QUALITY MANAGEMENT SYSTEMS USED BY NURSING EDUCATION INSTITUTIONS IN GAUTENG PROVINCE

by

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DECLARATION

I declare that **QUALITY MANAGEMENT SYSTEMS USED BY NURSING EDUCATION INSTITUTIONS IN GAUTENG PROVINCE** is my own work and that all the sources 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.

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ABSTRACT

Quality assurance forms an integral part of education and training programme delivery.

The purpose of this research was to determine whether the quality management systems (QMS) used by nursing education institutions in Gauteng are aligned to the SAQA criteria and guidelines for education and training providers. A quantitative, descriptive and exploratory design was followed using a self-administered questionnaire as data gathering instrument. A total of 32 respondents from three selected nursing education institutions completed the questionnaire. The data were analysed by using the Statistical Package for Social Sciences (SPSS) program.

The findings revealed that the nursing education institutions only partially comply with SAQA's core criteria for quality management systems. Recommendations to improve the current QMS were made.

Key concepts

Quality management system, quality assurance, quality cycle, nursing education institutions, core criteria.

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Dedication

I dedicate this dissertation to my late father, Lucas Booi as appreciation of my upbringing to the person I am today.

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Table of contents Page

CHAPTER 1

Orientation to the study

CHAPTER 2

Literature review

Table of contents Page

Table of contents Page

CHAPTER 3

Research design and methodology

CHAPTER 4

Data analysis and interpretation of data

Table of contents Page

Table of contents Page

List of tables Page

List of tables Page

List of figures Page

List of abbreviations

CHE	Council of Higher Education
CTS	Conformance to Specification
ETQA	Education and Training Quality Assurance Body
HEQC	Higher Education Quality Committee
HPCSA	Health Professions Council of South Africa
ISO	International Standardisation Organisation
NEI	Nursing Education Institution
NQF	National Qualification Framework
NSB	National Standards Body
QA	Quality Assurance
QMS	Quality Management System
SAEF	South African Excellence Foundation
SANC	South African Nursing Council
SAQA	South African Qualification Authority
SETA	Sector for Education and Training Authority
SGB	Standard Generating Body
TQM	Total Quality Management

List of annexures

CHAPTER 1

Orientation to the study

1.1 INTRODUCTION

Higher education institutions are undergoing major changes worldwide. The higher education environment has become more competitive with new trends in teaching and learning; due to increased mobility of students, professionals and academics; the pressure of private institutions and growth of alternative systems; increasing institutional authority; stringent financial budgets, and a shift towards market-oriented elements in the steering of higher education systems. Governments have converted higher education policies from an input-oriented to an output-oriented approach. An exchange between deregulation and institutional autonomy on the one side and quality assurance, accountability and out-put control on the other, took place in this context in attempt to achieve the effective and efficient education and training (Hattingh 2003:1; Van Damme 2000:10-11). The concept of quality assurance, control and management has emerged as a primary instrument and priority for evaluation of performance and accountability in the provision of quality service in higher education systems.

The international emergence of quality assurance in higher education started in the 1990s when quality became the central concept and major focus of institutions and governments. Most countries in the world established quality assurance systems and procedures in higher education comparable to those in the industries. This happened against a background of interrelated factors in a rapidly changing global economy. The growing market in higher education accessibility shifted from the elite to the masses raised concerns about a potential decline of academic standards whereas key stakeholders, particularly businesses, professional bodies and employer organisations, started to query traditional quality management capacities in view of the increasingly competitive and transformative economy of modern workplaces and labour markets. Budget restrictions led to declining government funding per student and a pressure to increase efficiency in public expenditure and therefore an expectation of institutions to meet the demands of greater public accountability. Within this context, quality

became a labelling instrument with potentially powerful effects (Middlehurst & Woodfield 2006:54; Van Damme 2000:10).

The need for quality education and training services is a global phenomenon. Changes in the marketplace, the emergence of new needs from society, as well as political and socio-economic fluctuations and globalisation have created new economic demands that require new skills. The striving for zero defect world-class products and consistent excellent services remains a quest for every national and international business market because clients expect quality products (Hattingh 2003:1-2). Therefore, quality management has become the drive to achieve the required competitive skills to meet economic demands globally. Employers, managers and communities demand quality services that improve continuously and are globally competitive.

The demand for quality service/products requires that higher education institutions offer quality qualifications and produce excellent products that meet international standards to achieve good investment returns (Hattingh 2003:1-2). Although the history of quality assurance in nursing precedes that in higher education because of the necessity of professional approval of programmes to safeguard the public, nursing education institutions are facing the same contemporary challenges and are expected to align with current requirements for quality assurance in higher education to ensure quality qualifications and quality service delivery (SAQA 1995:1) to meet NQF objective indicated earlier.

1.2 BACKGROUND TO THE STUDY

1.2.1 Quality management: a global perspective

The establishment of quality assurance policies and mechanisms in most countries took place in a political environment characterised by a changing relationship between the government and higher education institutions. Quality assurance became particularly important in higher education systems and adopted a more self-regulation-oriented approach to relationships between government and institutions especially in Western European countries (Van Damme 2000:11).

International variation in approaches to quality and quality assurance is due mainly to three dimensions: definition of quality, purpose of a quality assurance system, and the methodologies (self-evaluation/peer review/performance indicators/quality audit) used. Four general purposes have been distinguished, namely improvement of teaching and learning; client information and market transparency; steering of the higher education system in resources and planning, and accountability to the public (Van Damme 2000:11-12).

In South Africa, the Department of Education proposed two purposes of quality assurance in higher education in the *White Paper no 3: A on a Programme for the Transformation of Higher Education* and the *Higher Education Act, 101 of 1997*, namely, public accountability and institutional improvement. These two purposes are essential in the light of higher education's profound transformation due to economic globalisation, technological expansion, and different ideological views of knowledge that influence quality assurance systems worldwide (Chandru 1999:131-132).

The global challenges and different approaches to quality assurance models and quality management systems (QMS) led to the establishment of a worldwide federation of national standards bodies called the International Organisation for Standardization (ISO). The ISO's main function is to prepare international standards, and the ISO 9001 Quality Management System specifies QMS requirements for manufacturing companies and organisations providing services, including educational institutions. The requirements of this international standards body are generic, intended to be applicable to any organisation and can be adopted by any public or private business sector International private or business sectors have a choice to register and be monitored for compliance and conformance (UNISA 2005a: 6-10; SABS 2001b:iv-vii).

The nature of quality management systems (QMS) at educational institutions is what distinguishes one institution's credibility from another's. Clients recognise differences in quality of education from different institutions offering the same programmes. The international universities' external audit indicates that in the universities publicly known as good, audit results reflected gaps in their quality management systems, mainly with regard to the impact of learning experiences, gained from a university, in the work environment (Hattingh 2003:1).

1.2.2 Quality management: a South African perspective

South Africa is a growing democratic country with a fast developing economy, and rapidly increasing engagement in international business investments. As a result, a skills shortage emerged whereupon the South African Government acted by declaring the alleviation of the skills shortage a priority (SAQA 2001a: 13-19).

The SA Government regards public service as the face of the government and employees are judged by their performance. Value for money underlies the policy of quality in South Africa and is currently influenced by political and economic concerns and demands. The government is implementing performance-based systems across every area of the public sector with the purpose of measuring the impact of quality skills development initiatives according to the *Skills Development Act, 97 of 1998*. The quality management systems (QMS) framework includes measuring the effectiveness of the National Qualifications Framework (NQF) against the National Skills Development Standards (NSDS). To achieve NSDS, the government established the South African Qualifications Authority (SAQA), and mandated it to develop QMS criteria and guidelines, and to establish partners and delegate each partner with responsibilities and roles to sustain the QMS in education and training providers (SAQA 2000:4).

1.2.2.1 SA quality management systems legislation

In October 1995 the South African government established and legitimised a single authority, the South African Qualifications Authority (SAQA), with functions of authority in terms of section 5 (a) and (b) of the *South African Qualifications Authority Act, 58 of 1995*. This authority is mandated to provide for the development and implementation of a National Qualifications Framework (NQF) with legitimate objectives, one of which was to establish the foundation and origin of a quality management system for the South African educational system. The NQF is intended to enhance the quality of education and training (SAQA 1995:1).

SAQA uses the NQF as the driving force for the development of a quality management system originating from the above NQF objective. SAQA was also mandated to establish other partners and delegate each with responsibilities to sustain the QMS in education and training providers. These partners are the National Standardisation Bodies (NSBs), Standard Generating Bodies

(SGBs), Education, Training and Qualification Authorities (ETQAs), and monitoring bodies Sector for Education and Training Authorities (SETA) for different career paths, which together formed the NQF quality management system (Meyer, Mabaso & Lancaster 2002:269-280; SAQA 1995:1-6).

SAQA enabled each partner to play its part in quality management through clarifying its unique roles and responsibilities. Amongst the responsibilities the partners ensure clarity on standards and qualifications with accurate standards and comprehensive qualifications. Standards are not outcomes or competencies nor their equivalents; they are developed with competency, qualification, guidelines for education training and development, and assessment (SAQA 1995:1-6).

South Africa is faced with the challenge of multicultural differences and different qualifications and standards. For this reason, SAQA created a quality management system (QMS) as a quality culture with the expectation that institutions take full responsibility for quality and flexibility to respond to their unique situations through the development of their own QMS aligned to the SAQA quality management systems criteria and guidelines. SAQA emphasises that quality assurance, quality audit, and quality control are critical elements for a quality management system to secure and sustain continuous, consistent improvement in delivery of services/products (SAQA 2000:3-4; 2001a:18-21).

1.2.2.2 Higher education and quality assurance

Higher education institutions view quality as a concept that should come from within an organisation and should determine their own purpose for the QMS as an institution. Institutions' QMS should work towards becoming a living part of how they do their day-to-day work. For these institutions, the motivation for establishing a quality management system is to ensure that the SAQA, SETA, and ETQA requirements become an integral part of the activities within the organisation (Bellis 2001:119).

In higher education the concept of quality is regarded as unique and is expressed differently from one education and training provider to another (Oakland 2003:3). Institutions should define quality and contest their definition based on unique environments, core values,

different perspectives/opinions, vision, and different standards and qualifications. Hence the nature and scope of customers' requirements and needs regarding the expected service/product, should give direction in the development of an education and training provider's quality management system to ensure relevance to core values and contextualisation within its own situation and environment, however it is emphasised that that unique criteria at each institution should not contradict the SAQA core criteria (SAQA 2001a:2).

The quality management in higher education is aligned to SAQA quality management system as a quality culture that accommodates everyone, responding to a particular situation. The differences in methods of assessing quality and the use of different models to manage quality in higher education is based on components/elements for quality evaluation and programmes offered.

Performance indicators to evaluate quality in higher education may not reflect the entire organisational processes, but may be developed based on core values that are counted as quality for a particular programme and a particular department.

1.2.2.3 Quality management in nursing education

The South African Nursing Council (SANC), the statutory body for nursing, controls quality in nursing education and practice to safeguard the public. The SANC's quality management system consists mainly of regulations controlling the education and training of nurses. These include Regulation R425 (1985, as amended) that relates to the approval of and the minimum requirements for the education and training of a nurse (general, psychiatric, and community) and midwife; Regulation R2598 (1984, as amended) relating to the scope of practice of nurses, and Regulation R387 (1985, as amended) relating to the acts and omissions in respect of which the SANC may take disciplinary steps. The SANC is the nursing ETQA and must ensure that all the regulations are complied with before accreditation of a nursing education and training provider just like other general education and training providers. SANC is therefore expected to respond to SAQA's strategy that requires and enables the ETQA's and providers the development of quality management systems (SAQA 2001a:3).

The SANC conducts an inspection visit to a nursing education and training provider before accreditation of a nursing school. The SANC will give feedback on existing gaps or limitations and will only grant accreditation after the required improvements have been effected. Inspection visits are done on a regular basis, every five years to ensure that quality in nursing education is maintained (SANC 2005:21).

After the establishment of SAQA, the SANC received the status of Education Training and Quality Assurance body (ETQA) for nursing education and training career paths. The Nursing ETQA is therefore inclusive in the new education system establishment in terms of section 5 (a) (ii) of the *South African Qualifications Authority Act, 58 of 1995*. In terms of this Act, the ETQA monitoring and auditing of achievements in terms of national standards is an integral role.

The SANC perspective on current SAQA quality management system deliberations is not known at this stage, but the old system to maintain quality is still in place. However, nursing education recognises the NQF objectives as realised through nursing colleges' association with universities who monitor quality of education and training provided by the colleges.

It should be noted that the quality management system in the nursing education and training environment should be comprehensive rather than just to measure or assess a chosen component/element, and performance. It is commonly known that performance is assessed within a culture of an organisational strategy, focused on recognised critical success factors, and priorities of the nursing education institution. The researcher found no previous research in South Africa on quality management systems in the nursing education and training institutions. Research on quality assurance and management focused mainly on one or two core values reflecting elements of quality in nursing education and training.

The new developments in the national education and public sectors regarding performance effectivity and efficiency as required by the NQF and NSDS, demands a common comprehensive quality management system to ensure quality competitive skills. NQF principles facilitate access, mobility, and progression in education and training in different career paths; enhance the quality of education and training; redress past unfair discrimination in education and training, and facilitate learner development (South Africa 1999:1). It is crucial that nursing education fit in with the purpose of the new education dispensation by meeting the objectives

and principles of the NQF (Act 58 of 1998). SAQA's approach to a quality management system is applicable to any organisation and embraces different models to promote a comprehensive quality management system that can fit any specifications (SAQA 2001a:15).

1.3 PROBLEM STATEMENT

It is currently not known whether nursing educational institutions are on a par with the rest of the educational providers in different career paths in South Africa. Nursing education should align with the current quality management system, which encompasses quality management requirements that meet the objectives of the National Qualifications Framework (NQF). Although nursing education has challenges with regard to barriers emanating from nursing education and training's unique environment, it is essential for nursing education institutions to contextualise and formalise their organisational quality management processes using SAQA's criteria (SAQA 2001a: 1-31).

This led to the research question:

Are the current quality management system practices in nursing education institutions congruent with SAQA's core criteria for education and training providers?

1.4 PURPOSE OF THE STUDY

The purpose of the study was to explore the nature and extent of the quality management systems used by the selected nursing education institutions in Gauteng Province to establish whether these are aligned with the SAQA criteria and guidelines developed for education and training providers.

1.5 OBJECTIVES

The objectives of the study were to

1 determine whether the current quality management systems used by nursing education institutions are congruent with SAQA's requirements and guidelines for education and training providers

2 identify existing limitations in the quality management systems used by the nursing education institutions

1.6 SIGNIFICANCE OF THE STUDY

The findings of this study may illuminate the quality assurance practices and activities in the selected nursing education institutions. The information could assist these institutions to realise their strong points in assuring and managing quality and direct them to the limitations in their quality management systems. Dissemination of the findings could assist the institutions in the sample to align their quality management systems according to the SAQA criteria and at the same time alert other nursing education institutions of the need to do so.

Growth and development in quality assurance and management within nursing education could therefore be stimulated thereby eventually leading to improved competency of nurse graduates with the direct outcome of high quality patient/client care.

1.7 RESEARCH DESIGN AND METHODOLOGY

A quantitative approach using a descriptive and exploratory design was chosen as appropriate for this study. A self-administered questionnaire was designed and distributed to professional staff at three selected nursing education institutions in Gauteng. Purposive sampling was used to include nurse educators and managers who would be able to provide the required information as a result of their involvement in quality assurance. A total of 32 respondents completed the questionnaires. The data were analysed by using the Statistical Package for Social Sciences (SPSS) program. Descriptive statistics were used to describe the results.

1.8 ETHICAL CONSIDERATIONS

Permission to do the study was obtained in writing from the provincial head office of the Department of Health as well as from each of the participating nursing education institutions. The Department of Health Studies Research Committee at the University of South Africa granted ethical clearance.

The ethical principles of informed consent, anonymity and confidentiality were upheld (see chapter 3).

1.9 DEFINITION OF TERMS

For the purposes of this study, the following terms are used as defined below.

Quality refers to the achievement of a specified degree of excellence within the context of an organisational environment (Oakland 2003:3). In health care quality means excellence, perfection, and technical expertise and to strive for and have the ability to meet faultless outcomes (Stanhope & Lancaster 2004:12).

Quality management system refers to a combination of processes used to ensure that the degree of excellence specified is achieved through a variety of activities and information that assist the institution to consistently deliver a required excellent product (South Africa 1998a: 6).

Quality assurance refers to activities associated with guaranteeing the quality of a service or product (Foster 2004:23). SAQA (2001a:6) defines quality assurance as the sum of activities that assure the quality of products and services at the time of production or delivery of services. Quality assurance presupposes that the degree of excellence specified is achieved (Bellis 2001:118-119). Hence quality assurance ensures that quality is continuously assessed in order to improve (Meyer, Mabaso & Lancaster 2002:22).

Quality audit refers to a way to improve customer service and ascertain whether current customer service processes are being performed. This is an internal assessment model for

performance and outputs (Foster 2004:23). A quality audit is the process of examining activities against the quality standards or indicators to verify that the specified quality of service has been achieved (South Africa 1998a:6) or activities undertaken to measure the quality services that are already rendered (SAQA 2001a:6).

Quality control is a process based on a scientific method, which includes the phases of analysis (process of breaking into fundamental pieces), relation (understanding relationships between the parts), and generalisation, which looks at how the interrelationships apply to quality control as a phenomenon (Foster 2004:23). Quality control is a system of activities designed to assess the quality of the product as a service or product to a customer (SAQA 2001a: 6).

Nursing education institution "it is regarded as a provider" refers to a higher education institution which offers nursing programmes at basic and post-basic levels according to the statutory requirements stipulated by the South African Nursing Council (SAQA 2006:33).

1.10 OUTLINE OF THE STUDY

Chapter 1 briefly outlines the study, including the problem, purpose, objectives and significance of the study, and the research design and methodology, and defines key terms.

Chapter 2 discusses the literature review on quality management and the South African quality authority bodies.

Chapter 3 describes the research design and methodology.

Chapter 4 presents the data analysis and interpretation.

Chapter 5 summarises the study and its conclusions, and makes recommendations for practice and further research.

1.11 CONCLUSION

This chapter outlined the South African government's position on quality management in higher education within the context of the skills shortage in the country. The study seeks to generate knowledge on the quality practices in nursing education institutions and how they comply with SAQA criteria and guidelines. Nursing education institutions should demonstrate a mature effective, sufficient, performance that has a positive impact on quality skills development and management. Satisfied clients, students' rewarding experience, and national and global strengthening of an institution's competitive service/products demonstrate quality. Current practice, then, should reinforce a culture of continuous improvement and contribute to developing new knowledge.

CHAPTER 2

Literature review

2.1 INTRODUCTION

This chapter discusses the literature review conducted on quality management practices at nursing education and training institutions nationally and internationally. A literature review is the process of finding, reading, understanding and forming conclusions about published research on a particular topic, using a range of sources, in order to guide a research topic in a way that permits a clear formulation and refining of the problem statement and to obtain relevant background information for the topic (Bless & Smith 2000:23). According to Neuman (2003:96-97) and Struwig and Stead (2001:38), the purpose of conducting a literature review is to acquire a knowledge base, insight into and background on the topic under study to avoid duplication.

The literature review covered definitions of quality, quality assurance, quality management, and total quality management; described the South African approach to quality management in higher education and explored the nature of its quality management systems to illuminate quality management in higher education, and finally, examined quality management practices used by different nursing education institutions.

The quality management practices studied reflected the following common concepts: quality monitoring, controlling, measuring, evaluation, and management. The literature revealed a variety of approaches used by different nursing education institutions to manage quality. However, the researcher found no information on comprehensive quality management system practices and most of the literature focused on ad hoc quality assurance practices in nursing education institutions.

2.2 QUALITY, QUALITY ASSURANCE AND QUALITY MANAGEMENT

Most countries throughout the world aspire to socio-economic status and a knowledgeable society through the medium of education. Higher education is undergoing major changes worldwide in order to educate the masses, and quality assurance has become a focal point in the delivery of high standard and globally competitive qualifications.

The South African Qualifications Authority (SAQA) emphasises two dominant approaches to quality assurance and management, namely the Total Quality Management (TQM) approach and Conformance to Specification (CTS) approach. Regulation R1127 under the SAQA Act (no 58 of 1995), defines quality, quality assurance, quality management, and total quality management as elements of a quality management system (SAQA 2001a: 15-18).

2.2.1 Quality

Oakland (2003:3) describes quality as meeting the needs, or exceeding customer expectations. If this is achieved, customers will be satisfied and will perceive the service provided as quality. Reeves and Bednar (1994:437) define quality as excellence, indicating the high achievement of standards, with attributes of excellence. Quality is conformance to specifications, which means precise measurement of efficiency. Quality is the "total composite product and service characteristics of marketing, engineering, manufacture and maintenance through which the product or service will meet the expectation by the customer". These definitions are more appropriate to the manufacturing industry than to nursing education because the focus is on the quality of a tangible product that is achieved by determination and specification of customer's requirements. In the manufacturing industry, employee performance must conform to the specified requirements, and ensure that customer requirements and needs are met and satisfied. Manufacturing companies speak of *quality products*, whereas education institutions speak of *quality service delivery*, which implies that education institutions should adhere to standards and requirements to provide educational programmes and expect to provide excellent qualifications (Foster 2004:22,23).

Cullen, Joyce, Harsal and Broadbent (2003:5-6) defines quality as "fitness for purpose", and maintain that quality "should be aimed at the needs of the customer's present and future".

According to Unisa (2005a:8), quality refers to "conformance to specifications". These definitions are more applicable to higher education institutions as they provide a similar perception of quality (indicating the relationship between purpose, needs and satisfaction) which depicts fitness for purpose, mission, goals and objectives of an institution which is determined within the local, national and international context (HEQC 2004:5-6).

The definition of quality differs from one institution to another based on institutional core business, which leads to strengths and weaknesses (SAQA 2001a:18). SAQA (2001a:18) therefore defines quality in general as a holistic concept that focuses on processes which deepen the new democracy and encourage flexibility within the system, including client/learner centeredness.

The concept of quality was traditionally associated with the notion of distinctiveness, something special or high class, therefore quality is regarded as a broad concept and has the attributes of exceptionality, perfection, fitness for purpose and transformative (Harvey & Green 1993:11-27). The Quality Promotion Unit (QPU) established by the Committee of South African Universities Principals argues that quality should be a notion rather than a definition due to its broad concept that gives birth to its broad approach (Chandru 1999:126).

In view of the particular focal point, quality is defined according to the nature of the service or product, the institutional environment, values, and the educational programme offered by the particular education and training institution. Due to these differences, the nature and concept of quality becomes open to interpretation. For example, universities interpret the concept of quality as fitness for purpose because an institution is required to formulate its mission and goals suitable to their environment and therefore staff performance is evaluated against it (Brink 1996:7-8; Harvey & Green 1993:11). The educational environment of higher education is unique because it has to provide diverse career paths to those who graduate.

2.2.2 Quality assurance

Definitions of quality assurance refer to a process comprising a variety of activities leading towards meeting the requirements for quality.

Foster (2004:23) refers to quality assurance as activities associated with guaranteeing the quality of a service. O'Connell (1997:165-166) describes quality assurance as part of the evolution of total quality management. Quality assurance is the activity of providing evidence to establish confidence that quality requirements will be met (Gryna 2001:659; Oakland 2003:3). Dale (1994:333) refers to quality assurance as planned and systematic actions necessary to provide adequate confidence that an education and training development programme, delivery, product or service will satisfy the given requirements for quality.

The South African Qualifications Authority (SAQA) (2001c:6) defined quality assurance as the sum of activities that assure the quality of products and services at the time of production or delivery. According to Dale (1994:333), quality assurance as an integral part of organisational processes encompasses an integrated management system of determining customers' needs or requirements, planning, designing, production, and delivery.

These definitions indicate that QA is monitoring the evaluation of standards and meeting the needs of the customers while at the same time establishing and maintaining continuous improvement. QA is a proactive programme of planned, systematic activities that analyse and evaluate whether the necessary processes are established and continually improved. It is a quality control that provides elementary performance data and feedback. Moreover, QA is also a programme that finds and solves problems at their source before non-conformance manifests. Accordingly, QA focuses on how outcomes are achieved by taking into account human and technological factors and the end result/outcome. If the QA activities are implemented correctly, defects may be proactively anticipated and mitigated during the development, production or service. Ahire, Landeros and Golhar (1995:289) emphasised that the primary emphasis should be on the translation of needs and expectations into Education Training and Development (ETD) programme design or strategy.

2.2.3 Quality management

Foster (2004:23-24) refers to quality management (QM) as the process that ties together the quality control and quality assurance activities by defining, prioritising, and measuring performance and techniques throughout the ETD programme delivery or service life cycle to enable detection and corrective action for deficiencies. QM controls production/service

delivery processes and outcomes and is driven by customers' needs and expectations. While the emphasis in control is mainly on the processes' conformity rather than the actual improvement of outcomes or competence of ETD delivery, QA focuses on the design of a service/product. In the case of an educational institution, the design of service is the design of educational programmes and the delivery, tasks and educational institutional processes.

Historically, quality managers performed policing functions and were responsible for quality conformance. In other words, they spent their time finding the causes of problems, or defects. However, the integrative view of QM combines quality control and assurance to provide for effective quality management of an institution (Foster 2004:24).

The understanding of QM as the responsibility of all involved in quality management activities and not only managers supports this integrative view (Donna & White 1991:120-125). It differs from the QA activities, which are reinforced by experts, implementers and managers. QA acts on problems before they exist (proactive), whereas QM is reactive to problems that already exist.

2.3 QUALITY MANAGEMENT SYSTEMS/MODELS (QMS)

According to SAQA (2001b:6), quality management systems or models (QMS) comprise a combination of processes utilised by an organisation/institution to ensure that the specified degree of excellence is achieved. A QMS includes all the activities and information an organisation uses to enable it to improve and consistently deliver products and services that meet and exceed the needs and expectations of its customers and beneficiaries, and to be more cost effective and efficient currently and in future (SAQA 2001b:6). According to this definition, then, the QMS is a system that consists of elements, components and characteristics of the organisational processes, developed from the organisation's mission, vision, and strategy to ensure and manage quality of the service or product.

2.3.1 Total Quality Management (TQM) and Conformance to Specifications (CTS) Systems/Models

A CTS model includes defined characteristics and a set of elements for developing and implementing a QMS whereas a TQM model goes beyond the conformance to standards by involving everybody in an organisation in a continuous cycle of changing and improving.

Total Quality Management (TQM) is regarded as a philosophy that embraces total quality culture of an organisation and is a programme that goes beyond conformance to specification or standard because it demands every member of the organisation to be involved and requires continuous change/improvement (Basu & Wright 2004:184). The Deming Institute (2005) defines TQM as systematic activities carried out by the entire organisation to achieve company objectives effectively and efficiently to provide products/services that satisfy customers at an appropriate time and price.

SAQA (2001a:15, 16) views TQM as the objective of quality management and assurance and part of the process of managing a changing organisation, culture and environment where change management is used to align the organisation's mission, culture and work activities to improve quality continuously. SAQA indicates that TQM is a process designed to constantly challenge current practices within an organisation with the aim of improving inputs and outputs. Moreover, all staff within an organisation are responsible for quality maintenance and improvement and the quality culture is an integral part of an organisation requiring all line functions to be interfaces of quality assurance.

These definitions indicate that TQM comprises a designed programme, a philosophy, an organisational business strategy, a structured set of systematic activities and core values such as leadership, support systems, and finance. The TQM approach requires commitment from management and involvement of everybody in the organisation (employees of all levels), who will focus on changing the organisational culture on quality, generating continuous improvement. TQM therefore becomes a quality management system because it includes a set of specified systematic activities and quality elements that creates a comprehensive quality management system.

In contrast to TQM systems/models, the **Conformance to Specification (CTS)** systems/models comprise a set of clearly defined characteristics and a basic set of elements for the development and implementation of a quality management system. A conformance model aims to control every phase of a production process in order to have products match technical specifications. CTS models specify how an organisation's activities should be performed to produce outputs that conform to specifications. Consequently, this type of model emphasises the necessity of documentation in the form of policies and procedure manuals (SAQA 2001a:17).

While CTS models focus primarily on meeting and maintaining specifications/criteria (not on improving the specifications/criteria), TQM models go further than meeting requirements, by dealing with how criteria are formed, how they are met, and who has to meet them. TQM models are therefore more flexible and holistic and focus on systemic transformation. According to SAQA (2001a:17), the integration of CTS and TQM models might be more beneficial than polarising them and it is therefore accepted that quality management approaches be developed from both CTS and TQM models.

2.3.2 Quality management systems/models: International and South African

Various quality management systems are used worldwide and some of the most prominent ones are included for the study, namely the Malcolm Baldridge National Quality Award (USA); the European Quality Management Award; the Australian Quality Award, the Deming Prize (Japan), the Scottish Quality Management System; the ISO 9000/2000 International Code of Practice for Quality Management Systems, and the South African Excellence Model (SAQA 2001a:13).

Three of the international quality management systems are briefly described by highlighting their core values and concepts. SAQA (SAQA 2001a:15) has examined international quality management systems and indicates the following models as outstanding, dominant and prominent: the European Quality Award, the Malcolm Baldridge National Quality Award, and the ISO 9000/2000. All three models focus on continuous improvement and best practice quality performance, which is directed towards meeting customers' needs and satisfaction. The

South African Excellence Model was developed after careful consideration of a variety of models and reflects the core values of the internationally prominent models.

