learning environment that is conducive for your students to practice reflective learning?

YES [ ]          NO [ ]

Please explain your response above and provide an example if possible

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

11. Please provide any other relevant comments or share experiences regarding your role as facilitator of reflective learning.

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Thank you
To whom it may concern

This serves to confirm that HJ Gerber were involved in the empirical research efforts of Ms. K Naicker for her MA (Health studies) study with the title "ROLE OF REFLECTIVE LEARNING IN NURSING EDUCATION".

Although every effort was made to ensure that the student presented the statistical results correctly, I cannot accept responsibility for the structure and logical flow of the presentation of the results of this study.

Regards
Hennie Gerber
To whom it may concern:

I certify that I am a professional editor and that I have edited the dissertation on *Role of reflective learning in nursing education* by Kannagi Naicker for an MA degree in Health Studies at Unisa (Supervisor: Professor G. van Rensburg).

I have edited the manuscript for correctness and fluency of language and expression and consistency of references.

Marion J Marchand
BA, H Dipl Lib, HED,
Postgraduate Certificate in Editing UP; Accredited Translator (Afrikaans to English) and English Editor, South African Translators' Institute, Member Professional Editors Group; Member of the English Academy