2.3.2.1 European Quality Award Model

The European Quality Award is a quality management system that centres on *leadership*; *policy and strategy*; *people management; resources*; *processes; customer satisfaction; people satisfaction; impact on society,* and *business results*. These core values and concepts are also used as the criteria to manage quality in any organisation. The focus is mainly on self-assessment because self-assessment is regarded as comprehensive, systematic, and can become a regular review of organisational activities. European countries regard self-assessment as a tool to benefit a rigorous and structured approach, which can bring business improvements based on facts and not individual opinion. It encourages consistency, consensus, and direction on what is to be done. It is perceived as a means to promote education for people to adapt Total Quality Management, creates individual enthusiasm, integrates various quality initiatives, induces improvement-focused activities, and assists in objective assessment and not a widely accepted set of criteria to measure progress over a period of time (SAQA 2001a:9-10).

2.3.2.2 The Malcolm Baldridge Quality Award Model

The Malcolm Baldridge Quality Award is used in the USA and is based on the core values and concepts of *leadership; strategic planning; customer and market focus (students and stakeholders); information and analysis; a human resource focus (academics and other staff),* a *process management approach,* and *business results.* This management system is implemented in the education and health sectors in the USA, using the core values as core criteria for monitoring and controlling quality. For the purposes of this study, student and stakeholders replace customer and market, and faculty and staff replace the human resource focus.

2.3.2.3 The ISO 9000/2000 International Code of Practice for Quality Management Systems

The focus of the ISO 9000/2000 International Code of Practice for Quality Management Systems in education and training is to identify and meet customer and other interested parties' expectations (for example, employees, students, suppliers, owners, society), and to improve the processes of an organisation to facilitate and enhance best performance for the entire organisational activities. The core values and concepts include *a customer focus, leadership, involvement of all personnel, a process approach, systems approach to management, continual improvement, decision-making based on facts,* and *mutually beneficial supplier relationships* (SAQA 2001a:12).

The International Organization for Standardization (ISO) is mandated to draft international standards. These standards are then delegated to member bodies of different international organisations, which are all represented in the established technical committee to give input before it is implemented. The *ISO 9001:2000*, developed in South Africa, is an international code of practice for quality management systems and specifies generic requirements for quality management systems internationally. The ISO 9001/2000 can be applied to any organisation, and the system can still demonstrate its ability to meet customers' needs consistently to enhance customer satisfaction through the effective implementation of the QMS requirements (UNISA 2005a:1-10).

The ISO 9001/2000 was developed to improve the processes of an organisation, using well-defined QMS requirements. The ISO 9001/2000 framework and approach to QMS is as follows:

General requirements

An organisation should identify the QMS processes needed and determine the sequence and integration of these organisational processes (institution functional divisions). Ways to monitor, measure, and analyse these processes should be identified. Availability of resources and information to support operations, control and planning for continual improvement should be ensured (UNISA 2005a:2-5).

Documentation requirements

The organisation should develop statements of quality objectives and a quality policy. A quality manual with documented procedures must be developed as required by ISO 9001/2000. It has to include a strategic plan, an operational plan, and guidelines on how the organisational processes will be controlled. Records required by ISO 9001/2000 include reports, internal audit records, and various other documents (UNISA 2005a:4).

Management responsibility

From the start management is obliged to communicate its statutory and regulatory obligations with regard to quality to the entire organisation because everyone in the organisation needs to understand the origin and the purpose of the concept of a quality management system. All employees and management should be actively involved in the development, implementation and evaluation of the quality management system. Management has a duty to establish and orchestrate a quality policy, and review and amend the policy carefully, to ensure continuing suitability as well as communication of the policy matters. Management should also continuously ensure the development and achievement of quality objectives, which include clients' needs and the relevant functions of the organisation. Objectives should be measurable and consistent with the quality policy. In addition, management should conduct management reviews, manage input and output and ensure availability of resources e.g. facilities, personnel and finance (UNISA 2005b:3).

Resource management

Human resources (that is, personnel at all functional areas of the organisation) must be competent at providing effective and efficient performance to achieve the quality objectives and purpose. The infrastructure must be fit for the service and education and relevant training programmes have to be in place and to meet and conform to the standard requirements. All facilities, including equipment, workspace, support services – the entire work environment – should conform to these standards. Finally, customer requirements should be determined, designed, and maintained (UNISA 2005b:5).

Product/service realisation

This refers to the determination and planning of quality product objectives and requirements and review of products. Managing the communication with customers and providing feedback to all stakeholders should determine the planned output and impact. In nursing education and training it requires the planning of objectives to offer quality training programmes which will produce qualified and competent nurses.

The input from students or customers, output from the education and training programmes, review of the entire process, verification and validation of the programmes should be provided before implementation of planned programmes. Developmental changes must be determined, designed and incorporated. The quality process of development and evaluation demands information to verify the service requirements, and education and training programmes or qualifications need to be monitored and controlled.

The suitability of the product or service is vital. The customers' and learners' needs have to be determined in advance. The provision of care, the safeguarding of learners and the preservation of ethics must conform to quality standards. There should also be monitoring and quality control of assessments (UNISA 2005b:6).

Measurement, analysis and improvement

Conformity of the service/product and continuous improvement must be sustained. Information on customer perception of service should be obtained. An internal audit has to be conducted to determine the efficiency and effectiveness of the system and how it conforms to the product/service requirements. The processes and product must be monitored and measured for conformity. Data should be analysed to determine suitability and effectiveness of the performance and the product/service. Plans for continual, corrective and preventative improvements should be developed to improve the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management reviews. Documented procedures should be developed to prevent nonconformity. The implemented procedures have been evaluated; the results recorded and reviewed, and preventative action needs to be taken (UNISA 2005b:11).

Conforming to quality policy and procedures and the reinforcement of quality indicators should ensure quality measures. This can be done by using quality assessment tools throughout the entire process of the delivery of each education and training programme to encourage and sustain continuous improvement. The information obtained from the target group analysis and consultations will assist in meeting students' actual needs.

An internal audit must be conducted to determine the efficiency, and effectiveness of the quality management system in use, and whether the standards were achieved according to the required outcomes. Internal audit results and learner and stakeholder feedback should be used to develop corrective measures and to develop a strategy to achieve the quality objectives.

A non-conformance report should be drawn up and distributed to the relevant stakeholders and implementers. Feedback from each functional area is vital to determine any gaps and their causes in order to plan corrective measures with involved members.

2.3.2.4 The South African Excellence Model

The South Africa Excellence Foundation (SAEF) (2006:2-3) developed the South African Excellence Model. The model employs the terms used by the European and Australian quality models, namely *enablers* and *results* with the enablers describing how the results are achieved (SAEF 2006:3-4,11-12, 42). The core criteria include *leadership, strategy and planning, customer and market focus, people management*, and *resources and information management* as enablers. The results include *processes, customer satisfaction, people satisfaction, supplier and partnership performance* (SAQA 2001a:13). The main quality characteristic of this model is to promote and manage continuous improvement through the use of the model, and to provide a framework and direction to create a culture of excellence throughout South Africa to encourage competitiveness (SAEF 2006).

All the quality management systems/models discussed have the common core values and concepts of leadership, human resources, a process approach to quality and service delivery, a customer and market focus, strategic planning, involvement of all personnel, and continuous improvement.

2.4 THE SOUTH AFRICAN APPROACH TO QUALITY MANAGEMENT

The Constitution of South Africa (1996:1) refers to the improvement of life of all citizens and to freeing the potential of each person in a new democratic society. This became the foundation of quality needs in the country. An integrated approach to national workplace education and training is supported by a legislation and policy framework to promote the transformation of learning (Meyer et al 2002: vii).

The *South African Qualifications Authority Act, 58 of 1995, as amended* regulates the development of policies and the education and training standards required by the National Qualifications Framework (NQF). The *Higher Education Act, 101 of 1997* prevails over any other law dealing with higher education other than the Constitution. These two Acts provide for an integrated approach to quality education and training (Erasmus & Van Dyk 2003:267).

2.4.1 Structures established under the *South African Qualifications Authority Act, 58 of 1995*

The *South African Qualifications Authority Act, 58 of 1995* makes provision for the development of the **South African Qualifications Authority (SAQA)**. This body was mandated to establish partners designated as quality supporting structures. The main functions of SAQA are to develop, formulate, and publish policies and criteria for the registration of bodies responsible for establishing standards for best practice in education and training and for registering qualifications. The aim is to ensure that students' achievements or qualifications are internationally comparable (South Africa 1995:1).

The SAQA Act laid the foundation for the development of an internationally comparable quality management system of education and training in South Africa. The South African skills shortage and the drastic need for skills development directly impacted on the country's economic growth. The *Skills Development Act, 97 of 1998* was passed to make provision a comprehensive and well-developed quality management system in order to meet the need for good investment returns, which depended on quality skills (South Africa 1998b:8-14).

SAQA established its partners designated as quality supporting structures, and delegated them with unique roles and responsibilities with regard to quality in the South African Education and Training System. The structures include the *National Qualifications Framework (NQF*); the *National Standardisation Bodies (NSBs);* the *Standard Generation Bodies (SGBs)* currently referred to as Panels of Experts*;* the *Education and Training Qualifications Assurance (ETQAs) bodies*, and the *Sector for Education and Training Authorities (SETAs)* for different career path fields*.* All these structures are linked to the South African quality management infrastructure, which is responsible for the accreditation, monitoring, and auditing of achievements in terms of national standards or qualifications (SAQA 2001b:11-15).

National Qualifications Framework (NQF)

The National Qualifications framework (NQF) provides the framework for education and training in South Africa. Its aim is to reconstruct and transform the South African traditional education and training system into one with an integrated approach and is based on a credit system, with recognition of prior learning (RPL) formally or informally acquired (Meyer et al 2002:267-268). As from 2009, the NQF has 3 bands from level 1 to 10 (prior to 2009 it had 8 levels). General education is the first band; further education the second band, and higher education is the third band. The 10 levels are categorised under the three bands in such a way that qualifications are pitched at different levels in general, further and higher education, respectively (for example, masters degrees are pitched on level 9 and doctoral degrees on level 10). All education institutions have to adhere to this framework in offering their qualifications as a means to manage the entire educational system.

The NQF objectives are to create an integrated national framework for learning achievement; facilitate access, mobility and progression within education; enhance the quality of education and training, and contribute to the full personal development of each learner/student as well as the social and economic development of the nation. The establishment of the NQF reflects a clear picture of a TQM approach to education and training in South Africa. The NQF is responsible for enhancing the quality of education and training in South Africa according to the SAQA Act (South Africa 1995: section 2 (c)).

One of the principles of the NQF regarding quality, which is of special relevance for this study, is *integration*. This focuses on how to form part of a system for human resource (HR) development, which provides for the establishment of a unifying approach to education and training (South Africa 1995), with two main principles:

1 *Progression*: Learners/students should be able to transfer the credits of qualifications from one institution to another (South Africa 1995:3).
2 *Recognition of prior learning:* Learners'/students' previous formal or informal learning experience, and that the learning has already been acquired in different ways, should be recognised (SAQA 2001a:9).

SAQA developed the existing QMS criteria and guidelines for Education and Training providers, taking into account the NQF objectives and principles reflected above. This QMS for providers forms part of the South African educational quality assurance system, including the NQF roles and responsibility for quality management (SAQA 2001a:1-40).

Education and Training Quality Assurance (ETQA)

SAQA (South Africa 1995:1-3) recognises Education and Training Quality Assurance bodies (ETQA's) as partners in quality assurance. The ETQA role is to accredit and monitor the quality of learning programmes offered by education and training providers. It monitors the quality of internal and external assessment practices of the service providers, and is also responsible for the quality assurance of students' achievements certification as approved by SAQA. The ETQA uses its own criteria and guidelines for quality management (with due consideration of SAQA and NQF requirements) to monitor and control quality at that level (South Africa 1995:1-3). The South African Nursing Council (SANC) is the ETQA for nursing education in South Africa.

Sector for Education and Training Qualification Authority (SETA)

SETAs are responsible for monitoring and reinforcing quality management systems in education and training before the approval/accreditation by the provider. The SETAs ensure the approval and registration of the educational programmes to be provided. By law, all training providers must implement the criteria for QMS. QA involves establishing and

maintaining self-improving process and systems in an institution or a programme (SAQA 2001a:3-7).

National Standardisation Body (NSB)

The NSB ensures quality of the standards recommended to the authority (SAQA). It also divides fields into sub-fields and stipulates the requirements of all standards. For example, all standards should have clear statements of outcomes with associated assessment criteria together with requisite moderation and accreditation criteria. It reviews registered standards, and recommends standards and qualifications to SAQA. The NSB establishes and recognises standard-generating bodies, which have currently been replaced by panels of experts. The NSB is accountable to constituencies through the two ministers and Parliament for the development of standards (Meyer et al 2002:274). The primary responsibility of the NSB and the panels of experts who replaced SGBs is the quality of the product or outcome, because they have to ensure that standards are generated and registered with SAQA (Meyer et al 2002:277).

This highlights the role of the NSB with regard to the national education quality management system in partnership with SAQA. The NSB forms part of the quality management system at that level by providing education and training providers with standards and guidelines to refer to when they design and develop their programmes according to the requirements of the South African QMS.

2.4.2 Structures established under the *Higher Education Act, 101 of 1997*

The *Higher Education Act, 101 of 1997* prevails over any law dealing with higher education other than the Constitution of South Africa.

2.4.2.1 Council on Higher Education (CHE)

The Council on Higher Education (CHE) was established as an independent statutory body in May 1998 under the *Higher Education Act, 101 of 1997* and the White Paper for the Transformation of Higher Education of 1997. The CHE is mandated to promote quality, audit

quality assurance mechanisms of higher education institutions, and accredit higher education programmes (HEQC 2004:3-20; HEQC 2003:5-14).

2.4.2.2 Higher Education Quality Committee (HEQC)

The Higher Education Quality Committee (HEQC) was established by the CHE as the permanent sub-committee entrusted with the responsibility of monitoring and maintaining quality. The HEQC created mechanisms for quality management at higher education institutions. This body has been tasked with advising the Minister of Education on all matters of higher education, in order to bring equity and quality into the education and training system (HEQC 2003:1).

The HEQC is mandated to conduct institutional audits, and programme accreditation. HEQC focuses on institutional dimensions of quality management through the development of institutional indicators of quality and quality management as follows: quality assurance, quality support, quality development and enhancement, and quality monitoring (HEQC 2003).

The HEQC is recognised by SAQA as the Education and Training Quality Assurer (ETQA) for the higher education band. A summary of the HEQC criteria set for higher education institutions is presented below (see table 2.1). All higher education Institutions in SA will be visited and audited by the HEQC (HEQC 2003:par 1).

Summary of the criteria to be met by higher education institutions

Table 2.1 presents a summary of the criteria for quality assurance to be met by all higher education institutions in South Africa (SA). Institutional mission, purpose and goals should be responsive to its local, national, and international context with provision of transformation, and linked to planning, resource allocation and quality management. These criteria concur with SAQA's criteria for education and training providers.

Table 2.1 Higher Education Quality Council (HEQC) criteria for higher education institutions

• Objectives and mechanisms for quality management are integrated into institutional financial planning.
• Improvement and monitoring of core activities of teaching and learning, research and community engagement.
• General quality management of teaching and learning, and academic support services (e.g. library, computer etc.).
• Quality management on programme development, management, review, and student assessment (on short courses, partnership, and satellite programmes).
• Systems and procedures to manage quality of the design and approval of new programmes, learner records and the certification process.
• Procedures for student assessment management, moderation system (internal and external), recording and documenting data and recognition of prior learning.
• Recruitment, selection, development and support policies and procedures to facilitate availability of suitable qualified academic staff and staff capacity.
• General quality arrangements for research for all higher institutions.
• General quality arrangements for research for post graduates.
• Information development, gathering, and access.
• Community engagement.
• Benchmarking, user, surveys and impact studies.

(HEQC 2003:1-33).

2.4.3 Nursing education's quality management system

The South African Nursing Council (SANC) is the ETQA for nursing education and training, and is responsible for quality assurance and accreditation of the nursing education and training institutions. SAQA (South Africa 1995: Section 5[1] [a] [IV]) defines an education and training provider as "a body that should deliver learning programmes, which culminate from specified National Qualification Framework standards, qualifications, and management of assessments". Therefore it is critical that providers should develop relevant quality management systems as

required by SAQA, and operate within the NQF objectives and principles (South Africa 1998, Section 5 (1) (a) (IV)). The nursing education and training QMS process is enhanced and managed by SANC. SANC (2005:7) has two quality responsibilities, namely to

1 Protect the public by making sure they receive care from a nurse or midwife who has received a high quality education intended to equip him or her to provide competent, compassionate and ethics based nursing care.
2 Accredit education and training providers that meet SANC requirements and offer programmes that are registered by SAQA on the NQF.

SAQA, the Department of Education (DoE), all ETQAs, all SETAs and all education and training providers depend on each other for the assurance and management of quality education and training. As such, nursing education and training should be able to comply with the new education training and development (ETD) deliberations (SAQA 1995).

The nursing ETQA approach to QMS is intertwined with the higher education quality assurance mechanisms for quality to accommodate the Council of Higher Education (CHE) quality management system requirements. Universities and nursing colleges who are in association with universities offer professional nursing education programmes. All programmes have to be accredited by CHE and then registered by SAQA on the NQF. This study focused on the above relevant responsibilities. The aspect of high quality is incorporated in CHE's vision and mission and its framework for a QMS.

2.4.4 The South African Qualification Authority (SAQA)

After the establishment of the South African Qualification Authority (SAQA), the development of QMS criteria and guidelines became a focal and critical point. SAQA's quality management system criteria and guidelines were established from the NQF objectives and principles as a foundation to the development of a quality management system (South Africa 1995).

SAQA conducted international and national research to obtain maximum information on the approaches/models of quality management systems used by different countries. The findings laid out different features, and core values and models of these quality systems. The findings

promoted understanding and insight into the process SAQA had undergone during the development of generic QMS requirements, criteria and guidelines applicable to any organisation. Based on the findings, SAQA developed the current essential categories of criteria and guidelines of the QMS which all ETQAs and their constituent providers adopt as a quality assurance system (SAQA 2001a:19-30).

SAQA indicates that the purpose of a QMS is to enhance learning by increasing the number of learners, frequency of learning, with relevance and durability of what is learned. Quality management is done to establish and sustain a frame of quality qualifications and standards that are relevant, credible and accessible (South Africa 1998a:3).

Ultimately, SAQA created a quality culture by developing generic quality management system criteria and guidelines to secure continual improvement of quality in education and training (SAQA 2001a:1-38). A QMS is about creating a quality culture across an organisation. The key consideration in the QMS is to secure continual improvement in quality presently and in future. All education and training providers are challenged to apply quality management at any field of education and training development (ETD) to improve ETD processes and activities of ETD staff members (Meyer et al 2002:268-269).

The SAQA (SAQA 2001a:1-18) QMS criteria and guidelines became a framework for quality assurance. This framework is not meant to be prescriptive regarding the quality management system requirements and guidelines for the ETQAs and their constituent providers. Accordingly, a flexible generic approach that accommodates two or three approaches used by different countries to describe a set of elements and characteristics for developing a QMS for any organisation was outlined and drafted as one of the requirements for accreditation of education and training providers (SAQA 2001a:19-30).

Quality assurance is part of TQM (SAQA 2001a:17). The emphasis is on the integration of the QMS with recognition of both the TQM and CTS approaches (SAQA 2000:11). In 2000 SAQA endorsed a policy with the main aim of providing guidelines for the establishment of QMS for providers (SAQA 2000:7-9). In 2001, SAQA released QMS criteria and guidelines for providers for implementation.

SAQA found the international QMS standards significant, and integrated the International Organization for Standardisation (ISO) known as ISO9001 with SAQA strategic QMS with specified requirements to ensure quality education and training. The ISO9001 identifies and focuses on meeting the needs and expectations and requirements of its customers, other interested parties, employer, suppliers owners, and society, to be able to achieve, maintain and improve overall organisational performance and capabilities (SAQA 2001a:12).

SAQA (2001a:3-20) emphasises that the aim of the generic QMS is to create a culture of quality management that is holistic, integrated, democratic, flexible, and process oriented towards unique environments and applicable to any organisation. Currently SAQA conducts direct "spot check" monitoring without scheduled visits or appointment of education and training providers, due to SAQA's shift of focus from conformance and compliance to an effective and efficient impact of SAQA QMS criteria and guidelines towards training and education against skills achieved.

2.5 THE SOUTH AFRICAN QUALIFICATION AUTHORITY'S (SAQA'S) CORE CRITERIA FOR EDUCATION AND TRAINING PROVIDERS VERSUS A GLOBAL PERSPECTIVE

A review of available literature revealed that international research on quality assurance in nursing education institutions has focused on only a few aspects of quality at a time. The research conducted on quality assurance in nursing education is therefore fragmented and does not provide a holistic picture of comprehensive QMS in operation. The findings do, however, support many of the criteria emphasised by SAQA as requirements for QMS to be used by education and training providers in South Africa.

SAQA focuses on eight core criteria in *Quality Management Systems for Education and Training Providers (2001)*, which provides guidelines for education and training providers. The eight core criteria are discussed, supported by relevant international research.

2.5.1 Policy statement: aims, purposes and objectives (criterion 1)

According to SAQA (2001a:21-22), an education and training provider must have a policy explaining the values and principles on which it bases itself; indicating to whom it directs itself

and why it believes that it needs to exist; describing how it views itself, and communicating its aims and objectives. Such an organisation has to show how it is located within the NQF and all policy statements need to be located within the values and principles expressed by the NQF. It must illustrate how democratic practices inform the structure, management and operations of an organisation and the approach to teaching and learning activities has to be clearly stated. Organisations are obliged to demonstrate how the development of activities will be assured through assessment, monitoring and auditing as well as by way of research and review practices.

Policy statements form part of the structure component of quality, as structure includes the laws governing the functioning of an organisation (Muller 1996:228). An organisation's vision and mission must be clearly stated, operations described and a strategic plan drawn up (SAQA 2001a:16).

John, John and Trevor (2003:5-14) conducted a study at a university school of nursing in the UK, to explore the use of a balanced scorecard system to reinforce the importance of managing quality in higher education, rather than monitoring quality. The scorecard system included the aspects of strategy, vision, mission, objectives and targets, internal and external customers, performance measurement, leadership involvement, partnership, tasks and programmes, resources, and processes and values. The focus was to direct performance and streamline strategy towards the objectives of the various stakeholders. The findings reflected the difference between monitoring and managing quality, and progression from monitoring to management of quality. It was found that a system/model to measure performance against a path of excellence was a means to help the performers understand the gaps. It was also a way of stimulating personnel to find solutions that would establish a culture of continuous improvement regardless of the individual practice limitations.

The question of whether a scorecard system is practical or not as a means to manage quality within an institution is still relevant. Although the scorecard system evaluates most of a nursing education institution's functional areas, it is not as comprehensive as the QMS developed by SAQA. It covers the structure component of quality assurance well but only addresses some of the processes, such as assessment and learner policies, and actual programme delivery is not covered.

Armstrong and Muller (2002:59) reported the following values (related to structure) to be held in high regard by internal and external customers of nursing education institutions in Gauteng: strategy, human and physical resources, technology and theoretical and practical learning facilities. According to Lancaster and King (1999:43-48), policies regarding finances, resources (human, physical and administrative), and procedures of accountability should be outlined. All staff should contribute as partners with management in the development of a strategic plan, which consists of aims, objectives, and the purpose of the institution, because it describes a plan to arrive at the destination and assess barriers. An operational plan would indicate how to execute tasks and should be in place in order to balance the organisational business needs with the future needs and that of customers (students). The purpose of the operational plan depicts the reason of the institution's existence, the aim indicates the goal to be achieved and the objectives are the stepping stones to achieve the aim and all these together become the foundation of the institutional strategy. Involvement of staff creates awareness of staff on impending changes in the education and training environment and knowledge of what is expected from them (Oakland 2003:60-63).

2.5.2 Quality management systems (criterion 2)

The identification of processes and outlining of procedures to implement quality management in an organisation is essential. SAQA and the NQF view quality from a TQM perspective as a holistic, integrated, flexible, democratic and process-oriented approach which would, specifically in the South African context, enhance learning through increasing the number of students, the applicability and durability of what is learned, and establish a framework of relevant, credible and accessible qualifications and standards (SAQA 2001b:22). The emphasis here is on how an organisation creates and sustains a quality culture, which includes the principles within a TQM approach of a QA policy with clear objectives in place. Quality is everybody in the organisation's responsibility; an ongoing process with continuous reviews; monitoring and control, and consistent feedback to all concerned (SAQA 2001a:23). The HEQC concurs, stating that the achievement of quality requires not only effective quality management systems, but also professional competence and a commitment in teaching and learning from all involved (HEQC 2003:14). It must be evident how quality assurance is maintained on all levels in an organisation as well as how it relates and reports to its responsible ETQA.

A model was introduced at a nursing education institution in the UK to improve quality. The model was intended to go beyond theory in nursing education and the clinical environment. It expanded its focus to staff, systems, and patients, which were integrated into four broad categories of standards, structure, process, outcome and evaluation (Green 2005:25). The findings indicated that the model of structure, process, and outcome was easy to teach because it emphasised a standards-based system (structure, process, and outcome), using three domains: the clinical, professional tutors and administrative processes. Green emphasises that the integration of the above three domains in a model is critical for the implementation of a QM programme within an institution because the monitoring of quality activities revolves around standards, and evaluation of standards encompasses the clinical and administrative aspects. The conclusion was that quality monitoring should be according to set standards, and every solution should be tri-focused (clinical, professional and administrative).

According to Erinoso (2005:64-65), the use of quality assurance and the nursing audit must be mandated, maintaining that in QA, quality can be managed and improved but cannot be assured. Hence teaching on quality should move to a new approach of quality improvement and not quality assurance.

A QMS requires that the customer (student/learner) and the organisation's requirements are identified to provide a quality service, hence a quality policy and objectives should be developed as guidance on meeting and satisfying the needs of all involved (Oakland 2003:206-223). The QMS should move from requirements and control to the objective that makes everyone accountable for their own performance and gets each individual committed to achieving quality objectives and self-motivation.

2.5.3 Review mechanisms (criterion 3)

The ways in which an organisation monitors, reviews, researches and audits the implementation of its policies indicates whether it adheres to a TQM approach. An education and training provider needs to clearly describe what mechanisms are in place to maintain a developmental approach to quality assurance and maintenance. Proof of an available active, continuous cycle of quality assurance is of utmost importance. Questions with regard to quality assurance which are of relevance should include how often, by whom, and what

reviewing/monitoring tools are utilised and how they are used. Activities such as reviewing of programmes on a regular basis; obtaining internal as well as external customers' feedback on programmes and products delivered; gathering of evidence and reporting back after reviews and research, and ways in which improvements are implemented to all concerned, have to be described (SAQA 2001a:23-24).

Hogston (2006:41-47) evaluated quality control activities at a number of nursing schools in the UK, just after inception of the new Nursing and Midwifery Council (NMC) in 2002 and the release of its QA model. The purpose was to investigate the extent of QA activities, preparedness for these activities, expectations regarding NMC QA guidelines, and levels of satisfaction with QA events. The findings indicated that the QA model implemented in the higher education institution in the four different countries in the UK was effective in terms of guidelines, and personnel's expectations about procedures and preparedness for procedures. However, it was also found that there was anxiety about the introduction of the new quality assurance model as well as resistance among staff with regard to quality management and improvement efforts. One of the recommendations was that those responsible for QA should be encouraged by management through leadership example to adhere to procedures. Armstrong and Muller (2002:60) maintained that staff actually needs encouragement, involvement and motivation from management in order to assure quality through continuous efforts.

It appears that the focus of Hogston's research was mainly on adherence to the Nursing and Midwifery Council requirements and standards, and did not place the institutions in a position of continuous improvement of performance and quality measures. The conclusion is therefore that a conformance to specification (CTS) approach to quality was followed.

An education and training provider should have and describe mechanisms in place to review and maintain quality assurance and maintenance. It is crucial that proof of an active continuous cycle of quality assurance and feedback reporting is well established (SAQA 2001a:23-24). A quality cycle is regarded as a comprehensive management system that integrates planning, control, and review which foster improvement in a clearly articulated and systematic manner. It presents itself as a model that emphasises a continuous cycle of

assessments, planning, the implementation of change and performance (Dew & Nearing 2004:28-31).

2.5.4 Programme delivery (criterion 4)

More than anything else, the programmes offered by education and training institutions establish the rationale for their existence. It is therefore essential that an organisation describe how its programmes are developed, delivered and evaluated. The descriptions of programme delivery should be related to the NQF principles, as the establishment of the NQF aimed at transformation in education and training specifically at the level of programme delivery. Education and training providers must describe the nature and components of their programmes and indicate their NQF status by pegging them on the correct levels. Duration and flexibility of programmes as well as modes of delivery must be indicated and adequate resources have to be in pace for delivery of programmes (SAQA 2001a:24).

Provision for the integration of theory and practice must be made and provider-workplace linkages have to be established. Programmes must be student/learner-centred; facilitate horizontal integration of knowledge and skills (information offered through various modules in the programme) and vertical integration (ability to connect decision-making and performance with understanding); encourage problem-solving, reflective thinking, decision-making; and group work. Students have to be involved in programme design and implementation and assessment methods, and the nature of feedback to students must be clearly indicated. Furthermore, programmes should ground teaching in a wider social and economic understanding and awareness (SAQA 2001a:24-26).

Brooker and Curran (2006:276-285) conducted a study on professionals, who provided theory and clinical practice for mental health education programmes in the UK. The study focused on the national continuous tool on affective aspects of learning developed in 2005, which is used during the mental health education implementation phase. The tool was intended for the use of mental health educators, commissioners of mental health education and others with an interest in enhancing the quality of mental health education. The purpose of using the tool on the affective aspects of learning was to facilitate a dialogue between professionals working at the nursing education institution and in the clinical setting. The main aim was to encourage

and promote educators' self-assessment in the following key areas: relevancy of the programme to the policy context, the extent to which the users of service delivery and providers of service delivery are involved in the design of the programme, as well as the delivery and evaluation of the programme and how the impact of the programme is assessed. The findings indicated that the tool provided a useful framework to assess the quality of a broad range of mental health education and that it could be incorporated in the existing quality assurance system (Brooker & Curran 2006:286).

Morolong (2005:40-41) found that newly qualified registered nurses were not competent in to specific aspects related to the nursing process. The findings revealed that the nurses had not integrated their knowledge of basic nursing science, biology, pharmacology and social sciences. It was recommended that attention be given to the facilitation of critical thinking and problem-solving in the nursing curriculum.

Chou (2004:311-316) conducted a study on techniques to evaluate quality of programme delivery on what nursing students perceived as quality at four Taiwan universities. The main purpose of the study was to identify which quality characteristics students considered as quality during programme delivery, to describe the quality requirements for service delivery for undergraduates, and to explore the discrepancies in the service delivery. The findings revealed that students viewed sufficient quality learning experiences and quality programme delivery as quality education in nursing. The findings also reflected that students were able to identify discrepancies in programme service delivery, because they valued traditional elements of nursing education delivery as quality education, thus a tutor who is a subject matter expert, knowledgeable with practical expertise, was regarded as able to provide quality programme delivery. Students' feedback could therefore be used to enhance quality of programme delivery.

According to Armstrong and Muller (2002:60), both theoretical and practical resources are valued for student assistance. Models, computer programs and a well-equipped library are essential theoretical learning resources. For practical learning resources, a clinical skills laboratory, hospitals and clinical sites are important. The integration of theory and practice and the development of critical and reflective thinking, problem-solving and decision-making skills, are emphasised by the SANC (nursing education's ETQA) as requirements for the basic four-

year nursing programme leading to registration as a general, psychiatric, and community nurse and midwife.

Donna and White (1991:120-125) identified mechanisms for the design of a relevant quality assurance plan, namely, identification of learning needs and problems; outcome criteria demonstrating desired behaviour; a focus on the changes that should occur in the clinical practice setting; and the use of a monitoring instrument for staff's work performance in the form of feedback questionnaires and performance appraisals. A quality assurance plan saves time and promotes efficient use of resources. It assists nurse educators to assess the quality, appropriateness and application of the education programme, thereby ensuring that it meets the learning needs of students.

Whitley (1992:315-323) investigated nursing education programme delivery focusing on both theory and practice as a means of reviewing quality in nursing education in Scotland. She noted that previous literature indicated only fragmented approaches used to evaluate nursing education programmes, mainly to determine to what extent both theory and practice achieved their objectives. Whitley (1992:320-321) studied quality evaluation of fragmented elements through interviews, questionnaires, and observations. The findings indicated a clear need for a more detailed, comprehensive evaluation model of the theoretical elements.

Brooker and Curran (2006:276- 289) used a national quality improvement tool developed in 2005 to evaluate the quality of mental health education programmes in England. They found that evaluation of achievements is not sufficient to promote continuous improvement within a nursing education institution; the evaluation of achievement basically focuses on the end result without evaluating all functional areas that contributes to a desired end result. Although it is essential to evaluate achievements, the desired end results cannot be separated from other institutional processes that contribute to achievement of institution objectives, goals and impressive output.

2.5.5 Staff policies (criterion 5)

SAQA (2001a:26-27) views policies and procedures for staff selection, appraisal and development as an important criterion for quality assurance in education and training

institutions. The criteria for staff selection and selection procedures must conform to the *Employment Equity Act of 1998* as well as to NQF principles regarding assessment of competence. Staff must facilitate the integration of theory and practice in the delivery of programmes to ensure the development of applied competence among learners. An organisation must provide for professional development of staff to meet the lifelong learner principle and ensure that staff design their activities in ways congruent to the required mechanisms of review, monitoring and auditing of quality and that changes are implemented as proven necessary by research. Staff must be competent to assess learners in an integrated, applied and continuous way that informs the teaching and learning process.

The evaluation of staff performance and programme reviews is a mechanism that improves quality. Learners' evaluations of teaching staff and programmes provide opinions, input and learning experiences, which lead to improvement of teaching activities, programme standards and performance towards a set goal. Performance appraisals contribute to personal growth and development and discipline (Quinn and Hughes 2007:145, 152, 462). These aspects should be addressed in the staff policy to create a culture of addressing quality in order to achieve the quality objectives of the institution.

Armstrong and Muller (2002:60-61) found leadership, educational programme relationships and research important values in a nursing education institution. The respondents indicated staff placement and utilisation, and staff development (access to, and availability of development programmes and orientation) as high priority values. With regard to educational programmes, the respondents indicated that the content of programmes should be relevant to students; there should be a balance between contact with lecturers and self-study; lecturers should be flexible and creative in the presentation of learning material; the curriculum should be evaluated and the evaluation system for learners should be efficient. Most of the respondents indicated that lecturers required the opportunity to do research to keep up to date with changes to enable them to answer questions and solve problems. SAQA regards research as inherent in quality assurance, quality development and quality management (SAQA 2001a:21).

2.5.6 Learner policies (criterion 6)

Education and training providers have to formulate policies and procedures for the selection of learners and ensure that learners' needs are met and that they receive the necessary support and guidance. The NQF principles regarding programme relevance, learner-centeredness, learner participation, recognition of prior learning and life-long learning should be adhered to. Selection criteria must make provision for programme standards requirements, historical disadvantages (demographic composition) and recognition of prior learning (SAQA 2001a:27). The HEQC specifically requires evidence during their audits of how higher education institutions address the legacies of inequity and lack of opportunity of the past (HEQC 2003:14). Erinoso (2005:64-65) emphasised the importance of reviewing learner recruitment, the learner selection policy and whether a learner orientation programme is in place, as part of a nursing audit towards quality assurance.

An organisation must indicate how a programme is relevant to the aspirations of learners, in which ways guidance and support are offered, how learner participation is encouraged and what opportunities exist for further learning. Transformation in the sense of developing the abilities of learners for personal growth, social development and economic and employment growth, must be in place within higher education institutions (HEQC 2003:18).

According to Moon (2004:21-73), a student policy should be learner-centred by allowing student participation that relates to students' learning to build meaning by working with experience and learning to manage themselves, e.g. their emotions (emotional intelligence) so that they can obtain employable skills.

Erinoso (2005:64-65) includes nursing audits as part of quality assurance to review quality activities in nursing education and clinical practice activities. Moreover, Erinoso (2005:65) emphasised that auditing has to be done by nurse educators themselves as a mechanism to review student recruitment, selection policy and learner orientation programmes.

Specific personal characteristics, which educators should possess to provide adequate learner support, included a caring attitude, authenticity in teacher student interactions, availability for students and empowerment of students during teaching (Chou 2004:316).

Hill, Lomas and MacGregor (2003:15-20) studied four themes, one of which related to social/emotional support systems. The findings indicated that one of the two aspects most valued by students were the support systems within the college, which is a very influential factor in the provision of quality. Armstrong and Muller (2002:62) identifed values pertaining to quality nursing education and emphasised the importance of student-counsellor/lecturer/mentor relationships (where personal and academic support were provided). This study also mentioned that respondents valued the involvement of all groups of internal customers (lecturers and students) of a nursing college in decision-making and information sharing. A student council makes provision for the students' voice to be heard.

2.5.7 Assessment policies (criterion 7)

According to SAQA (2001a:28-29), assessment policies should encompass the principles of life-long learning, recognition of prior learning and integration of theory and practice. They should be supportive, developmental and continuous in approach, embrace NQF principles and extend beyond assessment practices. Educational and training providers have to describe how and by whom and how often internal and external assessment and moderation will take place. The provision of feedback and support to learners must be explained and records of assessment must be maintained. Strict criteria have been set by the HEQC for specifically the appointment of external moderators. Clarification as to the criteria for appointment of external moderators and information provided to them on curriculum and assessment procedures, as well as the format of handling their reports and approval of final marks after moderation, need to be provided by higher education institutions (HEQC 2004:15).

Morolong (2005:40-44) reported that one of the limitations in the competence of newly qualified nurses confirmed student assessment where critical information about specific patient care was not explained to the student. The study found that not all the clinical outcomes were achieved. Morolong recommended that the approach to learner assessment as well as the methods of assessment be reviewed. In the light of the SAQA criteria, this is a serious limitation as SAQA emphasises the necessity for learners to be able to apply what they have learned and to integrate theory and practice (SAQA 2001a:29).

Great emphasis is placed on student assessment as a core indicator of quality in higher education, as reflected in both SAQA and the HEQC's criteria for quality management. Armstrong and Muller (2002:62) confirm the importance of student assessment to assure quality. They found that respondents identified student evaluation, standards of evaluation, examination regulations, and efficiency of the evaluation system, as priority values with regard to quality in education.

Karuhije (2001:6-9) found that external examiners were regarded as a method of quality assurance and their duties included a review of the curriculum, on-site visits, consolidated internal and external assessments and writing an examiner's report. Specific criteria were set for the type of institution where an external examiner came from and the period of appointment. These measures were put in place to ensure justice to the learner, benchmarking and ascertaining that programme examinations and assigned grades and quality were upheld. It pointed to the external examiner as having the responsibility to uphold standards and legitimise results based on those standards.

However, the findings indicated that there was a lack of objective data to support the decisions of external examiners who were not subject experts and did not have experience on the process of efficacy. Other disadvantages of using external examiners were that some educators were never offered opportunities to gain experience due to modernisation and the institution of more nursing programmes. Karuhije (2001:6-9) found that not all nursing education institutions used external examiners, probably due to the high cost thereof at a time when universities were experiencing hard financial times worked against this system.

It is expected in each programme that students' reflective competence (the ability to connect one's performance with own understanding of other contexts for example the economic or social contexts) should be assessed and achieved. This can be achieved by integrated and holistic assessment of outcomes, using a combination of assessment activities (Meyer et al 2002:162-164; SAQA 2001b:55-57). Therefore the assessment policy should include mechanisms of assessment that will enhance reflective learning and competence.

2.5.8 Management systems and policies (criterion 8)

An education and training provider needs to indicate its capacity to deliver programmes effectively, efficiently and accountably. It must have the necessary infrastructure to manage and administer its functions and established bodies must be responsible for decision-making. An organisation must prove that it is financially viable and has adequate human and material resources to achieve its purpose (SAQA 2001a:29-30). This criterion must be contextualised as there are differences in the size, type and focus of education and training providers. A nursing education institution, for example, needs to have an institutional council as a governing body, a well-equipped library, computers and Internet access, a clinical laboratory and well-equipped classrooms. Policies and procedures for student information and record capturing and maintenance, and for maintenance and upgrading of facilities, resources and materials must be in place.

The systems that need to be in place according to SAQA are also reflected in the HEQC general criteria for higher education quality management systems – for example academic support systems (library, computers) and procedures for learner records and data capturing. The HEQC states that objectives and mechanisms for quality management must be integrated into institutional financial planning (HEQC 2003). Armstrong and Muller (2002:59-60) reported that respondents in their study identified physical and theoretical learning resources as important for quality nursing education. A well-equipped library, computer programmes, access to technology, models, and a clinical skills laboratory were emphasised.

Management should plan and ensure availability of resources for the operation and management of quality effectively and efficiently, by providing a training infrastructure and quality-working environment to facilitate the implementation of the institution's strategy and to achieve the institution's objectives. The resources should be timeously provided and continuously reviewed and improved (Unisa 2005:37-54).

2.6 SUMMARY

SAQA, and its constituent structures' quality management systems were outlined to indicate their unique and complementary roles and responsibilities towards quality assurance in South

Africa. SAQA used international benchmarks to develop a quality management system that is globally recognised and has introduced the QMS process that will promote best education and training practices in South Africa by developing quality skills to meet the needs of the competitive world market.

SAQA identified the developmental process of the QMS criteria and guidelines of different international QMS models, approaches, and frameworks. Based on these findings, SAQA developed the current QMS criteria and guidelines as a framework to promote and sustain continuous performance improvement. The framework also indicates a need to align the SA education and training system to the emerging international trends of best practice. The intention is to provide quality education and training that will establish and sustain lifelong learning and contribute to quality work output and life for all the citizens of South Africa.

The outlined QMS criteria, guidelines and requirements were developed with the purpose of meeting the international standards that address quality needs and demands globally.

Although the QMS criteria and guidelines are generic, the quality features from the education and training providers differ, based on different programmes and education institution environment or context. With regard to global QMS, the difference is that the QMS requirements applicable to any organisation are outlined, and include a TQM approach that integrates quality assurance, quality control and quality management. SAQA developed the current QMS inclusive of the global total quality management requirements. It is therefore a comprehensive quality management system.

South Africa, European countries, and African countries reflect different focal areas related to quality assurance and management practices. Most of the quality management models or approaches used to evaluate quality in nursing education institutions focused mainly on one, two or several quality elements, quality characteristics, and/or quality features as focal area for quality assurance and did not comprise complete quality management systems. This displayed fragmented quality assurance and management activities related either to one or two functional areas or divisions of an entire nursing education institution.

Quality was evaluated on different aspects, which were deemed valuable by the individual nursing education institutions depending on the specification of programmes provided, different views, and different definitions of quality due to unique education and training environments or context. Quality practices were also in line with the requirements designed by the individual country's nursing education and midwifery governing bodies, for example South African Nursing Council, currently known as the nursing ETQA. These legal requirements must be met before a nursing education institution is approved to provide training and education for nurses in approved programmes. No evidence could be found in the literature that the nursing education institutions in South Africa had adopted and meet the SAQA quality management system criteria and guidelines for education and training providers.

CHAPTER 3

Research design and methodology

3.1 INTRODUCTION

This chapter presents a discussion of the research design and methodology. The population, sample, data collection instrument, reliability, validity, data collection process, data analysis and ethical considerations are discussed. A quantitative, descriptive and exploratory design was used to establish whether the current quality management systems of the selected nursing education institutions in Gauteng are congruent to the SAQA criteria and guidelines for Education and Training providers.

The objectives of the study were to

1 determine whether the current quality management systems used by the nursing education institutions are congruent to SAQA's requirements and guidelines for education and training providers

2 identify existing limitations in the quality management systems used by the selected nursing education institutions

3.2 RESEARCH DESIGN

Research design is referred to as the overall plan or blueprint of how a research study is going to be conducted with specifications for enhancing the study's integrity (Polit & Beck 2008:30). A quantitative approach using a non experimental, descriptive and explorative design was used. The quantitative approach is more formalised and well controlled with a carefully defined scope. It is aimed at examining generally accepted phenomena, which is more structured and controlled in nature (Burns & Grove 2003:35). Quantitative research originates from the positivist philosophical paradigm. Positivists view reality as objective, existing

independent from the human mind. They use a set of orderly and systematic processes to gather empirical evidence which is rooted in objective reality (Polit & Beck 2008:15).

A quantitative research approach enabled the researcher to explore objective data and describe respondents' actual practices/activities (Mouton 2001:55). Information was obtained from stakeholders who were actively involved in quality activities and experiences, in this study they included the nurse educators, quality enablers, managers, and individuals assigned to manage quality tasks in the nursing education institutions.

Descriptive research presents a picture of specific detail of a situation, social setting, or relationship (Neuman 2006:35). It addresses how did it happen and who is involved exploring issues and explaining why something happens. Descriptive research gives a picture of social activities and begins with a well-defined phenomenon and research is conducted to describe it accurately (Struwig & Stead 2001:8). This research study is aimed at providing a clear picture of quality prevalence, approach, characteristics and scope in the nursing education institutions' quality management systems e.g. the institution's functional processes and procedures and techniques used to manage quality (Neuman 1997:19-20; Burns & Grove 1997:30). Description of the research results may be utilised to indicate institutions' QMS practices compliance to required SAQA core criteria, and may reflect limitations in the current quality practices at the nursing education institutions.

Exploratory research investigates the *what* of a phenomenon in the manner in which it manifest and the factors to which it was related (Polit & Beck 2008:21). It is basically a deeper search for information about and topic that would bring out the relevant facts of the study in a scientific manner (Neuman 2003:29-30, Burns & Grove 1997:17). Exploration may be done to explore a new issue in order to learn about it, or a researcher may do an exploratory study to gain sufficient knowledge to be able to design and execute an extensive study. In this study items were included which invited comments from the respondents additional to yes, no and uncertain responses. The comments from the respondents could provide more clarity on quality assurance activities. Therefore the dimensions of the phenomenon were explored, to obtain the nature of the related factors, as well as the contributing factors that influences limitations of quality management system practices in the nursing education institutions.

3.3 RESEARCH METHODOLOGY

The research methodology comprises the method of sampling, the data collection and analysis strategies.

3.3.1 Population

The population refers to all persons or objects possessing common defining characteristics of interest to the researcher that meets the criteria the researcher is interested in studying (Polit & Beck 2008:66). The target population for this study were the nurse educators and managers employed in the nursing education and training institutions currently registered as nursing education and training providers in Gauteng Province, South Africa.

3.3.2 Sampling

A *sample* is a subgroup of the population of interest selected to participate in a study and is representative of the total population that one desires to study (Polit & Beck 2008:731). In this study persons or stakeholders involved in the quality management activities in three selected nursing education institutions in Gauteng were selected as study participants.

Sampling refers to the method of selecting the sample who will be respondents for the study, it is about specifying how a sample will be selected and recruited (Polit & Beck 2008:344). Non-probability sampling was chosen, because this category is not based on a chance of being included in the study but selected by the judgment of the researcher. The researcher required respondents who were directly involved in quality matters, because the probability of selecting any particular member at the nursing education institutions under study depends on the researcher's need for obtaining information from people directly involved to be able to gather the most relevant data, and this particular need determined selection of respondents for this study (Struwig & Stead 2001:111). Purposive sampling was therefore the most suitable sampling technique for the study.

Purposive sampling is a method based on experience and judgments of a researcher regarding the characteristics of a representative sample and is also regarded as site sampling (Neuman

2003:212-214; Polit & Hungler 1999:209). Staff involved in quality assurance and management for example quality committee members, those coordinating quality issues in the nursing education institutions, and the nurse educators who implement quality activities to maintain and sustain a quality culture within the institution, were included in the sample. Hence the researcher made a conscious choice in the selection of relevant participants for the study to be able to obtain valid and reliable data about actual practices (Neuman 2003:214). The intension was to include the persons considered as knowledgeable and experienced about quality, and involved in the quality management and practices from the operational and managerial levels (Neuman 2003:212-214; Polit & Hungler 1999:209).

3.3.2.1 Sampling criteria

Sampling criteria refer to the characteristics essential to the membership of the target population (Burns & Grove 2003:366). Only respondents who were involved in quality activities were included in the sample using the following criteria as guidelines:

1 Qualified quality assurance practitioner who has sound experience in the teaching and training of nurses for different programmes.
2 Principal, deputy principal, head of a nursing department or subject heads, and quality team or quality committee members.
3 Nurse educators who implement procedures, and activities to manage quality.

3.3.2.2 Sample size

Sample size refers to how many (subset) respondents of the population to be sampled. There is no formula to calculate how large the sample should be, but it should be adequate to represent the target population for the study (Polit & Beck 2008:348). Three nursing education institutions (NEI) were conveniently selected, they were within reasonable distances from the area where the researcher lives. The researcher was given a contact person at each institution who happened to be a research contact person.

Each contact person was then handed 20 questionnaires to distribute to the respondents who complied with the sampling criteria in each NEI. It turned out that in NEI A seven (7), in NEI B

thirteen (13), and in NEI C twelve (12) respondents completed questionnaires as it was voluntary, and this condition determined the actual sampling size for this study based on the availability and willingness of respondents to participate in the study. The total sample size was therefore 32 (N=32).

3.3.3 Research instrument: questionnaire

A questionnaire is a printed document that contains instructions, questions and statements that are compiled to obtain information from respondents and it is self-administered. This means respondents read the questions in a written form at and give written answers (Polit & Beck 2008:324).

A questionnaire was chosen as the most suitable data collection instrument for this study because respondents would have the opportunity to complete on their own in their own time reflecting on their practices without being intimidated by the researcher. It was anticipated that an anonymous questionnaire would elicit genuine and honest responses about the quality management practices in the nursing education institutions under study.

A self administered questionnaire was designed based on the SAQA criteria and guidelines and information from a literature review on quality assurance practices locally and internationally.

A research stands or falls on the quality of the facts in which it is based, hence the researcher should maintain consistency and control regarding selection of respondents and data collection to protect the integrity or validity of the study with consistent information (Burns & Grove 2003:301; Bless & Smith 2000:97). Therefore before data collection the researcher conducted a briefing session at each NEI to all the staff members and managers who were available as arranged by each NEI's contact person. The briefing sessions were successful with the help of the institution's contact person. The main purpose for the briefing sessions was for guidance on answering questions and clarity on information required as an attempt to obtain authentic, valid and reliable data and consistency of information from respondents' at all three institutions.

3.3.3.1 Questionnaire content

SAQA's eight core criteria and guidelines for quality management systems for education and training providers were used to derive relevant questions, and the literature reviewed assisted in determining what questions should be asked under each criterion (see 2.5.1 to 2.5.8). The following options were provided for answering the questionnaire:

1 Yes
2 No
3 Uncertain
4 Remarks

(A column for remarks was added to yield more specific information which could lead to a better understanding of conformance to SAQA's quality management system criteria).

The sub-sections in the questionnaire which represent SAQA's eight (8) core criteria are as follows (SAQA 2001a:21-30):

Criterion 1: General quality issues, accreditation and policy statement

Questionnaire items focused on registration and accreditation of the institution and its programmes with relevant bodies (NQF, SAQA, and SANC) and whether the institution's vision, mission, aim and objectives were aligned to the NQF's values and principles.

Criterion 2: Quality Management systems

This category reflects quality characteristics that sustain a quality culture such as the monitory and controlling of quality whether all staff are involved in the development, implementation and evaluation of quality. The items under this criterion are mainly to determine whether the nursing education institution have developed, and implemented its own quality management system.

Criterion 3: Review mechanisms

In this criterion the researcher enquires to obtain evidence regarding the Quality review mechanisms that sustain active continuous quality cycle for quality assurance and management of the institutional processes, implying that internal and external feedback have to be noted and acted upon to improve quality of service delivery.

Criterion 4: Programme delivery

Items under this criterion explores the actual delivery of a programme which include planning, implementation, and evaluation as well as the review of staff performance during programme delivery. The focus is on whether learner relevance is adhered to and whether the mode of programme delivery is learner centered.

Criterion 5: Staff policies

Items addressed staff policies and procedures for staff selection, appraisal and development, and staff competency to fulfill their roles.

Criterion 6: Learner policies

Items focused on learner's policies which should include procedures for selection and admission criteria, RPL, support services and career guidance.

Criterion 7: Assessment policies

Items inquire whether assessment policies and procedures underpin quality practices within the institution, by focusing on ongoing supportive development and integrated assessment which are in line with NQF principles.

Criterion 8: Management systems and policies

Items under this criterion inquires about the general learner administration issues and the general management of the institution's facilities and equipment, the maintenance, and upgrading thereof and governance.

3.3.3.2 Pre-testing of the questionnaire

The researcher pre-tested the questionnaire at the South African Military Health Services Nursing Education Institution, an institution that was not included in the study. Three tutors from different subject specialties and experienced in quality issues were given the questionnaire to complete. They took 25 minutes to complete the questionnaire in the researcher's presence. The questionnaire was tested to determine if the questions would obtain reliable and required information, and also if it could obtain consistent information. It was also tested to identify and correct ambiguities and to find out if the questions were well understood and yielded the required information. Only three questions required restructuring for clarity and two that were double barrel and required to be corrected. Few questions were corrected for spelling and preposition.

3.3.3.3 Reliability

Reliability and validity of an instrument are not independent from one another. If the instrument is unreliable it cannot be valid because it cannot validly measure an attribute or construct if it is inconsistent and inaccurate - consistency refers to reliability. However, an instrument can be reliable without being valid (Polit & Beck 2008:458).

Reliability refers to the consistency or dependability with which an instrument measures the attribute it is designed to measure (Burns & Grove 2003:749). When a particular instrument is applied repeatedly to the same object, and yields the same results each time it is regarded as reliable (Babbie & Mouton 2001:119). The designed instrument should be stable – when using the instrument to gather data it should be able to yield the same results after being used during different periods of time (Neuman 2003:179,180). The instrument designed by the

researcher for this study revealed consistency in responses by the respondents from the different nursing education institutions under study.

Reliability was ensured through minimisation of data collector bias and keeping extraneous factors. The researcher conducted a briefing session at each institution with the assistance of an institution's research contact person and respondents had an opportunity to ask questions. The briefing sessions covered the research topic, purpose and objectives of the study, significance of study, questionnaire questions, and aspects of written consent for participation. This was done to ensure consistency of responses by respondents to obtain valuable and reliable data. The researcher maintained a friendly, open and supportive attitude during each of the three briefing sessions.

3.3.3.4 Validity

Validity refers to the degree to which an instrument measures what it is supposed to measure (Polit & Beck 2008:457) In this study it implies that the questionnaire should contain items which test quality assurance practices and activities to ensure quality in an educational institution.

Face and content validity were ensured. Face validity refers to whether an instrument looks as though it measures the appropriate construct. Although not strong evidence of instrument validity, it is helpful in cases where other types of validity have also been established (Polit & Beck 2008:458). The researcher requested the assistance of a quality assurance committee member at a higher education institution who has already gone through the process of a higher education quality assurance committee audit, to look at the instrument and provide input to establish face validity. A few changes to the instrument were made as a result.

Content validity is concerned with the degree to which an instrument has an appropriate sample of items for the construct that is being measured and that the domain of the construct is adequately covered (Polit & Beck 2008:458). According to Neuman (2003:184) content validity is about measures that sample representative ideas or concepts. It is the extent to which the theoretical content of the construct is being measured. To ensure content validity, the questions in the questionnaire were formulated by the researcher after an in-depth study

of SAQA documents on quality assurance and a thorough study of the literature (nationally and internationally) on quality assurance and quality management. Additionally, the questionnaire was sent to two experts on quality assurance and a statistician at the University of South Africa for validation. Their recommendations were incorporated before finalisation of the questionnaire.

3.3.4 Data collection

Data collection is the process of selecting relevant informants and gathering required data from respondents/subjects for a study (Burns & Grove 2003:298). After having obtained permission to conduct the research at the three selected NEI's, the researcher was given a contact person's name to liaise with. The contact person was asked to assist in the arrangement of a briefing session meeting between the researcher and educating staff including management at each NEI. During the briefing sessions the topic, problem statement, research objectives, significance of the study, questionnaire questions and consent for participation were explained by the researcher. After the briefing sessions held at each nursing education institution, the researcher left 20 questionnaires with the research contact person to distribute to staff who met the sampling criteria. The researcher asked a contact person to handle the distribution of the questionnaires because that person knew staff members who could give valuable information. Respondents were requested to complete the questionnaires within two weeks and the contact person played a major role in doing the follow up with the respondents to complete the questionnaires within the requested period.

A collection box was placed at the reception area in each NEI for completed questionnaires. The completed questionnaires were handed to the researcher by the contact persons. The questionnaires had contact details of the researcher for enquiries and respondents had an opportunity to ask questions. The researcher did not know who completed the questionnaires as the questionnaires had to be completed anonymously. The research contact person was the quality assurance coordinator or worked closely with the quality assurance at the three institutions.

3.3.5 Data analysis

Data analysis comprises the process of describing and interpreting the collected data. Analyses of data is regarded as the systematic organisation and synthesis of research data, to evaluate if the research objectives were achieved (Neuman 2003:33). The data was analysed by computer with the assistance of a statistician. The Statistical Package for Social Sciences (SPSS) program (version 15) was used.

Descriptive statistics were suitable for this study because the questionnaire was developed using the SAQA criteria and the items under each criteria were predetermined, as such, coded and rated in numbers to get frequencies which were calculated into percentages to indicate the extent of quality activities in the nursing education institutions included in the sample.

The percentages were compared between the three institutions, and the significant difference between the three nursing education institutions regarding QMS practices were determined through ANOVA tests (Polit & Beck 2008:68; Struwig & Stead 2001:156-158).

3.4 ETHICAL CONSIDERATIONS

Ethics refers to a system of moral values concerned with the degree to which research procedures adhere to legal, professional, and social responsibilities to the study participants ((Polit & Beck 2008:753). Conducting research on humans requires apart from expertise and diligence, also objectively, honesty and integrity. The rights and safety of human subjects were recognised and protected by the researcher.

Permission to conduct the study at the nursing education institutions was obtained in writing from the provincial head office of the Department of Health and from the respective institutions selected for the study. During briefing sessions offered by the researcher at the educational institution, essential ethical considerations like anonymity, confidentiality, informed consent and human rights were explained to build mutual trust, respondents were informed about the purpose, objectives, and significance of the study, and the fact that participation was voluntary.

The following ethical principles were upheld during data collection:

1 Informed consent is a fundamental principle of social research that emphasises voluntary participation (Neuman 2006:129-140). The Nursing Education Institutions and respondents were not forced to participate in the research. During a briefing session at each Nursing Education institution (NEI) staff was ensured that participation is purely voluntary. They were made aware that it is essential to get representative participation to be able to obtain a trend on quality practices for the specific institution. The researcher indicated that a sufficient representative sample would benefit the institution because it could supply sufficient information to give an accurate picture regarding the extent of the institution's quality practices and congruency with SAQA quality management system criteria and guidelines. The purpose and objectives of the research were explained and assurance was given that refusal to participate would not be held against anybody and that consent was obtained from participants in writing using an agreement contract consent form in which respondents attached their signatures as a sign of formal agreement.

2 Right to anonymity: This is about protecting the institution's and respondents' identity by not disclosing the identity of the institution nor the respondents (Neuman 2006:129-140). The researcher protected each institution's anonymity by not disclosing and discussing its identity. The three institutions' names were replaced by alphabetic numbers of A, B, and C. Respondents names were not disclosed, by not including a space to write names, however respondents were required to indicate their positions in the institution (tutor, manager, head of department, quality assurance practitioner) to be able to identify whether criteria for selection was met.

The researcher gave the questionnaires to the research contact person at each NEI to distribute to respondents, a box was provided to collect completed questionnaires. The researcher did not know who at each NEI participated.

3 Right to confidentiality: This is when respondents names and information is kept secret from the public and the information is not released in a way that permits linkage of specific institutions and specific individuals by presenting responses in aggregate, e.g.

percentages (Neumann 2006:129-140). The Nursing Education Institution and participant's information on their quality management system practices were kept secret, and the results were generalised in such a manner that the institution would not recognise own input. Questionnaires were assigned numbers so that no one could recognise who gave the information.

3.5 CONCLUSION

Chapter 3 explained the research design, instrument, pretest, reliability and validity of the questionnaire, data collection and data analysis processes as well as the ethical considerations, in detail. In the next chapter the data analysis and discussion will be presented.

CHAPTER 4

Data analysis and interpretation

4.1 INTRODUCTION

The chapter presents an analysis and interpretation of the findings of the study. The purpose of the research was to explore the nature and extent of the quality management systems (QMS) used by three selected nursing education institutions in Gauteng province to establish whether these are aligned with the SAQA criteria and guidelines developed for education and training providers. The South African Qualifications Authority (SAQA) regards it as vital that education and training providers develop quality management systems to enable them to operate within the National Qualification Framework (NQF) (SAQA 2001a:2). The objectives of the study were to

1 determine whether the current quality management systems used by nursing education institutions are congruent to SAQA's requirements and guidelines for education and training providers

2 identify existing limitations in the quality management systems used by nursing education institutions

Data were collected from a total of 32 respondents from the three NEIs. The data collection instrument comprised a 104-item self-administered questionnaire. The researcher analysed the raw quantitative data obtained from the questionnaires, using the Microsoft (MS) Excel (for Windows 2000) program. A statistician then did the statistical calculations, using the Statistical Package for Social Sciences (SPSS) 6.1 program. Descriptive and inferential statistics were done and the data are illustrated in tables and bar graphs.

4.2 DATA ANALYSIS

The data is illustrated in tables showing the frequencies of the respondents' *yes, no* and *uncertain* responses under each core criterion. In cases where respondents did not respond to an item, it is not shown in the frequency tables but only mentioned in the text. Significant respondents' remarks are given in the text to complement the findings. A total of 32 respondents (7 from NEI A, 12 from NEI B, and 13 from NEI C) completed the questionnaire.

The following statistical tests were conducted to determine the differences between the three NEI's in compliance to each of the eight core criteria:

ANOVA (analysis of variance) is a statistical procedure for testing the mean differences among three or more groups by comparing variability between groups to variability within groups. It is basically an analysis of variance and a parametric statistical technique for determining whether the variance in data differs significantly (Cramer 2003:145; Polit & Beck 2008:747). It was used in the study to determine the statistical significance of the differences among the mean scores of the three nursing education institutions on each of the eight criteria in the questionnaire.

Post hoc test is a scheffer test for comparing all possible pairs of groups. It can be used for a group of differing size, and is known as conservative because it is likely to find differences to be significant. This test usually follows a significant test of overall group differences for example the ANOVA (Polit & Beck 2008:762).

Bonferroni correction is an adjustment made when multiple statistical tests are done from the same data in order to establish a more conservative alpha level. It is computed by dividing the desired alpha by the number of tests (Polit & Beck 2008:748).

The ***SPSS*** (Statistical Package for Social Sciences) is a computer software programme that displays and summarizes statistics – it easily produces graphical displays and statistical analysis (Norusis 2006:1-23).

The data are presented according to the items included under each of the eight core criteria.

4.2.1 Criterion 1: General quality issues, accreditation and policy statement

Criterion 1 covered the three institutions' registration and accreditation with the South African Nursing Council (SANC) and the South African Qualifications Authority (SAQA). Educational institutions are required to have a policy statement containing a vision, mission, aims and objectives, which should be in line with the values and principles of the National Qualifications Framework (NQF). Table 4.1 presents the items grouped according to the different issues addressed under criterion 1, and the response frequencies from the three NEIs.

Table 4.1: Response frequencies for criterion 1: general quality issues, accreditation, and policy statement

Item		NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
		Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
1.1	SAQA Registration	86	0	14	92	8	0	100	0	0
1.2	SANC Registration	100	0	0	100	0	0	100	0	0
1.3	Alignment to NQF levels	86	14	0	100	0	0	92	0	8
1.4	Situational analysis	71	0	29	100	0	0	92	0	8
1.4.1	Community needs	71	0	29	33	8	42	62	8	31
1.5	Safety policy	86	0	14	8	67	17	92	0	8
1.6	Networking	86	0	14	100	0	0	100	0	0
1.7	Resources	86	0	14	92	0	0	100	0	0
1.7.1	Learner and staff Facilities	86	0	14	100	0	0	100	0	0
1.7.2	Finances	86	0	14	50	50	0	100	0	0
1.73	Human resources	86	0	14	75	0	25	100	0	0
1.8	Vision and mission	86	0	14	67	0	33	92	0	8
1.9	Policy statement	86	0	14	58	33	8	100	0	0
1.10	Policy statement aligned with SAQA, NQF and SANC	86	0	14	42	0	58	92	0	8
1.11	Institution's objectives are aligned with SAQA, NQF and SANC	57	14	29	42	0	58	92	0	8
1.12	Strategic plan	71	14	14	100	0	0	100	0	0
1.13	Programme requirements	57	29	14	92	0	8	85	0	15
1.13.1	Mode of programme delivery	57	29	14	92	0	8	85	0	15
1.13.2	Theory and practical contact sessions, and assessment	57	29	14	67	17	17	77	0	23

4.2.1.1 SAQA, SANC, NQF levels compliance and networking (Items 1.1, 1.2, 1.3, 1.6)

Item 1.1: SAQA registrations

Six (86%) respondents from Nursing Education Institution (NEI) A (n=7), 11(92%) from NEI B (n=12) and 13 (100%) from NEI C (n=13) confirmed that their institution is registered with SAQA.

Item 1.2: SANC approval

All the respondents from all three NEI have confirmed programme approval and registration by the SANC.

Item 1.3: Programme alignment with NQF levels

In NEI A (n=7) 6 (86%) respondents confirmed that programmes and qualifications are consistent with NQF levels whereas 12 (100%) respondents from NEI B (n=12) and 12 (92%) in NEI C (n=13) confirmed. However, all the respondents' indicated their uncertainty and lack of knowledge regarding the required NQF levels for the 4-year basic programme and other programmes. Two of respondents from NEI A, 8 from NEI B and 3 from NEI C indicated incorrect programme levels against the required NQF levels for the different programmes offered in their institutions. In NEI A, two of the respondents who confirmed the programmes consistency with NQF levels indicated that they did not really know on which NQF level the 4-year basic nursing programme was.

One of SAQA's objectives is to create an integrated national qualifications framework for registration of learning achievements and recognition of acquired knowledge and skills. NQF levels have been established to enhance the quality of education and training, and facilitate access to and mobility and progression in education training career paths (Meyer et al 2002:10-11).

Therefore it is crucial for every educator and manager to know the programme NQF levels they are providing in order to be able to equate the relevant learning content with the qualification level, as this ensures quality qualifications.

Item 1.6: Networking

Networking is done at NEI A, (n=7), as confirmed by 6 (86%) respondents. All 12 (100%) from NEI B (n=12) and 13 (100%) respondents from NEI C (n=13) confirmed. Respondents from NEI A indicated that networking is done through exchange of learners internationally with a nursing education institution in the Netherlands that provides the same programmes, and that their clinical laboratory is comparable to international standards. Networking is done through the Internet, and during in-service training, meetings, workshops and conferences.

According to the respondents from NEI B and NEI C, respectively, networking is done locally within the Gauteng region through the nursing education association, collaborative meetings, different educators' forums, the Gauteng Curriculum Forum, post-basic programme forums, consultation and telephonically.

Gryna (2001:659), Green (2005:20-23) and Foster (2004:24) emphasised benchmarking because it creates an atmosphere of excellence. Those who benchmark learn from other institutions' quality culture; for example, the nature of their quality management systems, and what new processes institutions are integrating within the existing SAQA criteria.

4.2.1.2 Situational analysis (Items 1.4, 1.4.1)

Item 1.4: Situation analysis

Of the respondents, 5 (71%) from NEI A, 12 (100%) from NEI B (n=12) and 12 (92%) from NEI C (n=12) confirmed that situational analysis is done.

Item 1.4.1: Community needs

Of the respondents, 5 (71%) from NEI A, only 4 (33%) from NEI B, and 8 (62%) from NEI C confirmed that community needs were taken into consideration during the situational analysis.

The purpose of a situational analysis is to enable educators to respond to social realities and changes through curriculum development. The determinants to be studied should include the subject discipline requirements, community needs and the student. The SANC (nursing ETQA) guidelines have to be used to assist in the identification of the education and training requirements. The difference between what is and what should be must be found and this gap should then be narrowed or eliminated to promote appropriate and quality education and training.

Nursing education and training is a dynamic growing process with an ever-changing practical environment that requires the institution to adjust strategies or change focus, which may require a change of training requirements for existing programmes. Regular situational analysis is therefore essential within reasonable periods of time (Meyer, Mabaso, and Lancaster 2003:119-140).

4.2.1.3 Resources (Items 1.7, 1.7.1, 1.7.2, 1.7.3)

Item 1.7: Resources

Of the respondents, 6 (86%) from NEI A, 11 (92%) from NEI B (only 1 did not respond), and all 13 (100%) from NEI C confirmed that management ensures resources availability. The respondents from NEI A remarked that management ensures availability of resources according to the situation by prioritising. However, the respondents from NEI B indicated that although resources are ensured, they are inadequate.

Item 1.7.1: Learner and staff facilities

Six (86%) respondents from NEI A, 12 (100%) from NEI B and 13 (100%) from NEI C confirmed the availability of learner and staff facilities. The respondents from NEI B remarked that the staff facilities were inadequate.

Item 1.7.2: Finances

Six (86%) respondents from NEI A, 6 (50%) from NEI B and all 13 (100%) from NEI C confirmed that sufficient financial resources are available.

Item 1.7.3: Human resources

Six (86%) respondents from NEI A, 9 (75%) from NEI B and all 13 (100%) from NEI C confirmed that the institution had sufficiently qualified human resources.

Managers should ensure that resources essential for education and training provision, such as human resources, finances, and a quality working environment are available to achieve the institution's objectives. These objectives should be constantly reviewed to create continuous improvement of resources (Unisa 2005a:37).

4.2.1.4 Vision and mission; policy statement/s and objectives (Items 1.8, 1.9.1.10, 1.11, 1.5)

Item 1.8: Vision and mission statements

Of the respondents, 6 (86%) from NEI A, 8 (67%) from NEI B and 12 (92%) from NEI C respondents confirmed their institution's and mission statements are in line with the Department of Health (DOH), SAQA, and nursing ETQA (SANC).

Vision and mission statements portray what an organisation should look like now and in future. In addition, guidelines on what to measure provide a context for evaluating staff performance.

The way in which staff behave, work and relate to those they serve and to one another, contribute to shaping the organisational quality, culture and stability (Miller 2007:46-47).

Item 1.9: Policy statements

Of the respondents, 6 (86%) from NEI A, 7 (58%) from NEI B, and all 13 (100%) from NEI C confirmed that the institution has a policy statement containing aims and objectives. The respondents from NEI A remarked that the nursing department has adopted the overall policy statement of the entire institution, and respondents from NEI B indicated that their institution has drafted a policy statement which contains aims and objectives, but that it has not yet been approved.

Item 1.10: Policy statement alignment with SAQA, the NQF and SANC

Of the respondents, 6 (86%) from NEI A, 5 (42%) from NEI B, and 12 (92%) from NEI C confirmed that their institution's policy statement is aligned with SAQA, NQF and SANC policy statements.

Item 1.11: Institution's objectives alignment with SAQA, the NQF and SANC objectives

Of the respondents, 4 (57%) from NEI A, 5 (42%) from NEI B, and 12 (92%) from NEI C (n=13) confirmed that their institutions' objectives are aligned with SAQA, the NQF and SANC objectives. Among the respondents from NEI A, some remarked that it was not available, however, and that they did not have their own overall objectives but adhered to those of the institution. Some indicated they were unsure of this aspect.

According to Oakland (2003:48-58), objectives provide direction on what is to be achieved and policy statements provide parameters of the work activities to enable stability and management of quality processes. Everyone involved should participate in the development and alignment with controlling bodies, to get all personnel acquainted with it because the vision and mission statements provide the context in which staff performance is measured.

Item 1.5: Safety policy

Of the respondents, 6 (86%) from NEI A, only 1 (8%) from NEI B, and 12 (92%) from NEI C confirmed that their institution has a policy on safety. These results indicate a problem in NEI B, which does not appear to have a policy on safety, and yet South Africa's Labour Law requires all organisations to implement safety precautions for employees.

The *Occupational Health and Safety Act, 5 of 1993* (1993:1-11) makes provision for the development of an environmental health and safety policy within the institution to ensure a safe work environment free from health hazards and their effects. If the institution complies with the Act, managers, employees and customers benefit, thereby promoting quality work. For example, in the education and training environment, safety may be enhanced by good lighting and ventilation, environmental hygiene, students' safety during practical and emergencies.

4.2.1.5 Strategic plan (Items 1.12, 1.13.1, 1.13.2)

Item 1.12: Strategic plan

Of the respondents, 5 (71%) from NEI A, 12 (100%) from NEI B, and 13 (100%) from NEI C confirmed that their institution has a strategic plan. Some respondents from NEI A remarked that they were unsure but assumed the strategic plan is available.

Item 1.13: Programme requirements

Of the respondents, 4 (57%) from NEI A, 11 (92%) from NEI B, and 11 (85%) from NEI C confirmed that the strategic plan contains programme requirements. Those who did not confirm for each of the NEI's were either uncertain or did not reply.

Item 1.13.1: Mode of programme delivery

Of the respondents, 4 (57%) from NEI A, 11 (92%) from NEI B, and 11 (85 %) from NEI C confirmed that the strategic plan describes the mode of programme delivery.

Item 1.13.2: Theory and practical contact sessions, and assessment approach

Of the respondents, 4 (57%) from NEI A, 8 (67%) from NEI B, and 10 (77%) from NEI C confirmed that information regarding theory and practical sessions, and assessment approach is included in the strategic plan. Respondents from NEI B remarked that information on theory and practical contact sessions, and the assessment approach is clearly stipulated in the programme's curriculum.

A strategic plan is the foundation for quality management, and if it is not used or available the staff performance cannot be measured appropriately against the plan. According to Miller (2007:232), staff should understand the purpose of strategic plan because it will be used to assess their performance and organisational performance. Most importantly, it will provide feedback on progress of achievement regarding strategic goals and therefore achievement should become evident to everyone and not just managers (Miller 2007:232). Oakland (2003:60-63) pointed out that involvement creates staff awareness of impending changes in the education and training environment and knowledge of what is expected of them.

Descriptive and inferential statistics

The descriptive statistics for criterion 1 determine the mean for each NEI. This index is based on 19 questions.

Table 4.2: Descriptive statistics for "yes" responses for items under criterion 1

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A	7	16.2857	6.15668	2.32701	7.00	21.00
B	12	14.8333	2.58785	.74705	11.00	19.00
C	13	19.0769	2.39658	.66469	13.00	21.00
Total	**32**	**16.8750**	**3.95743**	**.69958**	**7.00**	**21.00**

Table 4.2 indicates that NEI B has the lowest mean (14.83) and NEI C the highest (19.08). This means that NEI C's compliance with SAQA requirements is higher than the other two NEIs with

NEI B showing the lowest compliance with SAQA in criterion 1: general quality issues, accreditation and policy statement.

To compare the means of the three NEIs with respect to criterion 1, a One-way Analysis of Variance (ANOVA) was performed (see table 4.3).

Table 4.3: ANOVA for criterion 1

	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	115.482	2	57.741	4.525	.019
Within groups	370.018	29	12.759		
Total	**485.500**	**31**			

Since the p-value (listed under "Sig." for Significance in the table) of 0.019 is less than 0.05, the conclusion is that there is a significant difference between the means of the three NEIs in their compliance with SAQA's criterion 1. The biggest difference is between NEI C and NEI B.

Post hoc test

The post hoc test is used to compare the NEIs with one another.

Table 4.4: Bonferroni (multiple comparisons) for criterion 1

(I) Nursing education institution	(J) Nursing education institution	Mean Difference (I-J)	Std. Error	Sig.
Nursing education institution A	Institution B	1.45238	1.69883	1.000
	Institution C	-2.79121	1.67458	.319
Nursing education institution B	Institution A	-1.45238	1.69883	1.000
	College C	-4.24359(*)	1.42995	.018
Nursing education institution C	College A	2.79121	1.67458	.319
	College B	4.24359(*)	1.42995	.018

**The mean difference is significant at the .05 levels*

The only p-value smaller than 0.05 is for the comparison of NEI B with NEI C, where the p-value is 0.018, therefore a significant difference (see figure 4.1).

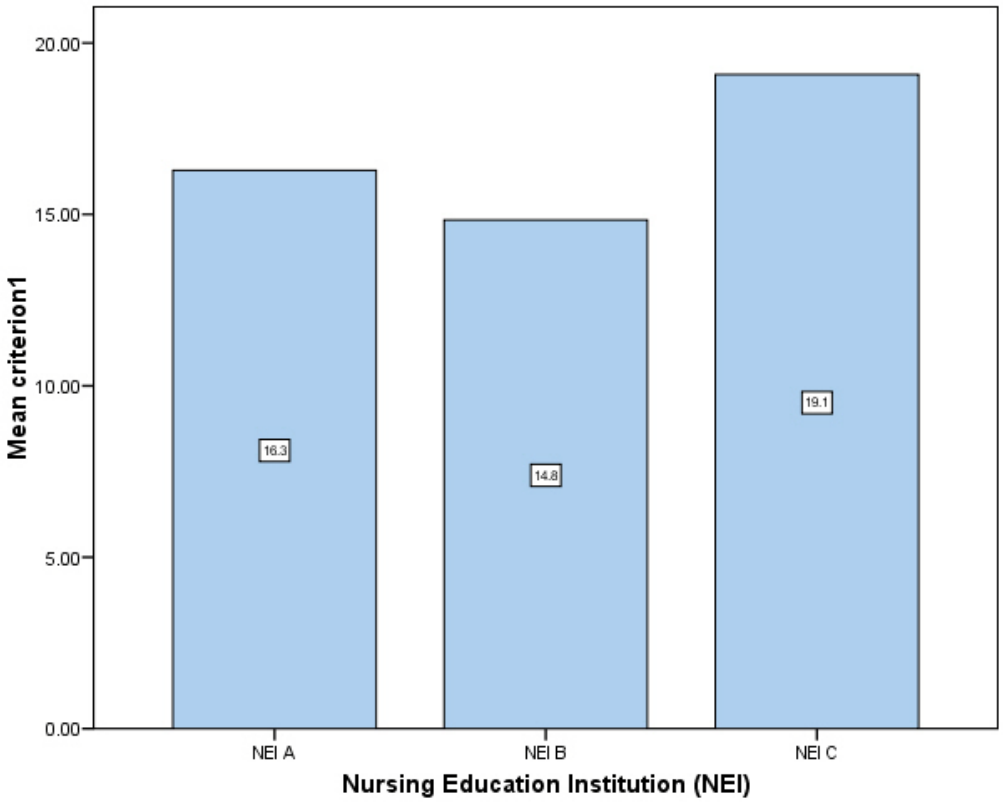

Figure 4.1: Differences in compliance of the three NEIs with criterion 1: general quality issues, accreditation and policy statement

4.2.2 Criterion 2: Quality management systems (QMS)

Items under this criterion focus on the sustenance of a quality culture in the institution with emphasis on quality assurance policy and standard operating procedures to assure a continuous cycle of quality improvement. It is about whether an institution does or does not enhance the development of quality and ensure its stability within the institution. The items are grouped together accordingly and the responses to these items are displayed in table 4.5.

Table 4.5: Response frequencies for criterion 2: quality management systems

Item	NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
	Yes %	No %	Uncertain %	Yes %	No	Uncertain %	Yes %	No %	Uncertain %
2.1 Quality assurance (QA) policy	100	0	0	8	92	0	69	0	31
2.2 QA policy review	43	0	57	0	67	25	67	0	38
2.3 QMS objectives	57	0	43	8	67	25	77	8	17
2.4 QMS objectives communicated	57	29	14	17	58	17	77		8
2.5 SOP for monitoring quality assessments	57	0	29	75	17	8	85	0	0
2.6 Leaders involvement in quality management	71	0	29	83	8	8	92	0	8
2.7 Planned schedule for external verification	57	0	43	17	0	83	62	8	31
2.8 Legal requirements	86	0	14	100	0	0	100	0	0
2.9 Nursing education and practice regulations	86	0	14	100	0	0	100	0	0
2.10 SOP for QA improvement	71	0	29	25	50	25	100	0	0
2.11 Staff involvement in QMS development	57	14	29	50	17	33	92	0	8

4.2.2.1 Quality assurance policy, and QMS (Items 2.1, 2.2, 2.3)

Item 2.1: Quality assurance (QA) policy

Of the respondents, all 7 (100%) from NEI A (n=7), only 1 (8%) in NEI B, and 9 (69%) from NEI C confirmed that their institution has a QA policy available. The respondent from NEI B, however, remarked that the institution does not have an internal QA policy, but used the Gauteng Department of Health standardised policies for quality assurance in the region.

According to SAQA (2001a:14), a total quality management approach (TQM) must be adopted by including the quality assurance policy and quality objectives relevant to the core business and aligned to the controlling bodies. Oakland (2003:31) emphasised that a QA policy is a

fundamental requirement in the management of quality, which requires responsibility in the commitment to it by all involved, and the content of the policy should be made known to all staff members.

Item 2.2: QA policy review

Of the respondents, only 3 (43%) from NEI A, and 8 (67%) from NEI C confirmed that the QA policy is continuously reviewed. In NEI B, no respondents confirmed continuous review of a QA policy, and 7 remarked that only stakeholders involved from institutions and the head office continuously reviewed the policy. The respondents from NEI C indicated different renewal periods, namely every six months, yearly, and when necessary. According to Oakland (2003:32), management and all involved should be committed to regular improvement of quality policy and practices.

Item 2.3: Quality management system (QMS) objectives

Of the respondents, 4 (57%) from NEI A (n=7) confirmed that QMS objectives are clearly outlined, with one remarking that only the quality assurance committee had developed the objectives. From NEI B, only 1 (8%) confirmed, 8 (67%) denied, and 3 (25%) were uncertain that the institution's QMS objectives are available. Of the respondents from NEI C, 10 (77%) confirmed that QMS objectives are clearly outlined, and only one respondent did not respond.

A quality management system requires that customer (student) and organisational requirements are identified to provide quality service, hence a quality policy and objectives should be developed as guidance on meeting and satisfying the needs of all involved (Oakland 2003:206-223). The QMS should move from requirements and control to the objective that makes everyone accountable for their own performance and gets each individual committed to achieving quality objectives and self-motivation.

4.2.2.2 Procedures for controlling assessing and improving quality (Items 2.5, 2.10)

Item 2.5: Standard operating procedures (SOP) for quality assessments

Of the respondents, 4 (57%) from NEI A, confirmed the use of SOP for monitoring and controlling quality assessment, and only 1 respondent did not respond. From NEI B, 9 (75%) respondents confirmed the use of SOP. Five remarked that the Gauteng provincial accreditation tool is used to monitor and control quality activities and assessments and 3 remarked that other staff used different tools. From NEI C, 11 (85%) respondents confirmed the use of SOP for monitoring and controlling quality assessments; 2 (15%) did not respond, and 3 remarked that the QA committee does the monitoring, and that different departments used various tools.

Item 2.10: SOP for quality improvement

Of the respondents, 5 (71%) from NEI A, only 3 (25%) from NEI B, and all 13 (100%) from NEI C (n=13) confirmed the availability of SOP for QA and management.

Standard operating procedures are a series of actions with clear systematic guidelines on how to perform tasks, which then create a pattern/culture of doing the tasks. SAQA (2001:22) emphasises that each education and training provider should create its own quality culture unique to its own environment. Hence the SOP should be developed to monitor, manage, and improve quality activities and performance to create the quality culture. The TQM approach indicates that everybody involved in the education and training should take responsibility for quality performance with an ongoing process of continuous monitoring, control, and reviews with consistent feedback to all involved (SAQA 2001a:14).

4.2.2.3 External verification (Item 2.7)

Item 2.7: External verification schedules

Four (57%) respondents from NEI A confirmed that the institution has a planned schedule for external verification of programmes, assessments, moderations and results by the nursing

ETQA (SANC). Two (17%) respondents from NEI B confirmed that an external verification schedule is available, and 3 remarked respectively that verification visits are scheduled by SANC, and the affiliating university also does the verification schedule with SANC. Eight (62 %) respondents from NEI C confirmed that the institution has an external verification schedule. Two remarked that SANC visits are done annually and the SANC quality assessment directorate schedules the meetings, while one respondent indicated that SANC visits are every 4 years.

4.2.2.4 Staff and management involvement in quality assurance (Items 2.4, 2.6, 2.11)

Item 2.4: Communicating QMS objectives

Regarding QMS objectives, 4 (57%) respondents from NEI A confirmed that management communicated QMS objectives to all staff. Two respondents remarked that these objectives were communicated through in-service training, capacity building programmes, and continuous education. In NEI B, 2 (17%) respondents confirmed, and 1 respondent did not respond. Two respondents remarked that QMS objectives are communicated during staff and team meetings. Of the respondents from NEI C, 10 (77%) confirmed, and 2 (15%) did not respond. The respondents remarked that management communicates through in-service training, team representative meetings, the quality committee, and through circulars or written notices.

Quality objectives are basically outcomes for quality management that provide direction on how to provide quality education and training (service). Management is responsible to develop QA objectives from the strategic plan and QA policy to provide a clear framework intended to improve the institution's performance. The objectives should be measurable and facilitate an effective review by all involved. Hence quality objectives should be communicated to all involved to encourage each individual's participation in achieving them (UNISA 2005a:14).

Item 2.6: Leaders' involvement

Five (71%) respondents from NEI A confirmed that leaders are actively involved in quality management activities. Five respondents remarked, respectively, that they were not sure of managers' involvement; that they were involved through their input and assessment feedback;

that only heads of departments are involved; that the quality assurance committee is more actively involved than managers and staff, and that the nursing school has a quality department that does quality management.

Of the respondents from NEI B, 10 (83%) confirmed managers' active involvement in quality management, and 1 did not respond. Five respondents remarked leaders are actively involved and are also members of the quality assurance committee. Twelve (92%) respondents from NEI C confirmed managers' involvement in quality management. Seven respondents remarked, respectively, that leaders are part of the quality committee; management involvement is through conducting training and workshops on QA, monthly meetings and facilitating QA sessions; management appoints the QA committee and ensures that the key responsibilities are implemented according to the set standards.

Item 2.11: Staff involvement in QMS

In NEI A, 4 (57%) respondents confirmed that management involve all staff in the development, implementation and evaluation of the institution's quality management system, and one did not respond. One respondent remarked that management involves staff through e-mail communication. In NEI B, 6 (50%) respondents confirmed staff involvement. In NEI C, 12 (92%) respondents confirmed all staff are involved in the QMS development, implementation and evaluation, and 4 respondents remarked that not all staff members are involved, only the members of QA committee are involved in the development, implementation and evaluation of the institution's QMS.

People should be empowered in decision making at their level of functioning regarding development of QMS, its implementation, and review, to ensure that they know appropriate boundaries and understand their own performance, to foster a sense of ownership, help them take pride in their work, improve their institutional performance, and to continuously improve their efforts (Dew & Nearing 2004:137-138).

4.2.2.5 Governance of nursing education and training (Items 2.8, 2.9)

Item 2.8: Legal requirements

Of the respondents, 6 (86%) from NEI A, all 12 (100%) from NEI B, and all 13 (100%) from NEI C confirmed their institution's adherence to the legal requirements governing nursing education and training.

Item 2.9: Nursing regulations

Of the respondents, 6 (86%) from NEI A (n=7), all 12 (100%) from NEI B, and all 13 (100%) from NEI C confirmed their institution's integration of SANC regulations with all programmes.

Students, educators and managers should know the statutory and regulatory requirements that apply to education and training, and practice as part of QMS and to promote ethical and efficiency with current and prospective legal requirements to protect themselves and the community's interests as regulated by SANC.

Descriptive and inferential statistics

The descriptive statistics for criterion 2 determine the mean for each NEI. This index is based on 11 questions.

Table 4.6: Descriptive statistics for "yes" responses for items under criterion 2

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A	7	7.4286	3.20713	1.21218	3.00	11.00
B	12	5.1667	1.52753	.44096	4.00	9.00
C	13	9.2308	2.20431	.61137	5.00	11.00
Total	**32**	**7.3125**	**2.83341**	**.50088**	**3.00**	**11.00**

Table 4.6 indicates that NEI C has the highest mean of 9.2 for yes responses and NEI B the lowest mean of 5.1. Therefore the ANOVA was done to determine whether the difference between the means of the three NEIs is significant (see table 4.7). There will be significant

difference only when the p-value is less than 0.05.

Table 4.7: ANOVA for criterion 2

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	103.186	2	51.593	10.270	.000
Within groups	145.689	29	5.024		
Total	**248.875**	**31**			

Since the p-value for the ANOVA test is .000, it is therefore less than 0.05, it is concluded that the three means for criterion 2 are significantly different. The next test is the post hoc test which compares the three NEIs' means pair wise. This serves as confirmation that the significant differences are between NEI B and NEI C.

Post hoc test

The post hoc test is used to compare the NEIs with each other (see table 4.8).

Table 4.8: Bonferroni for criterion 2

(I) Nursing education institution	(J) Nursing education institution	Mean Difference (I-J)	Std. Error	Sig.
A	B	2.26190	1.06598	.128
	C	-1.80220	1.05077	.291
B	A	-2.26190	1.06598	.128
	C	-4.06410(*)	.89727	.000
C	A	1.80220	1.05077	.291
	B	4.06410(*)	.89727	.000

**The mean difference is significant at the .05 level*

The only significant difference is between NEI B and C. NEI C has a high mean and NEI B has a low mean, with NEI A in the middle. The only significant difference is between NEI B and NEI C because it is at 0.000 and is lower than the p- value of 0.05 (see figure 4.2).

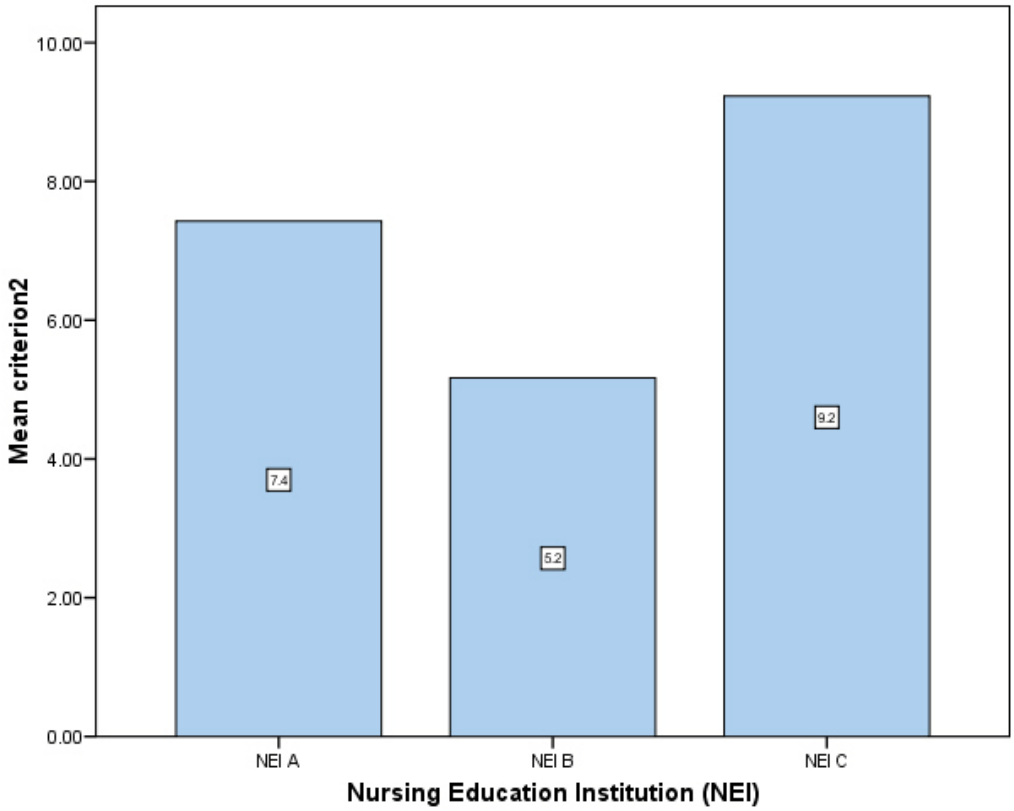

Figure 4.2: Differences in compliance of the three NEIs with criterion 2: quality management systems

4.2.3 Criterion 3: Quality review mechanisms

A comprehensive QMS has an element of total quality management (TQM). One of the important features of a TQM approach is a developmental emphasis and ongoing improvement. This is based on the assumption that institutions can only develop if they continuously monitor and review their own activities. In order to sustain a continuous quality assurance cycle, reviewing mechanisms must include external and internal feedback and ensure reporting back and acting thereon. Items are grouped together according to similarity and the responses from the three nursing education institutions are reflected in table 4.9.

Table 4.9: Response frequencies for criterion 3: review mechanisms

Item	NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
3.1 Programme reviews	71	0	29	92		8	77	0	23
3.2 Quality assessment tools	43	0	57	8	75	8	69	0	31
3.3 QA cycle	57	14	29	25	50	25	85	0	15
3.4 Review evidence	57	0	43	8	17	75	85	0	15
3.5 Feedback mechanisms	100	0	0	83	17	0	77	0	23
3.6 Review findings	43	0	57	83	0	17	85	0	15
3.7 Programme review responsibility	43	29	29	83	0	8	85	0	15
3.8 Communication of quality improvements	86	0	14	83	17	0	85	0	15
3.9 Quality reviews	57	0	43	75	25	0	77	8	15
3.10 External customers feedback	86	0	0	83	0	17	62	8	31
3.11 Internal customers feedback	43	14	43	83	8	8	77	0	23

4.2.3.1 Programme reviewing (Items 3.1, 3.2, 3.3, 3.7)

Item 3.1: Programmes reviews

Of the respondents, 5 (71%) from NEI A, 11 (92%) from NEI B, and 10 (77%) from NEI C confirmed that their programmes are reviewed. There was no consensus on the incidence of programme reviewing, as remarks differed from a yearly basis, to every four or five years in each NEI.

Item 3.2: Quality assessment tools

Of the respondents, 3 (43%) from NEI A, only 1 (8%) from NEI B, and 9 (69%) from NEI C confirmed that quality assessment tools for monitoring, controlling and managing quality are continuously reviewed. There appears to be a problem in NEI B in this regard.

Item 3.3: QA cycle

Four (57%) respondents from NEI A confirmed their institution has an active QA continuous cycle through monitoring, review, research and feedback into the system, but some remarked that they do not know if a QA cycle exists. Only 3 (25%) respondents from NEI B confirmed an active QA continuous cycle, and remarked that the institutional quality cycle is in a developmental stage, which suggests that the institution quality cycle is passive or not operational. Eleven (85%) respondents from NEI C (n=13) confirmed an active QA cycle.

Item 3.7: Programme review responsibility

From NEI A, 3 (43%) respondents confirmed that there is someone responsible for review of programmes, and remarked that the specific departments involved in the programme and the QA departments are responsible for programme review. From NEI B, 11 (92%) respondents confirmed availability of the responsible staff for review of programmes, remarking that responsibility is entrusted to certain members of staff, including individual tutors, heads of departments (HOD), and examiners. From NEI C, 11 (85%) respondents confirmed that the responsibility for review of programmes is entrusted to certain members of staff, referring to the curriculum development committee, the HODs and QA team.

Quality cycle in education environment involves an institutional/departmental improvement process consisting of individuals from each work division whereby all stakeholders involved in education and training address issues of concern, limitations, and challenges pertaining to students' education and training. A quality cycle, therefore, is regarded as a comprehensive management system that integrates planning, control, and improvement in a clearly articulated and systematic manner. It presents itself as a model that emphasises a continuous

cycle of assessments, planning, implementation of change and performance (Dew & Nearing 2004:28-31).

4.2.3.2 Feedback on reviews (Items 3.4, 3.5, 3.6, 3.8, 3.9)

Item 3.4: Review evidence

Four (57%) respondents from NEI A confirmed that evidence from reviews, and research and quality monitoring results are used to improve the institution's quality activities. Two remarked that evidence gathered from research committee meetings and reports is used for improvement in specified areas of shortcoming. Only 1 (8%) respondent from NEI B confirmed the use of results. Respondents who were uncertain remarked that provincial accreditation report results are used to improve the institution's quality activities, and that any form of evidence, which did not necessarily emerge from research findings, reviews, and monitoring, is used for improvement. Eleven (85%) respondents from NEI C confirmed the use of results for improvement purposes. The respondents remarked that feedback sessions are conducted for the planning of corrective measures and communicating implementation strategies for recommendations and feedback.

Item 3.5: Feedback mechanisms

Of the respondents, 7 (100%) respondents from NEI A, 10 (83%) from NEI B, and 10 (77%) from NEI C confirmed the existence of different ways to obtain feedback from educators, assessors, and moderators of individual institutions and other stakeholders. In NEI A, feedback is obtained through evaluation instrument, questionnaire, via HODs, and through examination paper comments. In NEI B and NEI C, feedback is obtained through verbal and written reports of assessors, moderators, educators and students, meetings (teams and staff), and suggestion boxes. In NEI C, active feedback is also provided during peer reviews.

Item 3.6: Review findings

Of the respondents, only 3 (43%) from NEI A, 10 (83%) from NEI B and 11 (85%) from NEI C confirmed feedback of findings. The NEI A respondents remarked that review feedback is

reported at departmental level and reports obtained from educators, assessors, and moderators are disseminated to stakeholders. At NEI B, review feedback is reported to staff during academic and staff meetings, and communicated to all staff through reports. At NEI C, review feedback is given verbally at staff meetings, and communicated through circulars and written reports.

An education and training provider should have and describe mechanisms in place to maintain a developmental approach to quality assurance and maintenance, as well as feedback or report back mechanisms hence it is essential that an active continuous cycle of quality assurance and feedback reporting is well established (UNISA 2005a:23, 24).

Item 3.8: Quality improvements

Of the respondents, 6 (86%) from NEI A, 10 (83%) from NEI B, and 11 (85%) from NEI confirmed that corrective measures for quality improvements are communicated to everybody in the institution. Respondents from NEI A remarked that corrective measures are communicated through workshops, meetings, and departmental heads, and those from NEI C remarked that communication of quality improvements is only done when the need arises.

A channel of communication between managers and everyone involved in quality management should be based on information regarding effectiveness and efficiency of the quality management processes, and focus on causes of potential problems, strategies and systematic approaches towards identifying and preventing potential problems (UNISA 2005a:63-65). A systematic approach should be established to gather information in the education and training processes and final results. The institution should have a technique to handle ongoing improvement, and corrective actions be planned, implemented, evaluated and communicated. Furthermore, it is vital to create an environment that empowers people to take authority and charge of continuous improvement at their level in their functional areas (Oakland 2003:225-256).

Item 3.9: Quality reviews

Of the respondents, 4 (57%) from NEI A, 9 (75%) from NEI B, and 10 (77%) from NEI C confirmed that quality reviews are conducted in all functional areas of the institution. One respondent from NEI C did not respond. One respondent from NEI A remarked that quality reviews in each functional area are conducted yearly, and respondents from NEI C remarked that quality reviews in each division are done every six months or once a year, respectively.

It is essential that a comprehensive review mechanism is developed to ensure review of all the programmes, identify limitations and consequently incorporate innovations to maintain continuous improvement. Review promotes quality services based on review findings and research, using mechanisms in place, and should be conducted continuously because quality is an ongoing process of continuous review, monitoring, control and consistent feedback to all concerned (SAQA 2001a:14).

4.2.3.3 Feedback from customers (Items 3.10, 3.11)

Item 3.10: External customers' feedback

Six (86%) respondents from NEI A confirmed that feedback is obtained from health services and community members during meetings, and from students during examination time; only 1 respondent did not respond. Ten (83%) respondents from NEI B confirmed that external customers' feedback is obtained. Respective respondents remarked that feedback was obtained from external customers three times a year, at the end of each programme, during exam time, and after clinical practice placement. From NEI C, 10 (77%) respondents confirmed that external customers' feedback is obtained. Respondents indicated that external feedback is obtained during monthly collaborative meetings, and by means of questionnaires.

Mechanisms for obtaining internal as well as external customers' feedback on programme delivery services should be described. Ways of collecting evidence, reporting back after reviews, reporting research findings, and of implementing corrective measures should be described in order to manage quality review activities promptly (SAQA 2001a:23-24).

Item 3.11: Internal customers' feedback

Only 3 (43%) respondents from NEI A confirmed internal customers' feedback is obtained from educators, other team members and managers during review sessions, and review of tests and exams. Ten (83%) respondents from NEI B confirmed that internal customers' feedback is obtained at different meetings (staff, senate, and tutor forums). Finally, ten (77%) respondents from NEI C confirmed that internal customers feedback is obtained during academic staff and team meetings on a monthly basis.

Descriptive and inferential statistics

The descriptive statistics for criterion 3 determine the mean of each NEI. This index is based on 11 questions.

Table 4.10: Descriptive statistics for "yes" responses for items under criterion 3

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A	7	6.8571	2.79455	1.05624	3.00	10.00
B	12	7.1667	2.36771	.68350	2.00	10.00
C	13	8.5385	3.35697	.93106	2.00	11.00
Total	**32**	**7.6563**	**2.90283**	**.51315**	**2.00**	**11.00**

Table 4.10 indicates that NEI C has the highest mean of yes responses (8.5) and NEI A the lowest (6.8). With regard to compliance with SAQA requirements for QMS pertaining to criterion 3, NEI C's mean is higher than NEI B and NEI A. An ANOVA tested whether the difference is significant (see table 4.11).

Table 4.11: ANOVA for criterion 3

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	17.464	2	8.732	1.039	.367
Within groups	243.755	29	8.405		
Total	**261.219**	**31**			

Since the p-value (0.367) is larger than 0.5, the difference between the three means is not significant. Post hoc tests were therefore not needed. This means that there is not a significant difference between the three NEIs' in their compliance with SAQA requirements regarding criterion 3 quality review mechanisms (see figure 4.3).

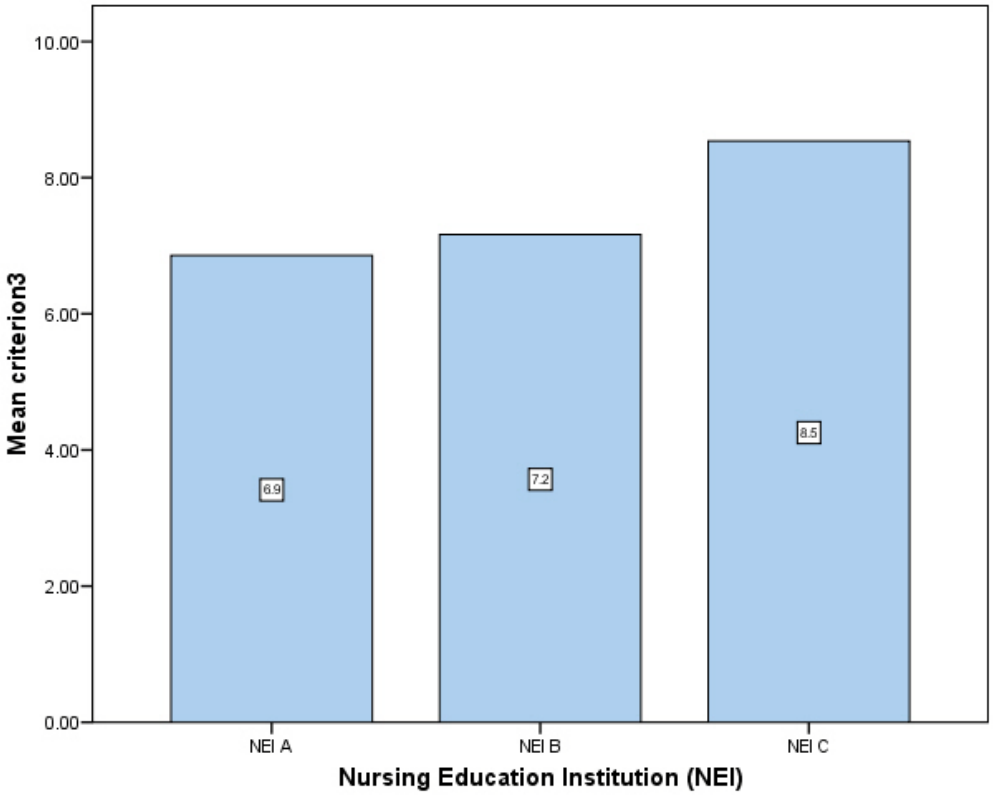

Figure 4.3: Differences in NEIs' compliance with criterion 3: quality review mechanisms

4.2.4 Criterion 4: Programme delivery

The rationale for the existence of providers of education is their activities related to the programmes they deliver. SAQA stipulates that providers must be explicit on how learning programmes are developed, delivered, and evaluated to adhere with NQF principles. Programme delivery should facilitate foundational, reflexive and practical competence. The items are grouped according to similar aspects and the responses to items under criterion 4 are displayed in table 4.12.

Table 4.12: Response frequencies for criterion 4: programme delivery

Item		NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
		Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
4.1	Operational plan	43	14	43	92	0	8	77	0	23
4.2	Strategic plan	43	29	14	83	8	8	77	0	23
4.3	Programme delivery research-based	43	0	43	75	0	25	69	0	31
4.4	Programme delivery relevance	86	0	0	92	0	8	92	0	8
4.5	Learner centeredness	86	0	0	58	17	8	92	8	0
4.6	Target group analysis	43	0	14	17	25	50	54	8	38
4.7	Orientation /induction programme	86	0	0	100	0	0	100	0	0
4.8	Mode of programme Delivery	43	0	14	67	0	8	54	0	31
4.9	Experiential learning	71	0	0	100	0	0	92	0	8
4.10	Integration of knowledge	71	0	29	92	0	0	85	0	8
4.11	Learning material	86	0	14	100	0	0	100	0	0
4.12	Assignments	86	0	14	83	0	17	100	0	0
4.13	Learners involved in programme design	29	0	71	25	33	42	38	38	23
4.14	Learners involved in programme implementation	43	29	29	25	58	17	23	46	31
4.15	Group work and practical	100	0	0	92	0	8	100	0	0
4.16	Tutors evaluation	100	0	0	100	0	0	92	8	0
4.17	Learners feedback on tutors	71	0	29	83	0	17	77	0	23

4.2.4.1 Strategic and operational plan (Items 4.1, 4.2)

Item 4.1: Operational plan

Only 3 (43%) respondents from NEI A confirmed that the institution has an operational plan for programme delivery. Eleven (92%) respondents from NEI B confirmed the existence of an operational plan. Ten (77%) respondents from NEI C confirmed the availability of an operational plan. The respondents from NEI A remarked respectively that the operational plan is included in the year plan, or in the entire institution strategy, which suggested that the nursing department did not have their own. The respondents from NEI B remarked respectively that the operational plan is included in the study guides, the curriculum, the institution's

calendar, or the accompaniment programme; that each staff member is given a copy of the operational plan, and that it is developed by the strategic planning committee.

The respondents from NEI C remarked, respectively, that their institution uses the strategic plan for programme delivery, and that the operational plan is a planned theory session (block) for all the programmes the institution provides. Some of the respondents referred to the strategic plan as a theory session plan and others as an operational plan indicating a series of planned dates and times for theory sessions. These remarks indicated that the respondents concerned did not understand what a strategic plan and an operational plan entails, and could not differentiate a strategic plan from an operational (delivery) plan. This suggests further that some teaching staff is not familiar with the institution's strategic plan, which could impact on their performance in terms of the strategy and the quality management of service delivery.

An operational plan is a framework or structure that with detailed aggregation and summary of portfolio plans, delivery model, access and entry to programmes, mechanisms and resources within institutional operational objectives (Oakland 2003:60-63). An operational plan should indicate how to exclude tasks and should be in place to enable balancing the institutional needs with future and customers' (students') needs.

Item 4.2: Strategic plan

Three (43%) respondents from NEI A confirmed that management inform staff about the institution's strategic plan, and 1 respondent did not respond. Remarks indicated that staff was informed via workshops, meetings and e-mail. One respondent discovered the strategic plan during her master's degree because it was required. Ten (83%) respondents from NEI B confirmed that management informed staff about the institution's strategic plan at staff meetings and information sessions. Ten (77%) respondents from NEI C confirmed that management communicates the strategic plan during meetings and that each staff member is provided with a copy of the strategic plan.

A strategic plan is a description of the institution's destination (goals), barriers/constraints and approach to dealing with them, purpose of the institution's existence and objectives, vision, mission and values, and customer and institutional needs (Oakland 2003:48-61).

John, John and Trevor (2003:5-14) pointed out that streamlining the strategic plan to performance is important in managing quality effectively. According to Dew and Nearing (2004:54-74), the quality management system of an institution should include strategic planning that engages all staff as a method to improve each person's performance.

4.2.4.2 Relevancy of programmes (Items 4.3, 4.4)

Item 4.3: Programme delivery research-based

Three (43%) respondents from NEI A confirmed that changes in programme delivery are based on research, monitoring, review and feedback from stakeholders, and 1 did not respond. Nine (75%) respondents from NEI B and 9 (69%) from NEI C confirmed.

Item 4.4: Programme delivery relevance

Six (86%) respondents from NEI A confirmed that programme delivery ensures programme relevancy to customers, and only 1 respondent did not respond. The respondents indicated that it is done through curriculum review, students' group analysis, and during clinical accompaniment. Eleven (92%) respondents from NEI B confirmed programme relevancy to students and remarked that relevancy is ensured by programme delivery according to the curriculum (considering community needs, stipulating clinical placement and content); delivering programmes according to students' line of education and training, and through situational analysis. Twelve (92%) respondents from NEI C confirmed, remarking that relevancy is ensured by programme outcomes; considering the provincial strategic plan, and outcome-based delivery of programmes.

4.2.4.3 Student orientation and target group analysis (Items 4.6, 4.7)

Item 4.6: Target group analysis

Three (43%) respondents from NEI A confirmed that a comprehensive target group analysis is done, including identifying students' learning styles to assist with selection of teaching strategies and appropriate learning activities, and support materials for integration of

knowledge, skills and attitudes. Three (43%) respondents did not respond. Only 2 (17%) respondents from NEI B confirmed, and only 1 respondent did not respond. Seven (54%) respondents from NEI C confirmed that the target group analysis includes aspects listed in item 4.6.

Item 4.7: Orientation/induction programme

Six (86%) respondents from NEI A) confirmed that an induction/orientation programme is offered to all new students, and 1 respondent did not respond. Respondents remarked that orientation is done in the first week of the programme for newly selected students to acquaint them with programme objectives and problem-based learning, and that lecturers and clinical mentors conduct the orientation. All 12 (100%) respondents from NEI B confirmed and indicated that clinical mentors, a student affairs department representative, and nurse educators orientate students, and that this includes learning materials and study skills. Thirteen (100%) respondents from NEI C confirmed that induction is done for new students.

Orientation should be combined with induction, which offers training in standards, history, policies, health and safety measures, institutional strategy, and conditions of service or code of conduct, institutional physical structure, to allay anxiety, and promote positive attitudes towards their new environment. Mentors are also assigned to new students to assist them to become productive and actively participate in their learning (Potgieter in Kotze 2008:216-218).

4.2.4.4 Student involvement in programme design and implementation (Items 4.13, 4.14)

Item 4.13: Student involvement in programme design (formally)

Of the respondents, only 2 (29%) from NEI A, 3 (25%) from NEI B, and 5 (38%) from NEI C confirmed student involvement during programme design at decision-making level.

Item 4.14: Student involvement in programme implementation (informally)

Only 3 (43%) respondents from NEI A, 3 (25%) from NEI B, and 3 (23%) from NEI C (n=13) confirmed that learners were informally involved through decision-making regarding assignments.

According to SAQA (2001a:24-26), students should be involved in programme design, assessment methods, and implementation. Moon (2004:64) maintains that if knowledge is to be constructed and recognised, then it is part of the student or person involved in the process, therefore the study material and the existing knowledge can be transformed to suit students through their involvement. If students' ideas are considered during the development of the study material, it can assist them to perceive the process of learning positively. The involvement should happen because there is a link between the approach to leaning and conception of knowledge.

4.2.4.5 Mode of programme delivery (Items 4.8, 4.9, 4.10)

Item 4.8: Mode of programme delivery

Three (43%) respondents from NEI A confirmed that the mode of delivery was indicated and some respondents remarked that the mode of programme delivery is full-time study and that relevant resources required for programme delivery are available. Eight (67%) respondents from NEI B confirmed that there is a mode for programme delivery. However, one respondent remarked that the mode of delivery is full-time study, whereas the rest indicated different equipment and teaching strategies as mode of delivery. Seven (54%) respondents from NEI C confirmed, and 2 (15%) did not respond. The respondents' remarks indicated resources, theory and clinical placement as the mode of delivery.

The results indicate that although the respondents from NEI B confirmed the mode of delivery for their programmes, their remarks contrasted with what they confirmed. Instead of indicating whether the programmes are offered on a full-time or part-time basis, they indicated different teaching methods and equipment. This shows that the respondents regarded mode of programme delivery as mode of teaching. Mode of programme delivery

refers to whether programmes will be distance learning or full-time learning. In the nursing education environment, the provider cannot decide on the mode of delivery without prior approval by SANC.

Item 4.9: Experiential learning

Five (71%) respondents from NEI A confirmed that mode of programme delivery provides students with learning experiences in the real situation, and 2 (29%) did not respond. In addition, all 12 (100%) respondents from NEI B and 12 (92%) respondents from NEI C confirmed.

Item 4.10: Integration of knowledge

Of the respondents, 5 (71%) from NEI A, 11 (92%) from NEI B, and 11(85%) from NEI C confirmed that modules are linked to clinical practice to facilitate horizontal integration of theory to practice.

SAQA (2001a:24- 26) stipulates that all education and training providers should ensure provision for integration of theory with practice, and the theory provider and workplace linkages should be established for learning opportunities and experiences.

4.2.4.6 Student-centred approach (Items 4.5, 4.11, 4.12, 4.15)

Item 4.5: Student centred

Six (86%) respondents from NEI A confirmed that programme delivery is student centred and flexible and only 1 respondent did not respond. The respondents remarked that accommodating students' needs, adopting an outcomes-based approach during programme delivery, and involving students through problem-based teaching strategy achieve this. Seven (58%) respondents from NEI B confirmed that the programme delivery is student focused, and 2 (17%) did not respond. Some respondents referred to the use of the outcomes-based approach. Eleven (85%) respondents from NEI C confirmed that the programme delivery was student focused and flexible.

Learning programmes should be student centred and facilitate integration of knowledge and skills through experiential learning. They should promote problem solving, decision-making, and critical, creative, and reflective thinking (Whitley 1992:315-323).

Item 4.11: Learning material

Six (86%) respondents from NEI A confirmed that learning material is offered in a consumer-friendly way and stimulates critical and reflective thinking. Respondents' remarks indicated that students are required to write self-reports, and reflective thinking was encouraged through case study activities and reflective reports. All 12 (100%) respondents from for NEI B confirmed, remarking that the learning manuals contain scenarios, evaluative activities after each outcome, and accommodate various teaching methods. All 13 (100%) respondents from NEI C confirmed, remarking that the learning manuals encourage critical thinking and reflective learning because they include activities that encourage student participation and have clear guidelines.

Item 4.12: Assignments

Six (86%) respondents from NEI A confirmed, remarking that assignments are designed to encourage problem solving. Ten (83%) respondents from NEI B confirmed, remarking that assignments encourage critical thinking and problem solving. All 13 (100%) respondents from NEI C confirmed, and remarked that assignments are directed at problem solving and students' active participation.

According to Morolong (2005:40-51), facilitation of development of critical thinking and problem-solving skills can be achieved if learning programme design provides for assignments and projects. Moon (2004:159-160) points out that activities like peer and self-assessment, portfolios, inquiry groups, action research, and problem-based learning enhance reflective and experiential learning. Hence it is essential that assignments are relevant to outcomes and provide an opportunity to learn when students are doing assignments. The learning opportunity should provide opportunities for experiential learning and reflective learning through problem-solving assignments.

Item 4.15: Group work and practicals

Of the respondents, all 7 (100%) from NEI A, 11 (92%) from NEI B, and all 13 (100%) from NEI C confirmed that their programme delivery modes accommodate group work and practicals. The respondents' remarks included group projects, group work, discussions in class, integrated learning practical sessions in the clinical area, and group activities.

In a study on quality assurance focusing specifically on the output of learning programmes, Lancaster and King (1999:34) found that it is crucial that the mode of delivery provide for achievement of required learning outcomes. Group projects and discussions enable students to learn from each other because they understand each other's language.

4.2.4.7 Evaluation of tutors (Items 4.16, 4.17)

Item 4.16: Tutor evaluation

Of the respondents, all 7 (100%) from NEI A and all 12 (100%) from NEI B confirmed that students evaluate tutors on a regular basis, and remarked that HODs give feedback to tutors. Twelve (92%) respondents from NEI C confirmed, with one indicating that tutors are not evaluated regularly. The respondents did not indicate the mechanisms used to evaluate tutors.

Student evaluation of tutors is essential and regarded as a reliable mechanism (Whitley 1992:315-323). Tutors, peers and managers perceive quality programme delivery to students differently. Chou (2004:311-316) found that students regarded the programme as of quality when the educator was knowledgeable and expert on the subject matter for both theory and practice, as well as when tutors meet student requirements. However, managers regard programmes as of quality when educators achieve the overall goals, learning outcomes and the institution's purpose, while peer educators regard quality as the achievement of performance indicators.

Item 4.17: Student feedback on tutors

Five (71%) respondents from NEI A confirmed that the students' feedback after the evaluation of tutors is entered into the system, and 2 (29%) were uncertain. Ten (83%) respondents from NEI B confirmed, and 2 (29%) were uncertain. Ten (77%) respondents from NEI C confirmed, and 3 (23%) were uncertain.

Descriptive and inferential statistics

The descriptive statistics for criterion 4 determine the mean for each NEI. The index is based on 17 questions.

Table 4.13: Descriptive statistics for "yes" responses for items under criterion 4

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A	7	11.1429	2.91139	1.10040	6.00	14.00
B	12	12.4167	1.44338	.41667	10.00	14.00
C	13	13.1538	2.79422	.77498	8.00	17.00
Total	**32**	**12.4375**	**2.44867**	**.43287**	**6.00**	**17.00**

The mean (13.2) of NEI C is the highest and the mean (11.1) of NEI A is the lowest. The ANOVA test determined the significance of the differences between these means (see table 4.14).

Table 4.14: ANOVA for criterion 4

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	18.409	2	9.204	1.594	.220
Within groups	167.466	29	5.775		
Total	**185.875**	**31**			

The p-value (.220) is larger than 0.05. Thus there is no significant difference between the means. Post hoc tests were therefore not needed (see figure 4.4).

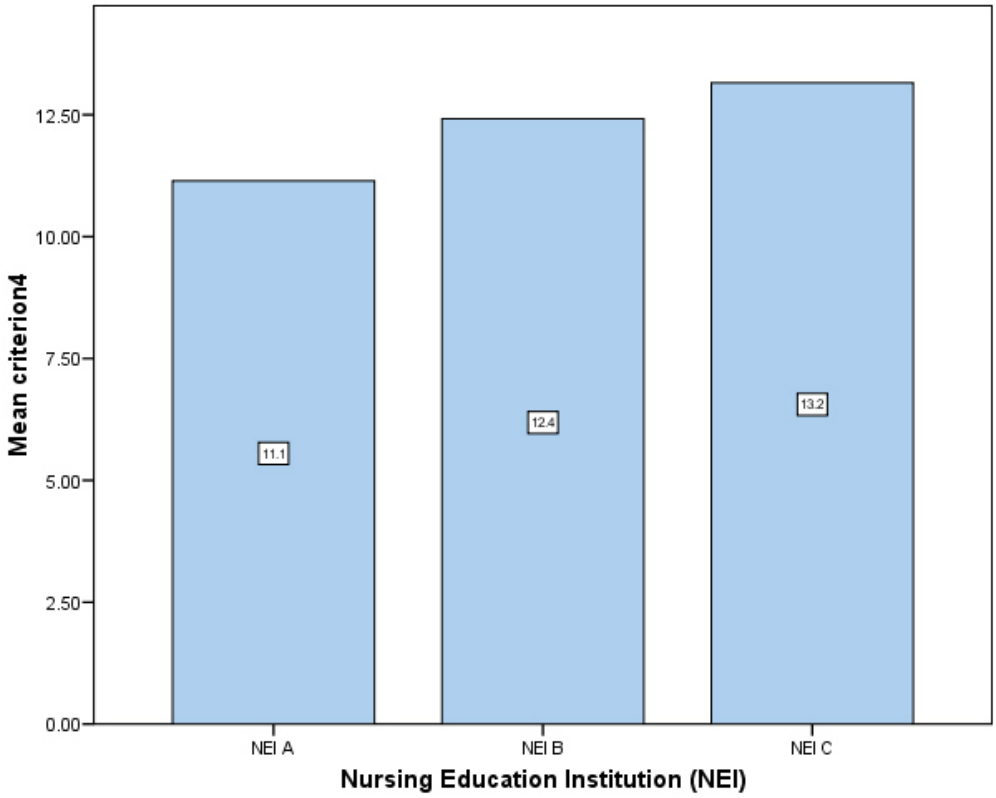

Figure 4.4: Differences in NEIs' compliance with criterion 4: programme delivery

4.2.5 Criterion 5: Staff policies

Criterion 5 requires education providers to outline the policies and procedures for staff selection, appraisal and development. Education institutions are responsible for indicating the competency of staff to fulfil their roles. The institution must ensure that policies adhere to NQF principles with regard to employment equity and the transformation of education and training practices. Table 4.15 reflects the responses from the three NEIs to items included under criterion 5.

Table 4.15: Response frequencies for criterion 5: staff policies

Item		NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
		Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
5.1	Staff selection policy	57	0	43	33	33	33	77	0	23
5.2	Employment equity	71	0	29	50	8	33	69	8	23
5.3	Performance appraisal	71	0	29	100	0	0	100	0	0
5.4	Staff suitably qualified	57	14	29	75	0	17	92	0	8
5.5	Teaching staff registered as assessors	43	43	14	25	58	17	23	62	15
5.6	Sufficient staff appointed	14	43	43	42	33	8	46	46	8
5.7	Staff availability in the clinical field	71	29	0	67	25	8	92	0	0
5.8	Integration of theory into practice	71	0	14	92	8	0	85	0	0
5.9	Staff career development policy	57	14	29	17	42	25	62	8	23
5.10	Staff access to ongoing professional development	100	0	0	67	0	33	92	0	8
5.11	Teaching activities	86	0	14	17	17	50	54	8	38
5.12	Staff teaching output is regularly assessed	57	29	14	33	33	33	92	8	0

4.2.5.1 Staff selection policy (Items 5.1, 5.2, 5.6)

Item 5.1: Staff selection policy

Four (57%) respondents from NEI A confirmed that the institution has a staff policy. Respondents remarked that the nursing school does not have its own policy, but has adopted the entire institution's policy. Four (33%) respondents NEI B confirmed. One respondent

remarked that the provincial policies are used. Ten (77%) respondents from NEI C confirmed the availability of staff policy.

SAQA (2001a:26-27) quality management system guidelines emphasise the importance of ensuring NEIs' relations with their own staff through practising fair and correct employment procedures by adhering to available policies. Therefore the NEIs should observe and ensure such policies, as they contribute to the reinforcement of the NQF principles, which seek to ensure that education and training practitioners are competent to provide the programmes that bear credits or qualifications. Ongoing access to professional development opportunities should also be provided to ensure a culture of lifelong learning to both educators and learners (SAQA 2001a:26-27).

Item 5.2: Employment equity

Of the respondents, 5 (71%) from NEI A, g (50%) from NEI B, and 9 (66%) from NEI C confirmed adherence to the Employment Equity Act.

SAQA (2001a:26) quality management criteria indicate that employment must observe and adhere to the Employment Equity Act provisions to practise fair staffing practices, and to accommodate diverse ethnic groups, gender and suitably qualified and experienced staff to create an environment of fair employment process and practice.

Item 5.6: Sufficient staff appointed

One (14%) respondent from NEI A confirmed that the institution appointed sufficient staff. Five (42%) respondents from NEI B confirmed, but indicated insufficient staff in some programmes. Six (46%) respondents from NEI C confirmed, and two respondents remarked that there was a shortage of staff and vacant posts were available.

SAQA (2001a:24; 2001b:32) criteria require that resources should be planned for the programme delivery and sufficient staff for the delivery of programmes.

4.2.5.2 Career and professional development (Items 5.4, 55, 5.9, 5.10)

Item 5.4: Staff suitably qualified

Four (57%) respondents from NEI A confirmed, remarking that the staff is suitably qualified for teaching different subjects, and 1 respondent remarking that not all staff is suitably qualified to offer the programmes the institution provides. Nine (75%) respondents from NEI B confirmed, and 1(8%) did not respond. Twelve (92%) respondents from NEI C confirmed.

Although most of the respondents confirmed that staff is suitably qualified, remarks indicated that some staff members are not suitably qualified, especially assessors, moderators, student counsellors, and student affairs practitioners. Staff should be qualified and competent with the required knowledge and skills for the programmes they provide and support services. All NEIs should have sufficient staff, appropriately qualified and competent (Meyer, Mabaso & Lancaster 2003:284).

Item 5.5: Staff registered as assessors

Of the respondents, 3 (43%) from NEI A, 3 (25%) from NEI B, and 3 (23%) from NEI C confirmed that teaching staff are registered as assessors. Five respondents from NEI B and 5 from NEI C remarked, respectively, that only newly appointed teaching staff is not yet qualified and registered as assessors.

SAQA (2001a:27; 2001b:30) stipulated that institutions should ensure that staff is competent in applied and integrated assessments and able to apply NQF principles because student qualifications are based on appropriate and quality assessment by a qualified and registered assessor.

Item 5.9: Staff career development policy

Four (57%) respondents from NEI A confirmed that the institution has a career development policy and procedures. Two (17%) respondents from NEI B confirmed, and 2 did not respond. Eight (62%) respondents from NEI C confirmed.

It is essential that management make policies on staff development available to all staff, and the policy should be reviewed and updated to accommodate new developments. The institution should also be committed to providing relevant education and training for staff development; that is, programmes related to teaching, learning and assessments, research and management (Quinn and Hughes 2007:435, 465).

Item 5.10: Access to ongoing professional development

All 7 (100%) respondents from NEI A confirmed that all staff have access to professional development, but 2 respondents remarked that the staff is too busy to utilise the opportunities. Eight (67%) respondents from NEI B confirmed and 2 respondents remarked that not all staff has access to ongoing professional development due to financial constraints, and currently the teaching activities have flaws and are not ideal. Twelve (92%) respondents from NEI C confirmed that the staff has access to ongoing professional development.

In 2004 the Department of Health (DoH) emphasised the development of knowledge and skills framework to form the basis of a development and review process on how individuals apply their knowledge and skills to meet the demands of their current post and identify if they have any professional developmental needs. Personnel development plans should be in place for all employees, outlining developmental programmes to be done, and the application of such knowledge and skills to their own work environment should be reviewed (Quinn and Hughes 2007:457, 488).

4.2.5.3 Theory practice integration (Items 5.7, 5.8)

Item 5.7: Staff available in the clinical field

Five (71%) respondents from NEI A confirmed that staff is available in the clinical field on a regular basis to guide students. Respondents remarked, respectively, that accompaniment is done weekly; twice a week; not done at all because tutors are too busy therefore clinical mentors do it. Eight (67%) respondents from NEI B confirmed that the teaching staff is regularly available in the clinical field. Twelve (92%) respondents from NEI C confirmed that staff is available in the clinical field regularly; only 1 respondent did not respond. Respondents

remarked that accompaniment was done continuously whenever students are in the clinical field.

Item 5.8: Integration of theory into practice

Five (71%) respondents from NEI A confirmed that teaching staff ensures theory practice integration during programme delivery, and 1 did not respond. Six respondents remarked, respectively, that integration is done during accompaniment by using scenarios during theory sessions. Eleven (92%) respondents from NEI B confirmed, and 9 remarked, respectively, that integration is done though clinical accompaniment, students are allocated to a clinical area related to the theory provided, and the clinical laboratory is used for integration of theory and practice. Eleven (85%) respondents from NEI C confirmed, and 2 (15%) did not respond. Five respondents remarked, respectively, that it is done through simulation, students are sent to clinical areas during theory contact sessions and given feedback, and that integration is done through accompaniment.

Educators should mentor and support the students and clinical staff in the clinical setting to ensure adequate learning educational opportunities and activities for learning experiences. Educators and clinical staff should allocate students appropriately to the clinical setting to enable them to integrate theory with relevant practice (Quinn and Hughes 2007:457, 488).

4.2.5.4 Staff assessment (Items 5.3, 5.11, 5.12)

Item 5.3: Mechanisms for performance appraisal

Five (71%) respondents from NEI A confirmed the institution has a mechanism for performance appraisal. Three respondents remarked that performance appraisal is done using a designed tool. All 12 (100%) respondents from NEI B confirmed, and 9 respondents remarked that PMDS is used for performance appraisal. All 13 (100%) respondents from NEI C confirmed and 4 respondents also remarked that PDMS is the mechanism used for staff performance appraisal.

Item 5.11: Teaching activities

Six (86%) respondents from NEI A confirmed that review, research, and quality monitoring inform educators' teaching activities. Two (17%) respondents from NEI B confirmed, and 2 (17%) did not respond. Seven (54%) respondents from NEI C confirmed.

Item 5.12: Staff teaching output is regularly assessed

Four (57%) respondents from NEI A confirmed students assess tutors' teaching outputs on a regular basis. Three respondents remarked that only students assess tutors outputs, while peer assessment is not done due to sensitivity of peers to criticism. Four (33%) respondents from NEI B confirmed, and 4respondents remarked that only students and HODs do the assessments, and peer assessments are not done. Twelve (92%) respondents from NEI C confirmed.

The evaluation of staff performance and programme reviews is a mechanism that improves quality. Students' evaluation of programmes provides opinions, input and learning experiences and needs, all of which improves the teaching activities, programme standards and performance towards a set goal. Performance appraisal contributes to institutional and personal growth and development and discipline (Quinn and Hughes 2007:145, 152, 462).

Descriptive and inferential statistics

The descriptive statistics are given for criterion 5 to determine the mean of each NEI. The index is based on 12 questions.

Table 4.16: Descriptive statistics for "yes" responses for items under criterion 5

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A	7	7.7143	2.92770	1.10657	4.00	11.00
B	12	6.3333	2.26969	.65520	3.00	10.00
C	13	8.8462	1.40512	.38971	7.00	11.00
Total	**32**	**7.6563**	**2.35015**	**.41545**	**3.00**	**11.00**

NEI C has the highest mean (8.8) and NEI B the lowest mean (6.3). ANOVA tested for the significance of the differences between the NEIs in compliance with criterion 5.

Table 4.17: ANOVA for criterion 5

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	39.431	2	19.716	4.338	.022
Within groups	131.788	29	4.544		
Total	**171.219**	**31**			

Since the p-value (0.022) is less than 0.05, the means are significantly different. The post hoc tests were pair wise multiple comparisons of the mean difference between the three NEIs.

Post hoc test

The post hoc test compared the NEIs with each other (see table 5.18).

Table 4.18: Bonferroni for criterion 5

(I) Nursing education institution	(J) Nursing education institution	Mean Difference (I-J)	Std. Error	Sig.
A	B	1.38095	1.01385	.551
	C	-1.13187	.99938	.800
B	A	-1.38095	1.01385	.551
	C	-2.51282(*)	.85339	.019
C	A	1.13187	.99938	.800
	B	2.51282(*)	.85339	.019

**The mean difference is significant at the .05 level*

The only significant difference is between NEI B and NEI C with a p-value 0.019, which is less than 0.05 (see figure 4.5).

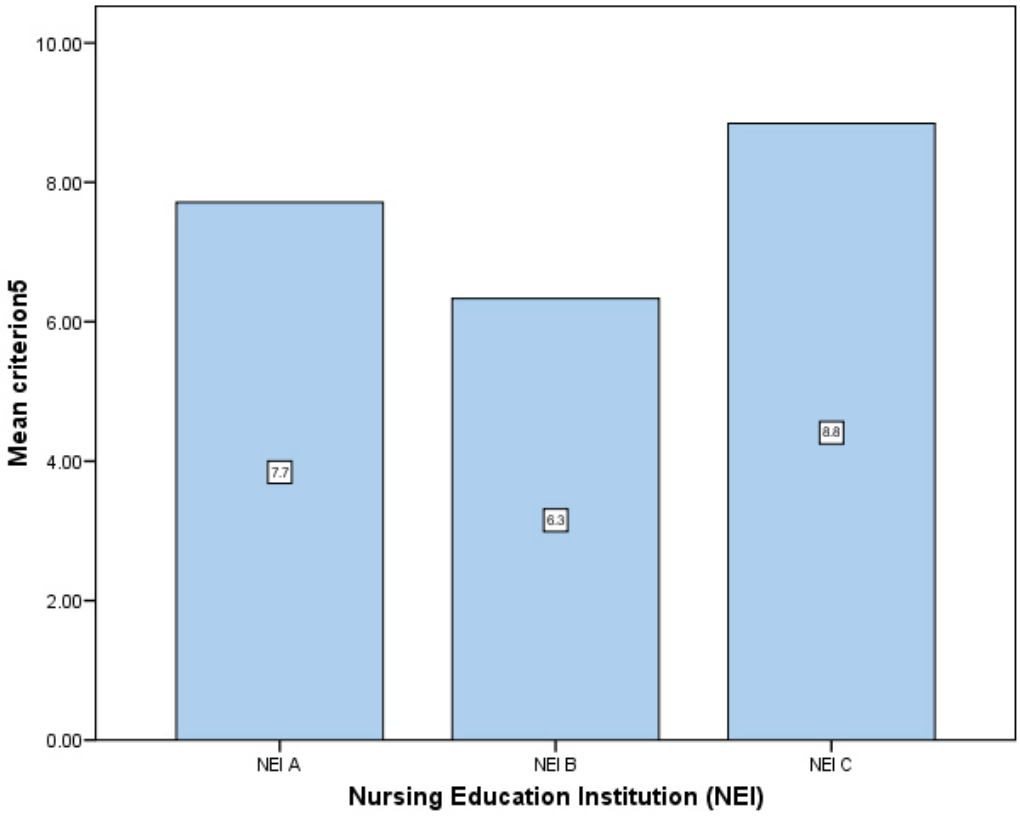

Figure 4.5: Differences in NEIs' compliance with criterion 5: staff policies

4.2.6 Criterion 6: Student policies

Criterion 6 focused on student policy issues required from educational providers to adhere to NQF principles in this regard. The emphasis is on a student-centred approach, which facilitates student participation, recognises prior learning, cultivates lifelong learning, provides supportive student guidance and ensures that programmes are relevant to students. The responses to items included under criterion 6 are displayed in table 4.19.

Table 4.19: Response frequencies for criterion 6: student policies

Item	NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
6.1 Entry and exit levels	71	29	0	50	8	25	100	0	0
6.2 Selection criteria and admission requirements	86	0	14	58	8	17	92	0	8
6.3 Selection criteria acknowledge demographic composition of South Africa (SA)	43	14	43	33	17	42	77	0	23
6.4 Criteria and procedures for learner selection is consistent with the institutional requirements	57	0	43	33	0	67	77	0	23
6.5 Student council	71	14	14	58	8	25	92	0	8
6.6 RPL policy and procedures	57	0	29	33	25	25	100	0	0
6.7 Student counselling service	100	0	0	42	50	0	100	0	0
6.8 Student support services	100	0	0	42	42	0	77	8	15
6.9 Identification of the nature of support learners require	100	0	0	67	0	25	100	0	0
6.10 Programme encourage learner participation	71	0	29	75	8	8	92	8	0
6.11 Learner career advice and guidance	43	43	14	50	25	17	85	8	8

4.2.6.1 Selection criteria for students (Items 6.2, 6.3, 6.4)

Item 6.2: Student selection policy

Six (86%) respondents from NEI A confirmed availability of a student selection policy, which stipulates criteria and admission requirements. Seven (58%) respondents from NEI B confirmed, and 2 (17%) did not respond. Two respondents remarked that the selection policy is decentralised for Gauteng and is established by Gauteng province head office. Twelve (92%) respondents from NEI C confirmed, and remarks were the same as in NEI B.

Item 6.3: Selection criteria

Three (43%) respondents from NEI A confirmed selection criteria take into account the demographic composition of South Africa. Only 4 (33%) respondents from NEI B confirmed. One respondent remarked that the selection criteria take certain African regions into account because there are learners who come from neighbouring African countries for nursing education and training. Ten (77%) respondents from NEI C confirmed.

Item 6.4: Student selection criteria consistency with the institutional programme requirements and community requirements

Four (57%) respondents from NEI A confirmed consistency. Only 4 (33%) respondents from NEI B confirmed. Four respondents from NEI B remarked, respectively, that tutors are not involved in the student selection criteria development and indicated that Gauteng province is responsible and the student selection board is decentralised. Ten (77%) respondents from NEI C confirmed, and respondents remarked that there are written guidelines from the Gauteng provincial department of health.

It appears that NEI B and NEI C has decentralised selection of students since the amalgamation of nursing education institutions in South Africa due to political and economic reasons for cost curtailment.

The new system does not provide tutors with the opportunity to conduct target group analysis of students coming for the programmes. Currently responsible people in all NEIs do analysis after student selection. From the remarks from the entire NEIs results do not always appear to be communicated and this has a negative impact on the quality of learning events planning. The tutors only have the opportunity to identify student needs during theory and practical contact sessions, using their own initiative because there is no standard mechanism used by all tutors for this purpose.

4.2.6.2 Career guidance (Items 6.1, 6.11)

Item 6.1: Student entry and exit levels are outlined

Five (71%) respondents from NEI A confirmed entry and exit level are outlined, remarking respectively that entry and exit levels are outlined by SANC; outlined in the institution prospectus; outlined in the programme curriculum, and that post-basic programmes do not have exit levels. Six (50%) respondents from NEI B confirmed, and 1 respondent did not respond, while all 13 (100%) respondents from NEI C confirmed.

Entry levels for programmes should be determined based on previous knowledge and skills in place, from RPL assessment, and entry and exit levels should be indicated after determining the relevancy of programmes to students. SAQA (2001a:27-28) indicates that entry and exit levels should be determined through credits or qualifications achieved.

Item 6.11: Student career advice and guidance

Three (43%) respondents from NEI A confirmed that career advice and guidance for further learning is provided to learners, remarking that it is done on an individual basis, when necessary. Six (50%) respondents from NEI B confirmed and 2 respondents remarked that career advice is given informally and partially done. Eleven (85%) respondents from NEI C confirmed.

It is imperative that opportunities for further learning and guidance be provided for all students effectively and efficiently to secure the NQF principle of lifelong learning (SAQA 2001a:28).

4.2.6.3 Student participation (Items 6.5, 6.10)

Item 6.5: Student council

Five (71%) respondents from NEI A confirmed the existence of a student council, but in name only, without participation in addressing learning matters or promoting students' interests.

Respondents' remarks indicated that the institution management do not facilitate or encourage establishment of the student council, but instead have opted for an 'open door' system. Seven (58%) respondents from NEI B confirmed that there is a student council, and 1 respondent did not respond. Four respondents remarked that the student representative is operational. Twelve (92%) respondents from NEI C confirmed, and 3 remarked that the student council is operating well.

The student council is one of the mechanisms to assist and support students to manage their learning by providing a learning channel for them to acquire knowledge, skills and abilities regarding their learning programmes. Students should communicate their challenges, needs, suggestions, input, and feedback regarding learning issues, using this mechanism. Mentoring and coaching, workshops/seminar, projects etcetera might facilitate students' learning and development through the student council. SAQA stipulates that the support and guidance given to students should be explicitly described.

Item 6.10: Learning programmes encourage student participation

Five (71%) respondents from NEI A confirmed that the learning programmes encourage student participation. Nine (75%) respondents from NEI B confirmed, 1 respondent was uncertain, and 1 did not respond. Twelve (92%) respondents from NEI C confirmed.

Five respondents from NEI A remarked, respectively, that student participation is not done at all times, but is initiated through problem-based learning (PBL) and self-directed learning for all students. Moon (2004:161) describes PBL as is giving students a problem to solve in a topic rather than the content knowledge about the topic. Six respondents from NEI B remarked that students are exposed to the learner-centred and self-directed approach. Theory and practical projects, assignments, case studies, group work and presentations, research projects and community projects are given to students to encourage maximum participation. Five respondents from NEI C remarked that students are engaged in group discussions and feedback in class, projects, group work, learning activities, and exposure to organising symposiums or workshops, and outcomes-based education principles.

SAQA (2001a:25) indicates that learner participation may be through involvement formally or informally in programme design, implementation, and decision-making regarding their assignments, and encouragement of reflective thinking and experience, critical thinking and problem solving. Learner participation involves students' learning to build meaning by working with experience and learning to manage their emotions (emotional intelligence) so that they may achieve employable skills (Moon 2004:21-73)

4.2.6.4 Student support (Items 6.6, 6.7, 6.8, 6.9)

Item 6.6: RPL policy and procedures

Four (57%) respondents from NEI A confirmed that the institution has a policy and procedures for RPL, and 1 did not respond. Four (33%) respondents from NEI B confirmed, and 2 did not respond. One respondent remarked that the institution has an RPL policy, but does not use it. All 13 (100%) respondents from NEI C confirmed that the institution has a policy and procedures for RPL.

Nursing education institutions should have a workable strategy for recognition of prior learning (RPL) in their environment, as it is one of the principles of NQF. RPL is done to assess students' existing knowledge, skills, and experience in certain elements of performance that have been acquired formally and informally, such as through self-study and on-the-job training. However, the existing competencies should meet the standards required. Evidence of the competence assessed for RPL will assist in determining the appropriate entry level for programmes, and this background will assist in the preparation of students for assessment, and accreditation for prior learning (Meyer et al 2002:175).

Item 6.9: Student support

All 7 (100%) respondents from NEI A confirmed the institution's ability to identify the nature of support that students require. Three respondents remarked that emotional students and those with learning needs are identified for support. Eight (67%) respondents from NEI B confirmed, and 1 did not respond. Four respondents remarked, respectively, as follows: students' needs and problems are identified during orientation; student counsellors determine students' needs

and problems, and individual tutors identify needs. All 13 (100%) respondents from NEI C confirmed that the institution is able to identify the nature of support students require.

SAQA (2001a:27) stipulates that the provider should ensure that the programmes are relevant to students' needs and aspirations; guide, assist and support them to manage their outcomes; accommodate a diversity of student groups, and provide feedback on their performance. Other problems outside learning matters, such social or medical problems, should be referred to experts, if necessary. This should be done to achieve the NQF principle of student-centred teaching and participation.

Item 6.7: Student professional counselling service

All 7(100%) respondents from NEI A confirmed the existence of a student professional counselling service. Five (42%) respondents from NEI B confirmed, and 1 did not respond. Two respondents remarked that the tutor responsible gives the counselling and supports the student at the time needed, because the institution does not have a qualified student professional counsellor. All 13 (100%) respondents from NEI C confirmed.

According to Meyer et al (2003:185-199), students require support and guidance to be able to manage their learning outcomes, experiences that will contribute to shaping them for future conduct that will contribute positively to the world around them. SAQA (2001a:28) stipulates that the nature of student support and guidance should be identified in order to intervene or provide relevant specific support and guidance, as required.

Item 6.8: Student support services

All 7 (100%) respondents from NEI A confirmed the availability of the institution's support service that provides guidance on career paths, career progression, planning of studies, and reading and writing skills. Two respondents remarked that the educational counsellor and library provide the services. Five (42%) respondents from NEI B confirmed; 5 (42%) remarked that such services are not available, and 2 (17%) did not respond. Two of those who confirmed remarked that the student affairs department arranges in-service training for career path issues, and it is also done during orientation of new students. Ten (77%) respondents from NEI

C confirmed. Five respondents remarked, respectively, that students do English, computer skills, career progression, and study methods guided by the student counsellor.

NEI A had the highest confirmation score in this area, followed by NEI C and NEI B. The researcher is of the opinion that the NEI B respondents who denied that this kind of service existed appeared to have done so through ignorance of what was happening around them. SAQA (2001a:28) indicates that organisations should provide students with opportunities for career guidance for further learning.

Descriptive and inferential statistics

The descriptive statistics for criterion 6 determined the mean for each NEI. The index is based on 11 questions.

Table 4.20: Descriptive statistics for "yes" responses for items under criterion 6

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
College A	7	8.1429	2.11570	.79966	4.00	10.00
College B	12	5.4167	3.08835	.89153	.00	9.00
College C	13	10.0000	1.87083	.51887	6.00	11.00
Total	**32**	**7.8750**	**3.13924**	**.55494**	**.00**	**11.00**

NEI C has the highest mean (10.0) and NEI B has the lowest mean (5.4). The ANOVA tested for the significance of the differences between the means (see table 4.21).

Table 4.21: ANOVA for criterion 6

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	131.726	2	65.863	10.991	.000
Within groups	173.774	29	5.992		
Total	**305.500**	**31**			

The p-value of .000 is less than 0.05, therefore, the means between NEI C and NEI B are

significantly different. Due to this significant difference regarding compliance to quality characteristics in criterion 6, the post hoc test was done for pair wise multiple comparisons of the means.

Post hoc test

The post hoc test compared the NIEs with one another (see table 4.22).

Table 4.22: Bonferroni for criterion 6

(I) Nursing education institution	(J) Nursing education institution	Mean Difference (I-J)	Std. Error	Sig.
A	B	2.72619	1.16421	.079
	C	-1.85714	1.14759	.349
B	A	-2.72619	1.16421	.079
	C	-4.58333(*)	.97994	.000
C	A	1.85714	1.14759	.349
	B	4.58333(*)	.97994	.000

**The mean difference is significant at the .05 level*

The multiple comparison between NEI C and NEI B's means is .000 and is less than the p- value of 0.05 level, which indicate a significant difference. The rest do not have a significant difference (NEI A and NEI C is 3.45; NEI A and NEI B is 0.79), both of which are more than 0.05 level, which means there is no significant difference between these (see figure 4.6).

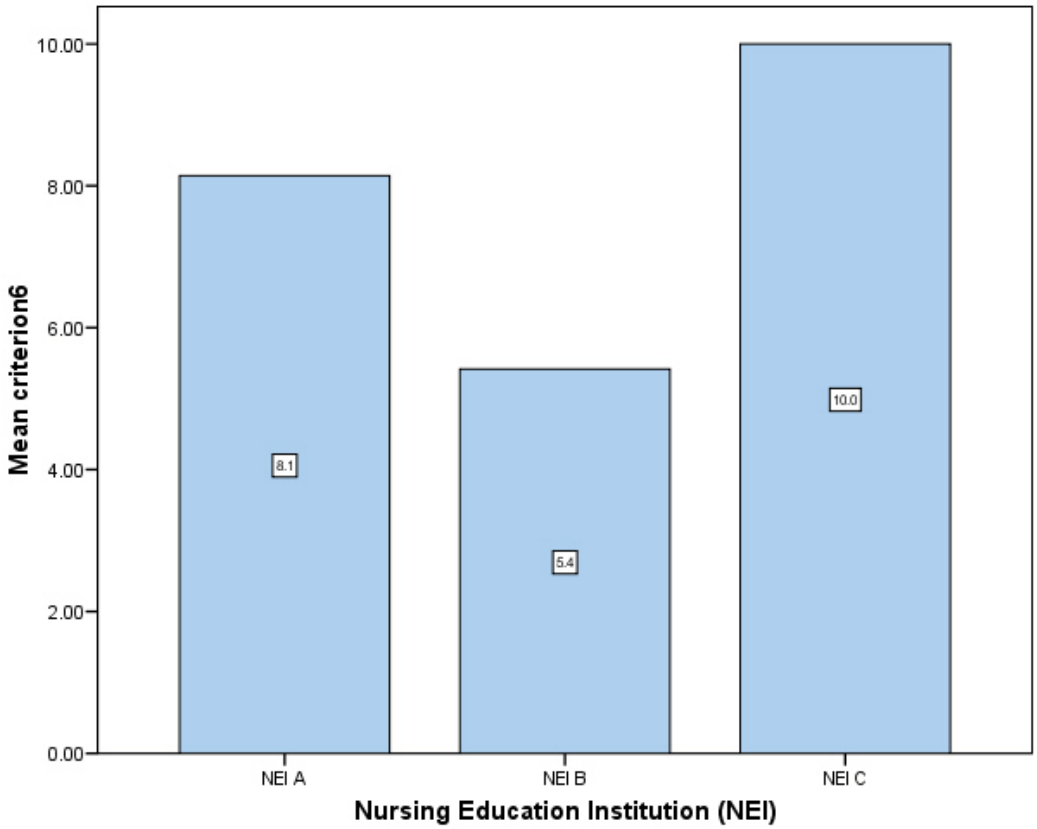

Figure 4.6: Differences in NEIs' compliance with criterion 6: student policies

4.2.7 Criterion 7: Assessment policies

Assessment polices go beyond assessment practices to reflect assessment processes. Education providers have to adhere to NQF principles, ensuring ongoing supportive development and integrated assessment, keeping in mind the requirement of horizontal and vertical integration of knowledge and skills. Table 4.23 illustrates the responses to the items under criterion 7.

Table 4.23: Response frequencies for criterion 7: assessment policies

Item	NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
7.1 Assessment policy and procedures	86	0	14	67	8	17	100	0	0
7.2 Assessment approach aligned to NQF principles	71	0	29	67	0	25	92	0	8
7.3 Learners feedback	86	0	0	83	0	0	77	0	0
7.4 Learner support	86	0	14	50	0	33	100	0	0
7.5 Integrative assessment approach	71	0	29	83	0	8	92	0	8
7.6 Assessment feedback	43	0	57	58	0	25	69	8	23
7.7 Examination based assessment policy	43	43	0	25	42	17	31	62	8
7.8 Continuous assessment	86	0	14	83	0	8	85	0	8
7.9 Informed learners	100	0	0	83	0	8	100	0	0
7.10 Variety of assessment approaches	86	14	0	42	42	8	77	8	8
7.11 Moderators: theoretical exams	100	0	0	83	0	8	92	8	0
7.12 External examiners: practical exams	86	14	0	42	42	8	62	38	0
7.13 Policy and procedures for appeals	57	0	43	58	25	8	92	0	8

4.2.7.1 Assessment policy (Items 7.1, 7.7, 7.13)

Item 7.1: Assessment policy and procedures

Six (86%) respondents from NEI A confirmed that the institution has an assessment policy and procedures. Eight (67%) respondents from NEI B confirmed, and 1 did not respond. Two respondents' remarks were contradictory in that one said the institution has guidelines but not a policy for assessments, while the other remarked that the assessment policy available has not yet received senate approval although it is in use. All 13 (100%) respondents from NEI C confirmed.

An assessment policy is an outline of how to manage assessment, and should describe the assessment approaches; for example, exam based, lifelong learning principle recognised, recognition of prior learning (RPL), developmental, supportive, and continuity. The policy should be an essential quality assurance mechanism in the monitoring of student progress and programme implementation. It should include the process of assessment management (internal and external), moderation, feedback to students, mechanisms that ensure assessments, parameters of assistance and support of students, and the nature of support that will be provided, and finally include applied and integrated assessments (SAQA 2001a:29-30).

The NQF objective on creating a framework for learning achievements and enhancing the quality of education and training in South Africa should be achieved as indicated in section 2 (c) of the SAQA Act, 58 of 1995). Each NEI should provide a policy that reflects their environment to guide the registered assessors to execute fair, validated, reliable and practical assessments to ensure the degree of excellence specified is achieved.

Item 7.7: Examination-based assessment policy

Three (43%) respondents from NEI A confirmed that the assessment policy was mainly examination based, and 1 did not respond. Three (25%) respondents from NEI B confirmed; 5 (42%) indicated that the policy is not examination based, and 2 (17%) did not respond. Four (31%) respondents from NEI C confirmed, and 8 (62%) indicated the assessment policy is not examination based.

Item 7.13: Policy and procedures for appeals

Four (57%) respondents from NEI A confirmed that the institution has a policy and procedures for appeals. Seven (58%) respondents from NEI B confirmed, and 1 did not respond. Twelve (92%) respondents from NEI C confirmed.

Documentary proof of a procedure or process with grounds for the student appeal is imperative, hence it is crucial that a provider has an internal system for student appeal against assessment decisions, and the system should not prejudice the student in any way. This is done to resolve matters of assessment grievances internally before seeking recourse to the relevant ETQA (SANC) (SAQA 2001a:53-54)

4.2.7.2 Integrated, developmental assessment (Items 7.2, 7.5, 7.6, 7.8, 7.9, 7.10)

Item 7.2: Assessment approach

Four (57%) respondents from NEI A confirmed that the institution's approach to assessment is in line with the NQF principles. Eight (67%) respondents from NEI B confirmed, and 1 did not respond. Twelve (92%) respondents from NEI C confirmed.

The NQF principles of assessment carry a notion of transformation, quality and quality assurance practices that should be internationally comparable. They encourage the achievement of the goal of eradication of injustice, achievement of reconstruction, development and transformation, and promote quality in education and training to achieve the NQF objective of enhancing the quality of education and training (SAQA 2001b:9).

Item 7.3: Student feedback

Six (86%) respondents from NEI A confirmed, and 1 did not respond. Remarks indicated that individual and group feedback is given for both practical and theory assessments. Ten (83%) respondents from NEI B confirmed and 2 did not respond. Ten (77%) respondents from NEI C confirmed and 3 did not respond. Respondents in all the NEIs remarked, respectively, that

general feedback is given through reports, and results are discussed with students in group sessions.

The feedback given during formative and summative assessment has different intents because formative is ongoing assessment and summative is the end of programme assessment. In formative assessment, feedback should be focused on supporting the teaching and learning process; determine effectiveness of programmes; ensure that objectives are met; provide student progress; ascertain the student's readiness to do summative assessments; make active use of feedback as it is given, and assist in the planning of future learning. Summative assessment feedback determines whether the student is competent or not for a learning programme regarding qualification, unit standard or part of qualification, and is done only when the student and the assessor agree that the student is ready for assessment, observes the quality delivery of the programme, compares subsequent clinical practice, and establishes an attitude of survey (Meyer et al 2002:185-199).

Item 7.4: Student support

Six (86%) respondents from NEI A confirmed that during assessments problem areas are identified and student support is provided. Six respondents remarked that when a problem area is identified, appropriate intervention is provided after the problem area is clarified with the individual student. Six (50%) respondents from NEI B confirmed, and 2 did not respond. Two remarked that poor performance is identified and follow-up sessions are conducted, poor performance students complete a form during assessments to identify learning needs and determine the required support. All 13 (100%) respondents from NEI C confirmed, and 5 remarked that student support is usually remedial assessments, and consultation of students to establish problem areas.

Student support is actual help provided to students to assist them to manage their learning and achieve their learning outcomes effectively. Student support is mainly providing assessment orientation on approach, techniques, assessment tools, assessment plan, preparation and resources, student-assessor agreement consent, support for anxiety over assessments, and problem areas outside the learning environment. Guidance is on what they can do and know, what they need to know, how to achieve what they need to know, and

inform them when they are ready for summative assessment. Students require this kind of support before, during and after assessments (Meyer et al 2002:185-198).

Item 7.5: Integrated assessment approach

Five (71%) respondents from NEI A (n=7) confirmed that an integrative assessment approach is followed covering outcomes, critical cross-field outcomes, knowledge, skills, attitudes, and values. Ten (83%) respondents from NEI B confirmed, and 1 did not respond. Twelve (92%) respondents from NEI C confirmed.

Integrative assessment includes specific and critical cross-field outcomes, which assess a combination of applied competence (practical competence); foundational competence (understanding what one is doing and reasons for it), and reflexive competence (ability to connect one's performance with one's own understanding of other contexts, e.g. economic, social etc). It is basically an assessment of outcomes together, assessment criteria together, unit standards together and a combination of assessment methods (Meyer et al 2002:162-164; SAQA 2001a:55-57).

Item 7.6: Assessment feedback

Three (43%) respondents from NEI A confirmed feedback from assessments is fed back into programme development. Seven (58%) respondents from NEI B confirmed, and 1 did not respond. Ten (77%) respondents from NEI C confirmed, and only 1 respondent remarked that the assessment feedback is not entered into programme development.

Education and training providers should ensure that practices are enhanced in the light of what is learnt from monitoring activities. Dissemination of information to all stakeholders about learning and assessment and using the feedback to plan and secure changes in practice leads to quality improvement (SAQA 2001d: 20).

Item 7.8: Continuous assessment

Six (86%) respondents from NEI A confirmed that assessment is ongoing and developmental, and 5 respondents remarked that a variety of assessment methods are used. Ten (83%) respondents from NEI B confirmed, and 1 respondent did not respond. Respondents remarked that formative, continuous assessments are done through accompaniment in the clinical field. Eleven (85%) respondents from NEI C confirmed that the assessment is ongoing and developmental, and 1 did not respond. Five respondents remarked that formative assessment is conducted for theory, and practice for students' developmental purposes.

Assessment in education and training is about collecting evidence of students' achievement of outcomes, and making judgments on whether they are competent or not yet competent. The evidence of achievements should relate to the specific outcomes and criteria to be assessed. Students have to progress through a process of assessment throughout a programme, meet assessment criteria, and achieve the desired specific outcomes. The emphasis is on what is achieved during the learning process and programme rather than at the end of the programme (Meyer et al 2002:169).

Item 7.9: Informed learners

All 7 (100%) respondents from NEI A confirmed that all students are informed about the learning outcomes, assessment criteria and assessment procedures, remarking that these are included in the study guides and in the assessment instruments. In NEI B, 10 (83%) respondents' confirmed, and 1 did not respond. Five said that outcomes and criteria for assessments are included in the students' workbooks and study guides; 2 said students are informed before assessments, and 1 said SANC provides the criteria and learning outcomes for a programme. All 13 (100%) respondents from NEI C confirmed, and 5 remarked that students are informed verbally of the criteria and outcomes for assessment during orientation period, and issued with the study guides.

Students should not just be informed how assessment will take place. Student and assessor should reach an agreement with signatures regarding the process, requirements of

assessments and conditions/rules of assessments, time limits and outcomes to be covered (Meyer et al 2002:104).

Item 7.10: Variety of assessment approaches

Six (86%) respondents from NEI A confirmed that assessment includes self-, peer and group assessment. Respondents remarked that self- and peer assessment is done at the clinical area, and group assessment is done in class. Five (42%) respondents from NEI B confirmed; 5 (42%) respondents indicated that assessment does not include self-, peer and group assessment, and 1 did not respond and. Ten (77%) respondents from NEI C confirmed that the assessment includes self-, peer and group assessment, and 1 respondent did not respond.

Assessment should be done using a variety of methods, including peer, self-, and group assessment, which will provide students with comprehensive feedback. (SAQA 2001a:28-29).

4.2.7.3 Moderation of assessment (Items 7.11, 7.12)

Item 7.11: Moderators: theoretical examinations

All 7 (100%) respondents from NEI A confirmed moderators are appointed for moderation of theoretical exams. One respondent remarked that a moderator for theory is appointed for exit levels. Ten (83%) respondents from NEI B confirmed, and 1 did not respond. Twelve (92%) respondents from NEI C confirmed that moderators are appointed for moderation of theoretical exams.

Item 7.12: External examiners: practical examinations

Six (86%) respondents from NEI A confirmed that external examiners are appointed for moderation of practical exams. Five (42%) respondents from NEI B confirmed, indicating that external examiners are appointed for theory exams only, and 1 respondent did not respond. Eight (62%) respondents from NEI C confirmed.

The education and training provider should rightfully conduct moderation of assessments, and has to set up the internal and external moderation plan, process, and schedule. Internal moderation by the institution refers to assessments of their own assessor's assessments and assessment process together with students' evidence of competence to ensure that assessments meet the NQF principles of assessments and are consistent, accurate and meet the standard outcomes. External moderation is basically the verification of the internal moderation system for its effective and appropriate functioning, and ensures appropriate qualifications and experience of assessors, credibility of assessment techniques and instruments. Verification also includes the assessment processes, student evidence, and the assessor's decisions (Meyer et al 2002:175-176).

Descriptive and inferential statistics

The descriptive statistics for criterion 7 determine the mean for each NEI. The index is based on 13 questions (see table 4.25).

Table 4.24: Descriptive statistics for "yes" responses for items under criterion 7

	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
College A	7	10.0000	1.52753	.57735	9.00	13.00
College B	12	8.3333	3.60135	1.03962	.00	13.00
College C	13	10.6923	1.49358	.41424	7.00	13.00
Total	**32**	**9.6563**	**2.65924**	**.47009**	**.00**	**13.00**

NEI C has the highest mean (10.7), and NEI B has the lowest mean (8.3). NEI A's mean is almost the same as NEI C's mean, indicating that their compliance with SAQA requirements regarding criterion 7, assessment policies, is almost at the same level. The ANOVA tested for the significance of these differences (see table 4.25).

Table 4.25: ANOVA for criterion 7

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	35.783	2	17.891	2.829	.075
Within groups	183.436	29	6.325		
Total	**219.219**	**31**			

The p-value (0.075) is larger than 0.05, thus the means between NEI C and NEI B are not significantly different regarding their compliance with criterion 7. No post hoc tests needed to be done (see figure 4.7).

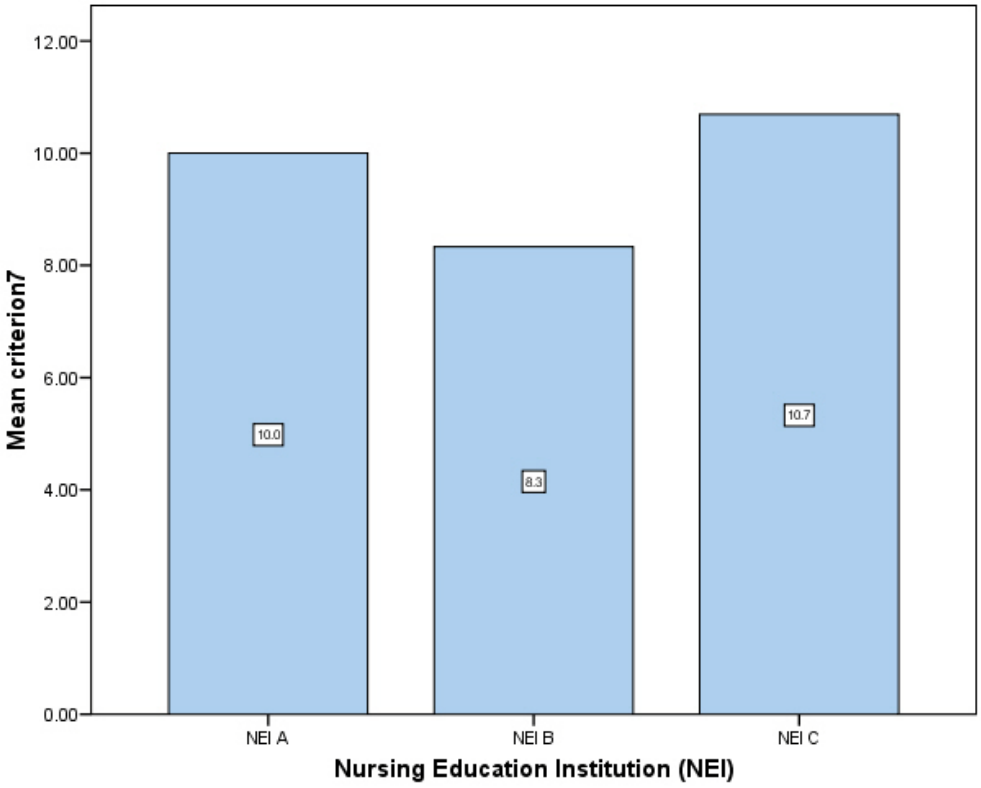

Figure 4.7: Differences in NEIs' compliance with criterion 7: assessment policies

4.2.8 Criterion 8: Management systems and policies

This criterion addresses the administrative, physical and managerial capacity of an educational provider to carry out its functions responsibly, efficiently and effectively taking full account of its own undertakings. Moreover, it is vital that NEI should outline the administrative

procedures, and maintenance of infrastructure. Table 4.26 reflects the responses to items under criterion 8.

Table 4.26: Response frequencies for criterion 8: management systems and policies

Item		NEI A (n=7)			NEI B (n=12)			NEI C (n=13)		
		Yes %	No %	Uncertain %	Yes %	No %	Uncertain %	Yes %	No %	Uncertain %
8.1	Governing body	86	0	14	92	0	0	100	0	0
8.2	Learner database	100	0	0	92	0	0	100	0	0
8.3	Policy and procedures for data capturing	100	0	0	58	0	25	100	0	0
8.4	Policy and procedures maintenance of resources	43	0	57	42	17	33	85	0	15
8.5	Financial resources	71	0	29	42	25	25	69	0	31
8.6	Classroom	29	43	29	42	50	0	54	46	0
8.7	Library	57	29	8	33	58	0	100	0	0
8.8	Clinical laboratory	86	8	0	42	33	17	92	0	8
8.9	Computers	71	29	0	42	25	8	100	0	0
8.10	Information technology	86	14	0	25	33	33	77	23	0

4.2.8.1 Governance (Items 8.1, 8.4, 8.5)

Item 8.1: Governing body

Six (86%) respondents from NEI A confirmed that the institution has a governing body (college council). Eleven (92%) respondents from NEI B confirmed, and 1 did not respond. All 13 (100%) respondents from NEI C confirmed.

Item 8.4: Maintenance of resources

Three (43%) respondents from NEI A confirmed the institution has a policy and procedures for managing, maintaining, and upgrading facilities, materials and resources. Five (42%) respondents from NEI B confirmed. Respondents' remarks indicated that maintenance, and upgrading of facilities is done according to policy, and maintenance and upgrading of facility is rarely done due to financial constraints. Eleven (85%) respondents from NEI C confirmed.

Item 8.5: Financial resources

Five (71%) respondents from NEI A confirmed the institution's financial resources are able to sustain services to students throughout the accreditation period. Five (42%) respondents from NEI B confirmed and 1 did not respond. Nine (69%) respondents from NEI C confirmed.

The first step to ensure financial resources is to determine the requirements, compare finances used against the strategic plan, maintaining and ensuring available finance for implementation of programmes and quality management system to achieve the institution's quality objectives effectively, and also determine negative and positive influence on existing finances (UNISA 2005a:42-43).

4.2.8.2 Database (Items 8.2, 8.3)

Item 8.2: Student database

All 7(100%) respondents from NEI A confirmed the institution keeps a complete database of student information and records. Eleven (92%) respondents from NEI B confirmed, and 1 respondent did not respond. One of those who confirmed remarked that records are handled manually. All 13 (100%) respondents from NEI C confirmed that the institution has a complete student database.

SAQA has established a national student record database, which consists of student-achieved credits or qualifications. The database includes a list of unit standards and qualifications; hence

the provider should ensure record of learning events, notional hours, preliminary identification and assessment results and should be updated (Meyer et al 2002:154).

Item 8.3: Policy and procedures for data capturing

All 7 (100%) respondents from NEI A confirmed the institution has a policy and procedures for accurate capturing, maintenance, and regular updating of student information and records, and 1 respondent remarked that another department does this. Seven (58%) respondents from NEI B confirmed, and 2 (17%) did not respond. All 13 (100%) respondents from NEI C confirmed.

4.2.8.3 Resources: facilities (Items 8.6, 8.7, 8.8, 8.9, 8.10)

Item 8.6: Classrooms

Only 2 (29%) respondents from NEI A confirmed that the institution has a sufficient number of classrooms for teaching. Five (42%) respondents from NEI B confirmed, and 1 did not respond. One of the respondents who confirmed remarked that the number of classrooms is sufficient, but the classrooms are small and not able to accommodate the increasing number of students. Seven (54%) respondents from NEI C confirmed that the institution has sufficient classrooms; but 1 remarked that the increased intake of students made more classrooms necessary.

Management should plan and ensure availability of resources for the effective and efficient operation and management of quality, by providing training infrastructure, a quality working environment to implement the institution's strategy and achievement of the institution's objectives. The resources should be timeously provided and continuously reviewed and improved (UNISA 2005a:37-54).

Item 8.7: Library

Four (57%) respondents from NEI A (n=7) confirmed that the library is adequately equipped with sufficient resources for students' study needs. Four (33%) respondents from NEI B

confirmed that the library is adequately equipped, and 1 respondent did not respond. All 13 (100%) respondents from NEI C confirmed.

Item 8.8: Clinical laboratory

Six (86%) respondents from NEI A confirmed the institution has a clinical laboratory with sufficient equipment and models, and 4 respondents remarked that the clinical laboratory is internationally comparable. Five (42%) respondents from NEI B confirmed, and only 1 did not respond. Some respondents were uncertain, and remarked, respectively, that the laboratory is not sufficiently equipped, and that there were insufficient models for the large number of programmes and students. Twelve (92%) respondents from NEI C confirmed.

The NEIs should establish resources that will satisfy students' learning needs (UNISA 2005a:57).

Item 8.9: Computers

Five (71%) respondents from NEI A confirmed that the institution has a sufficient number of computers for students' needs whereas 5 (42%) respondents in NEI B confirmed, and 3 (25%) did not respond. Respondents remarked that computers are not sufficient for the demand. All 13 (100%) respondents from NEI C confirmed the institution is adequately equipped with computers.

Item 8.10: Information technology

Six (86%) respondents at NEI A confirmed that the institution has sufficient and suitable information technology required by programme standards to achieve outcomes. One respondent remarked that not all students are able to access it because the occupational health students on part-time distance learning have no access to the institution's computers and Internet. Three (25%) respondents at NEI B confirmed, and 1 respondent did not respond. It was remarked that the institution does not have sufficient technology due to institution server limitations, and that only managers have access to the Internet. Ten (77%) respondents at NEI C confirmed sufficient technology to achieve outcomes.

Organisations should contribute effectively to work-related skills development that promotes continuous professional, social, economic and personal growth (Meyer, Mabaso and Lancaster 2003:69). Due to the increasing demand for skills development, the design of training is focusing more on electronic learning (e-learning). Classroom education and training is still popular, but self-directed learning and technology-based learning is increasingly common. Some books are bought with an electronic package, which enables students to use computers for self-learning (Meyer et al 2002:4).

Descriptive and inferential statistics

The descriptive statistics for criterion 8 determine the mean for each NEI. The index is based on 10 questions:

Table 4.27: Descriptive statistics for "yes" responses for items under criterion 8

Nursing education institution	Number of respondents	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A	7	7.2857	2.42997	.91844	3.00	10.00
B	12	4.9167	3.05877	.88299	.00	10.00
C	13	8.7692	1.42325	.39474	6.00	10.00
Total	**32**	**7.0000**	**2.87368**	**.50800**	**.00**	**10.00**

NEI C has the highest mean (8.8) and NEI B has the lowest mean (4.9). The significance of these differences is tested by the ANOVA test.

Table 4.28: ANOVA for criterion 8

	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	93.347	2	46.674	8.322	.001
Within groups	162.653	29	5.609		
Total	**256.000**	**31**			

The difference between NEI C and NEI B is significant at the 5 level of significance (p-value of 0.001 is less than 0.05). The post hoc tests therefore compared all the NEIs' means pair wise.

Post hoc test

The post hoc test compared the NEIs with each another (see table 4.29).

Table 4.29: Bonferroni for criterion 8

(I) College	(J) College	Mean Difference (I-J)	Std. Error	Sig.
College A	College B	2.36905	1.12634	.133
	College C	-1.48352	1.11026	.576
College B	College A	-2.36905	1.12634	.133
	College C	-3.85256(*)	.94807	.001
College C	College A	1.48352	1.11026	.576
	College B	3.85256(*)	.94807	.001

**The mean difference is significant at the .05 level*

The difference between NEI B and NEI C is significant at .001, which indicates a remarkable difference in the compliance with regard to criterion 8. The comparison between NEI C and NEI A shows a difference of .576, which suggests that their averages level is higher than .05 level therefore the difference in the extent of compliance between them is not significant (see figure 4.8).

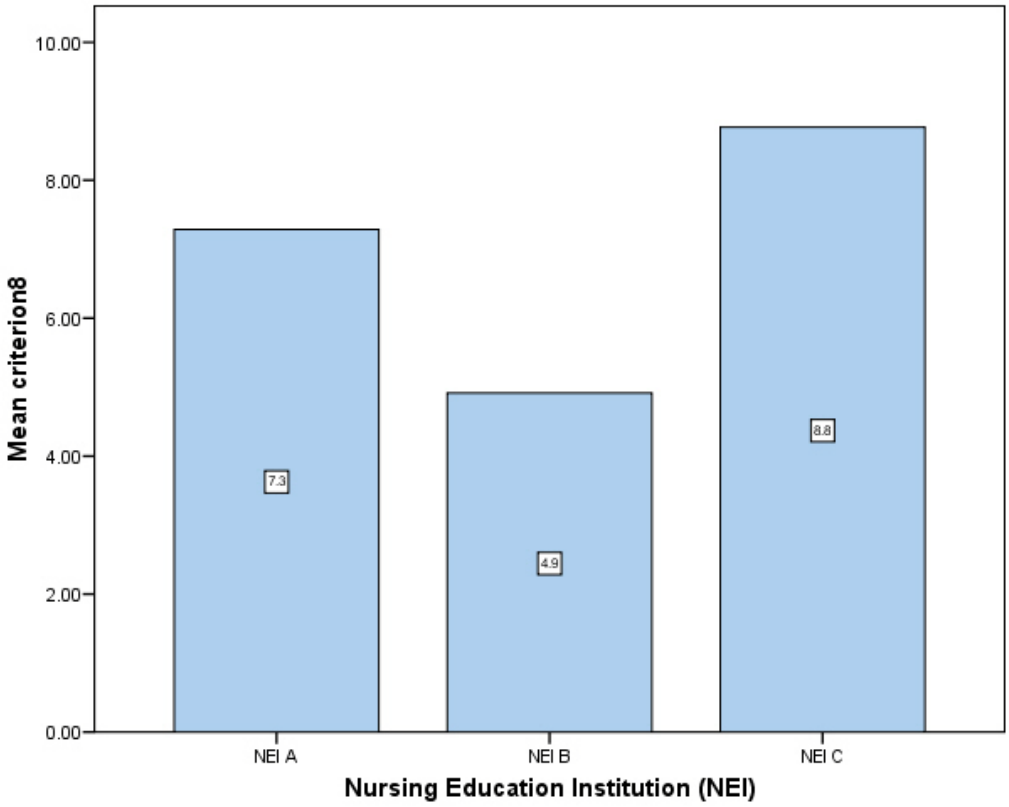

Figure 4.8: Differences in NEIs' compliance with criterion 8: management systems and policies

4.2.9 Comparison of criteria between NEIs with regard to compliance with criteria 1-8

Since the 8 criteria were based on different numbers of questions, the next comparison is in terms of percentages; that is, the percentage of questions in each criterion to which the respondents answered "Yes" (see figure 4.9).

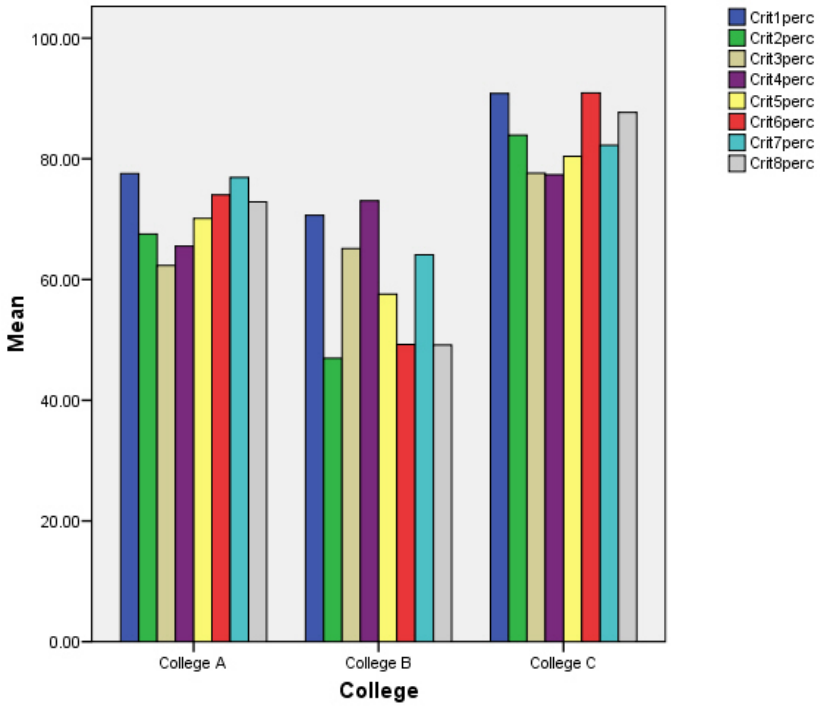

Figure 4.9: Differences in compliance of the three NEIs with all 8 criteria

NEI C shows the highest compliance rate to SAQA's eight core criteria for quality management systems. The lowest percentages in NEI C appear in criteria 3, 4, 5 and 7. This NEI could therefore improve on quality assurance with regard to quality review mechanisms, programme delivery, staff policies and assessment.

NEI A shows lower rates of compliance with SAQA's criteria and needs to improve on all eight criteria, particularly with regard to criteria 3, 4 and 5, which involve quality review mechanisms, programme delivery and staff policies.

The lowest compliance rates were found in NEI B. This institution's lowest percentages pertain to criteria 2, 5, 6 and 8. NEI B needs to improve on each of the eight criteria and has to give priority attention to its quality management systems in general, learner policies, staff policies, management systems and policy.

4.3 CONCLUSION

The research findings were discussed chronologically according to the 8 core criteria. Frequency tables and bar graphs illustrated the findings, and statistics indicated whether the differences in NEIs' compliance with SAQA criteria were significant.

Chapter 5 presents a summary of the findings and makes recommendations for further research.

CHAPTER 5

Findings, conclusions, limitations and recommendations

5.1 INTRODUCTION

This chapter presents a summary of the findings and conclusions, and briefly discusses the limitations of the study. The researcher proposes recommendations for the improvement of quality assurance in nursing education institutions to meet the criteria set by SAQA for education and training providers.

The purpose of the study was to determine whether the quality management systems (QMS) used by nursing education institutions are aligned to the SAQA criteria and guidelines for education and training providers. The research objectives were to

1 determine if the current quality management systems used by nursing education institutions are congruent to SAQA's requirements and guidelines for education and training providers

2 identify existing limitations in the QMS's used by nursing education institutions

Three nursing education institutions in Gauteng province were included in the study and purposive sampling was used to select respondents at the nursing education institutions who are coordinating quality assurance as well as the lecturers/tutors involved in teaching. A questionnaire was designed to collect the data which were analysed by a computer programme, the Statistical Package for Social Sciences (SPSS). A total of 32 respondents completed the self-administered questionnaire.

5.2 SUMMARY OF THE FINDINGS

The findings are discussed according to the eight core criteria that education and training providers should satisfy with regard to quality assurance, as required by SAQA.

5.2.1 Criterion 1: General quality issues, accreditation and policy statement

Respondents from all three NEIs confirmed approval by the SANC of the programmes they offer. However, only 86% respondents in NEI A and 92% in NEI B indicated that the programmes offered are registered with SAQA. It appears that not all the respondents from the three NEI's are well informed about the required programme levels as registered on the NQF (4.2.1.1).

All three NEIs participate in a variety of networking activities with other institutions and stakeholders through student exchange projects, conferences, educator forums, workshops, and collaborative meetings during which in-service training and benchmarking take place (4.2.1.2).

Although the majority of respondents in all three NEIs confirmed that a situational analysis was conducted, only 33% respondents in NEI B and 62% in NEI C remarked that community needs were taken into consideration (4.1.2.3).

In general the management in the three NEIs ensures availability of resources but 50% of respondents from NEI B reported inadequacy of financial resources (4.2.1.3).

The NEIs vision and mission statements and institutional policy statements are in line with the controlling bodies for nursing and higher education, except for NEI B, which shows a low compliance rate. Many respondents from NEI A (43%) and NEI B (58%), are uncertain as to whether their institutional objectives are aligned to SAQA, the NQF and SANC (4.2.1.4).

The NEIs have institutional strategic plans but not all staff seem to be aware of the strategic plan in NEI A as indicated by the respondents (4.2.1.5).

NEI B showed the lowest percentages of yes answers to items under criterion 1 which indicates its non-compliance to some of the SAQA requirements for general quality issues with reference to a safety policy, adequate finances, acknowledgement of community needs during situational analysis, and alignment of institutional policy statements, vision, mission and objectives to those of the NQF, SAQA and SANC.

5.2.2 Criterion 2: Quality management systems

NEI A and NEI C have their own QA policies but NEI B uses the Gauteng Department of Health's policy. Continuous reviewing of the QA policy is done in NEI A and NEI C although not all members of staff are aware of this reviewing process (4.2.2.1). Not all staff in NEI A and NEI C are aware of their institutions' QMS objectives as these objectives seem not to be communicated to all staff, and QA objectives seem not to exist in NEI B (4.2.2.1, 4.2.2.4).

NEI A and NEI C have standard operating procedures (SOP) for monitoring and controlling quality assessment but NEI B uses the Gauteng Department's accreditation tool. However, the majority of the respondents in NEI B (75%), are not aware that standard operating procedures for quality assurance and improvement are being used in their institution (4.2.2.2).

Not all staff in the three NEIs are aware of the existence of a schedule for external verification of programmes by the SANC (4.2.2.3).

The management of all three NEIs is involved in quality management activities but not all staff is involved in the development, implementation, and evaluation of quality assurance (4.2.2.4).

The three NEIs adhere to legal requirements which govern nursing education and practice (4.2.2.5).

Neither NEI A nor NEI C complies to all the requirements with regard to quality management systems, with NEI B showing the lowest rate of compliance (4.2.2.2).

5.2.3 Criterion 3: Quality review mechanisms

Although a high percentage of respondents in all three NEIs confirmed that programmes are being reviewed, there was no consensus on how often as 1 year, 4 years, and even 5 year periods were mentioned. Different mechanisms for reviewing of programmes therefore exist within the institutions (4.2.3.1).

Quality assessment tools for monitoring and controlling are not continuously reviewed in the nursing education institutions with NEI B being in the weakest position of non-compliance (4.2.3.1).

Only NEI C complies with the requirement of maintaining a continuous cycle of quality assurance to ensure total quality management, this requirement is not met by NEI B (only 25% confirmation) and not very convincingly by NEI A (57% confirmation) (4.2.3.1).

A variety of different people are responsible for programme reviewing including individual tutors, heads of departments, examiners, the curriculum development committee, and the quality assurance team. There appears to be a problem in NEI A in this respect as only 43% of the respondents confirmed that there was someone responsible for programme reviewing (4.2.3.2).

All three NEIs use a variety of mechanisms including questionnaires, examination papers, written reports, verbal communication, meetings and a suggestion box, to obtain feedback from educators, assessors, moderators, and students on educational activities (4.2.3.1).

Review findings are reported back within NEI C and NEI B but in NEI A this requirement is not satisfactory met, only 43% of the respondents confirmed. Review findings are reported back through written reports from various stakeholders, circulars, and during staff and academic meetings (4.2.3.2).

Corrective measures for quality improvements are well communicated within the NEIs (4.2.3.1). The NEIs obtain feedback from external and internal customers except NEI A which shows a limitation with regard to obtaining feedback from internal customers. NEI A also shows a limitation with regard to conducting quality reviews in all functional areas (see 4.2.3.1).

5.2.4 Criterion 4: Programme delivery

There appears to be a problem in NEI A and NEI C with regard to an operational plan as only 43% respondents in NEI A indicated the existence of an operational plan in the nursing

department, and remarks from respondents in NEI C (although there was a high confirmation rate) indicate ignorance about what an operational plan actually is (4.2.4.1).

Staff in all the three NEIs are informed by management about the institutions' strategic plans via workshops, meetings, information sessions, and e-mail communication although it appears not to be done successfully in NEI A as only 43% respondents confirmed that they are informed (4.2.4.1).

It appears that programme delivery are not always based on research, reviews and monitoring of results, with NEI A (only 43% confirmed) being in the weakest position of non-compliance to this requirement. Programme relevancy to learners is insured during programme delivery though situational analyses, curriculum reviews, group analyses, consideration of the Provincial Strategic Plan and an outcome-based approach (4.2.4.2).

Target group analysis appears not to be done satisfactorily in the three NEIs as uncertainty prevails about this activity (4.2.4.3). All three NEIs appear to meet the requirement of adequate orientation and induction of new learners well (4.2.4.3). Learner involvement in programme design at decision-making level is very low in all three NEIs and learners are also not involved in decision-making with regard to their assignments (4.2.4.4).

Almost half of the respondents in each NEI did not know what is meant by mode of programme delivery, they confused mode of delivery with equipment and teaching strategies. However in all three NEIs the delivery modes of programmes allow for learning in the real situation which includes group work and practicals and different modules are linked to facilitate horizontal integration for learners' knowledge (4.2.4.5).

Programme delivery appears to be learner-centered in NEI A and NEI C but not to a satisfactory extent in NEI B as only 58% respondents confirmed learner centeredness. Learning material encourages critical and reflective thinking as well as problem-solving in all three NEIs and adequate provision is made for group word and practicals (4.2.4.6).

Tutors are evaluated by learners on a regular basis and the feedback by learners is fed back into the system in all three NEIs according to the majority of respondents.

5.2.5 Criterion 5: Staff policies

Although all three NEIs confirmed the availability of a staff selection policy, NEI B and NEI C adopted the Gauteng provincial policy for staff selection, recruitment, appointment, promotion and termination. Respondents indicated they do not deal with these matters directly, it is done provincially, and hence such policy is not known nor seen by respondents. NEI A adopted the policy of the educational institution in which it resides and has indicated that the policy that is used does not have guidelines for all the listed aspects. It appears that the three NEIs have not developed their own staff selection policies. Staff are not informed about the contents of the promotion and termination policies (4.2.5.1).

All NEIs' responses indicated adherence to the Employment Equity Act when appointing staff, but remarks showed a shortcoming on gender equity. This is not surprising as nursing has always been a female dominated profession (4.2.5.1).

All three NEIs have insufficient numbers of staff and not all staff is suitably qualified especially with reference to student counsellors, assessors and moderators and also with reference to programme offering in NEI A specifically. Respondents in NEI B and NEI C indicated that only newly appointed staff are not registered as assessors and moderators whereas in NEI A respondents indicated that most of the staff are not registered as assessors and moderators (4.2.5.2).

Staff career development opportunities are moderately provided in NEI A and NEI C, however, staff remarked they do not use the opportunities due to tight work schedules and shortage of staff. In NEI B the majority of respondents (67%), indicated a lack of staff career development opportunities and remarks stated that staff are not able to use opportunities due to financial constraints from the provincial government (4.2.5.2).

Staff is available in the clinical field on a regular basis in the three NEIs although there are times when staff's work duties deter them to go to the clinical field. Theory and practice are well integrated in all three NEIs during programme delivery (4.2.5.3). Performance appraisal mechanisms are in place in the three NEIs but teaching activities are only informed by review,

research and monitoring in NEI A and NEI C. Teaching output is assessed by students in the NEIs but peer assessment is not done in the NEIs and respondents indicated staff is sensitive to peer performance assessments due to biases (4.2.5.4).

5.2.6 Criterion 6: Student policies

NEI A has a student selection policy stipulating criteria and admission requirements but NEI B and NEI C use the Gauteng province's decentralized student selection policy. Selection criteria in NEI A and NEI B appear not to consider the demographic composition of SA in order to adhere to equity requirements (4.2.6.1).

Students' councils are operating well in NEI C and NEI B but NEI A's management favours an open door system although a student council does exist. The learning programmes in all three NEIs encourage learner participation and there appear to be support systems to identify the nature of support students require (these include student counseling, orientation programmes and individual tutor-student consultations). However, not all staff from NEI B seems to be aware of the available support systems (4.2.6.3).

Student support services which include career progression, computer skills, study methods and reading and writing skills are provided in NEI A and NEI C but in NEI B student support is only offered during orientation and in-service training. NEI A and NEI C have a professional counseling service for students (4.2.6.4).

Career advice and guidance for further learning are not given to learners on a formal basis in NEI A and NEI B as remarks from respondents indicated. It appears that NEI C complies with this requirement more satisfactorily (4.2.6.2).

Only NEI C meets the requirement with regard to an RPL policy and procedures as in NEI A and NEI B almost half of the respondents are not aware of such a policy and procedures in their institutions (4.2.6.4).

5.2.7 Criterion 7: Assessment policies

The three NEIs have assessment policies and procedures but not all staff in NEI B are aware of the existence of an assessment policy and procedures. The assessment policies in the three NEIs appear not to be examination based as indicated by the majority of the respondents. NEI C has a policy and procedures for appeals but almost half of the respondents in NEI A (43%), and in NEI B (33%), are not aware of a policy for appeals (4.2.7.1).

NEI C's assessment approach appears to be aligned to NQF principles but uncertainty about this prevails in NEI A (43% confirmation) and in NEI B (only 25% confirmation). In all NEIs feedback is given to learners after assessments through individual and group discussions and reports (4.2.7.2).

Learner support is offered in NEI A and NEI C through identification of problem areas and appropriate intervention but in NEI B there appear to be a problem as half of the respondents either did not respond to this question or indicated uncertainty (4.2.7.2).

All three NEIs follow a continuous, developmental and integrative approach to learner assessment (4.2.7.2). In all the NEIs learners are informed about outcomes and assessment criteria and procedures in their learning guides and workbooks (4.2.7.2).

NEI A and NEI C use a variety of assessment approaches including self, peer and group assessments but NEI B does not, as indicated by more than half of the respondents (4.2.7.2). There appears to be uncertainty as to whether assessment feedback is fed back for programme development in NEI A (51% confirmation) and in NEI B (33% confirmation) (4.2.7.2).

Moderators are appointed for theoretical examinations in all three NEIS at exit level but external examiners are not appointed for practical examinations to a satisfactory level in NEI B (42% confirmation) and NEI C (62% confirmation) (4.2.7.3).

5.2.8 Criterion 8: Management systems and policies

Most respondents declined or were uncertain about their institution having a policy and procedures for maintenance and upgrading of facilities - in NEI A 57% respondents were uncertain, and in NEI B 33% were uncertain and 17% declined. NEI C appears to have such a policy and procedures in place (4.2.8.1).

NEI B does not seem to have sufficient financial resources to ensure sustainability of service to learners (4.2.8.1).

All three NEI's keep a complete database of learner information and records. NEI A and NEI C have a policy and procedures for capturing and updating learner data but NEI B appears to have a problem in this regard as only 58% of the respondents confirmed the existence of such a policy and procedures and remarks indicated inaccurate capturing of data which is done manually (4.2.8.2).

There appears not to be a sufficient number of adequate classrooms in the NEIs (4.2.8.3).

With regard to learning equipment only NEI C's library appears to be adequately equipped for learners' needs. In both NEI A and C the clinical laboratories are sufficiently equipped, a sufficient number of computers are available and adequate and suitable information technology are available. However, NEI B shows inadequacy with regard to these facilities (4.2.8.3).

5.3 CONCLUSIONS

The conclusions are discussed as they derived from the findings with regard to each of the eight core criteria.

5.3.1 General quality issues, accreditation and policy statement

The NEIs policy statements containing their visions and missions are aligned to the principles of the SANC, SAQA, and NQF. There is however uncertainty under the academic staff in two of the NEIs about whether institutional objectives are congruent to NQF and SAQA principles; about

SAQA registration of programmes; and about the levels of different programmes on the NQF. Community needs are not always taken into consideration during situational analysis in two of the NEIs (5.2.1).

5.3.2 Quality management systems

The NEIs do not fully comply to SAQA requirements for the sustenance of a quality culture as not all staff participates in the development of a QA policy, establishment of QMS objectives and reviewing of the QA policy. The province's policies for quality assurance should only be used as guidelines during development of an institution's own QA policy.

The lack of awareness among some staff about the existence of standard operating procedures for quality assessment and improvement in their institutions indicate weak points in the institutions' QMS (5.2.2).

5.3.3 Quality review mechanisms

Respondents from all the NEIs confirmed that programmes are reviewed but there is no consensus on how often, implying that all staff are not involved in the review of programmes which is alarming. Complete continuous quality cycles are not maintained in all the NEIs. In two of the NEIs quality assessment tools are not continuously reviewed and review evidence is not always used to improve activities. In one of the NEIs review findings are not consistently reported back within the institution and internal customers' feedback is not obtained to a satisfactory extent as the majority respondents were uncertain whether this was done (5.2.3).

5.3.4 Programme delivery

Not all staff knows the difference between a strategic plan and an operational plan. Ignorance regarding the institution's strategic plan and operational plan may lead to poor quality in programme delivery and ineffective personnel performance. Uncertainty prevails in the NEIs about whether changes in programme delivery are based on research, review, monitoring and feedback from stakeholders. However, the high confirmation response rate for programme

relevancy and respondents' remarks indicate that curriculum review is done and that the province's strategic plan is kept in mind.

Comprehensive target group analysis is not done on a continuous basis in the NEIs and not all staff are involved in these activities. Experiential learning opportunities, group work and practicals are offered by the NEIs and emphasis is placed on the development of reflective and critical thinking and problem-solving skills (5.2.4).

5.3.5 Staff policies

The use of Gauteng province's staff policies by NEIs could jeopardize quality in programme delivery as each educational institution has to ensure fitness for purpose. The NEIs do not have a sufficient number of staff and not all staff are suitably qualified as assessors, moderators, and student counselors. Financial constraints and lack of information on career development opportunities restrain staff from furthering their professional development.

Nurse educator availability in the clinical field appears to be satisfactory and theory- practice integration is facilitated through appropriate clinical placements and student accompaniment in the clinical field by either tutors or preceptors. There is, however, scope for improvement as in some cases tutors are apparently too busy to do any clinical accompaniment.

Quality in programme delivery can be improved if peer assessment forms part of performance appraisals (5.2.5).

5.3.6 Student policies

It appears that the student selection policy is decentralised by the Gauteng province for nursing colleges (not for universities or Technickons) and this may influence learner selection criteria consistency with institutional programme standards and community requirements, negatively. There is no strict adherence to the SA demographic composition as students from neighbouring African countries are admitted as mentioned by NEI B.

All three NEIs facilitate student participation in their programmes and do offer student support but NEI B's compliance to the requirements for student support is not satisfactory (5.2.6)

5.4 RECOMMENDATIONS

Based on the findings of the study and the conclusions, the researcher makes the following recommendations to nursing education institutions for improvement of their quality management systems.

1 Management at NEIs

- Should keep academic staff informed about NQF levels and changes thereof for different learning programmes through regular in-service training or personnel development sessions.

- Have to ensure that curriculum committees consider the community's needs during situational analysis.

- Needs to ensure that the NEIs policy statement and institutional objectives are aligned to the values and principles of SAQA, the NQF and the SANC.

2 Management in NEIs should include all academic staff in the development of the institution's own quality management system, quality assurance policy and the establishment of quality objectives and standard operating procedures. These should be reviewed on a regular basis and management should ask for input from all staff.

3 Managers at NEI's should involve all academic staff during programme reviewing as everybody can give valuable input. Each institution has to make a decision on how often programmes will be reviewed depending on the changes in external stakeholders' and community needs and the ETQA, SAQA and higher education requirements.

4 All members of staff at NEIs have to be consistently involved in quality monitoring and improving to maintain a continuous quality cycle.

5 Management at NEIs should develop and communicate the institution's strategic plan to all staff and academic staff should take the responsibility to familiarise themselves with their institution's strategic plan. This can improve quality performance and staff can be assessed against the goals and overall objectives of the institution.

6 All academic staff should participate in the development of the institution's operational plan to improve quality in programme delivery.

7 Each nurse educator should conduct a target group analysis on his /her students to determine their individual learning styles in order to select appropriate teaching strategies, learning aids and activities to facilitate integration of knowledge and skills.

8 NEIs should develop their own staff policies for staff selection, recruitment, appointment, promotion and termination. These should be aligned to the specific institution's aims and objectives and the types of programmes offered.

9 Management at NEIs

— Should encourage all staff to qualify themselves as assessors and moderators according to SAQA requirements.

— Need to develop career development policies for their institutions and ensure that all staff have access to ongoing professional development through proper human resource planning and budgeting.

— Should encourage peer assessment as this can complement student assessments of teaching activities and teaching output to improve quality in programme delivery.

10 Each NEI:

— Should develop its own learner selection policy using the provinces policy as foundation and guideline but taking into account the institutional programme standards and specific community needs.

— Needs to establish adequate student support services which include professional student counseling services, reading and writing skills, study methods, computer literacy and career guidance. A student council should be established at each NEI and management must ensure that it is operational.

11 All nurse educators should take responsibility to familiarise themselves with their institution's policy and procedures for assessment and appeals.

12 Management at NEIs should keep staff updated about assessment feedback on a regular basis and ensure that feedback is used to improve and further develop programmes. This will contribute to a continuous quality assurance cycle.

13 Academic staff need to familiarise themselves with their institution's policy and procedures for maintenance of equipment as they have to report dysfunctional equipment to management for replacement.

15 Management at NEIs:

— Should write motivations for adequate classrooms according to needs and submit these to the responsible financing authority.

— Has to ensure that adequate resources are available before a learning programme is offered.

5.5 LIMITATIONS OF THE STUDY

The study was limited to three nursing education institutions in Gauteng province and the findings can therefore not be generalized to all nursing education institutions in South Africa. Self-administered questionnaire limitations were noticed as some respondents confused certain items in the questionnaire for example mode of delivery of programmes was mistaken as teaching methods by a few respondents. This happened regardless of the data collection briefing session offered by the researcher at each nursing education institution during which items in the questionnaire were explained. With regard to some of the items respondents gave contradictory remarks which could not be clarified by the researcher because the questionnaires were completed anonymously. This, however, indicated that not all staff were completely up to date with quality measures in their institution.

The low response rate in completing and returning questionnaires in one of the nursing education institutions regardless of repeated requests and reminders by the researcher, could have skewed the total picture of the quality management system in that institution.

5.6 CONCLUDING REMARKS

The study showed that nursing education institutions participate in quality assurance and management activities in areas determined by the South African Nursing Council (SANC) and the Department of Health (DOH). There was however no evidence of a complete quality management system according to SAQA's eight core criteria.

Although all NEIs achieved certain SAQA core criteria requirements they did so in a fragmented way. The NEIs mainly adhered to the requirements of the SANC and DOH. These two bodies focus primarily on quality adherence for accreditation of education and training programmes and institutions where these are offered. Therefore, for staff to meet their customers' needs, quality management should be a daily practice. Only NEI C had quality management objectives whereas NEI A and NEI B appear not to have such objectives. The SAQA core criteria does not promote adherence to requirements but requires continuous quality improvement based on day-to-day activities.

There is scope for improvement especially with regard to some of the core criteria for quality assurance as identified by SAQA. In two of the NEIs in the sample, the same core criteria showed the lowest compliance rates namely: quality review mechanisms, programme delivery and staff policies. The NEI which in comparison to the other two NEIs in the sample showed overall lower compliance rates to SAQA criteria had the lowest compliance rates in the core criteria which comprise: quality management system in general, learner policies, and management systems and policies.

SAQA encourages a total quality management (QTM) approach embracing five critical principles. These refer to the establishment of a quality culture empowering all staff to participate and take responsibility for quality assurance; a customer orientation; management of quality through research; a people-based and participative management philosophy; and continuous quality improvement as ongoing objective.

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INDIVIDUAL WRITTEN CONSENT

Dear Respondent/Informant

INTRODUCTORY BACKGROUND

I am in the process of completing the Master's degree in Health Studies specifically in Nursing Education on quality management system practices.

The title: Quality management systems used by the Nursing Education Institutions in Gauteng Province.

The main purpose of the study is to determine whether the quality management systems used by the selected nursing education institutions in Gauteng Province are aligned to SAQA's core criteria and guidelines for education and training providers.

This will enable the researcher to provide valuable feedback to the selected nursing education institutions.

Objectives of the study

- To determine if the current quality management systems used by nursing education institutions are congruent to SAQA's requirements and guidelines for education and training providers.

- To identify existing limitations in the quality management systems used by the nursing education institutions.

Ethical considerations

The information will not be divulged against anyone or the specific educational institution. Informants and institutions will be kept anonymous. Confidentiality will be maintained and information will not be divulged without a written request from the head of the institution.

The implication of completing the questionnaire is that your institution will benefit on the feedback session of the results. Your anonymity is guaranteed.

Findings of this research will not be identified against the name of your institution; symbols will be used for the different educational institutions participating in this research.

When the information is analysed and interpreted informants and the nursing education institution will not recognise their institution's practices because it will be generalised.

Education institution benefits

The recommendations will benefit your institution and all stakeholders reinforcing quality practices on how to develop, implement and evaluate the institution's quality management system for continuous improvement.

Consent to participate

The researcher may request informants for clarity for required information.

Your time spent in completing this questionnaire is appreciated in anticipation. The researcher will ensure upholding the contents of this consent.

Attach your signature as an agreement to the contents of this consent.

I (initials and surname) _____ read and understood the contents of this letter and I accept to participate in the study.

Signature: _____ Date: _____

I (initials and surname) _____ thank you for taking part in the study.

Signature: _____ Date: _____

Researcher's telephone number: 079 876 3760 and 012 654 4050.

ANNEXURE A

STRUCTURED INTERVIEW QUESTIONNAIRE

DEGREE: MASTERS IN HEALTH STUDIES

Indicate your position within the institution. Mark with a tick (√)

Principal/Head of the Nursing education institution			
Person in charge of Quality assurance			
Tutor			
Institution		Department	

Name of the nursing education and training institution (Optional, the institution may remain anonymous)

……..

N.B Kindly complete the questionnaire and hand it to the person who distributed questionnaire by 20 December 2007

Thank you for your contribution

1 KEYS TO RESPONSE

Yes	=	Assessment criterion/quality characteristic is achieved correctly
No	=	Assessment criterion/quality characteristic is not achieved
Uncertain	=	Assessment criterion/quality characteristic is not understood or is partially achieved
Remarks	=	Briefly explain, substantiate, motivate or give examples

Yes	=	2
Uncertain	=	1
No	=	0
No response	=	3

2 INSTRUCTIONS ON COMPLETION OF THE QUESTIONNAIRE

2.1 The questionnaire is divided into eight criteria which indicate quality management system components: The questionnaire therefore contains core criteria and items based on SAQA Quality Management System criteria and guidelines for providers.

2.2 Read each question carefully. Provide your answer with a tick in the appropriate column.

2.3 **NB:** Substantiate or motivate your answer in the remarks column where requested.

2.4. **NB:** If unsure obtain clarity on questions from the researcher using telephone number provided or ask your institution contact person for this project to avoid irrelevant responses because these will influence the findings and results.

CRITERION 1: GENERAL QUALITY ISSUES, ACCREDITATION, AND POLICY STATEMENT

Number	Criteria	Yes	No	Uncertain	Remarks
1	Is your institution approved and registered as a provider for nursing education and training with SAQA?				
1.2	Are the programmes provided approved and registered by the South African Nursing Council (Nursing ETQA)?				
1.3	Are the Learning programmes and qualifications consistent with the NQF levels? (Indicate on which levels programmes are)				
1.4	Does the institution conduct situational analyses?				
1.4.1	Does the situational analysis consider specific community needs?				
1.5	Does the institution have a safety policy and a healthy learning environment in place?				
1.6	Does the institution network with other similar institutions (public or private), to share experiences and knowledge? (Indicate how)				
1.7	Does management ensure availability of resources?				
1.7.1	For learners and staff facilities.				
1.7.2	Finances.				
1.7.3	Sufficient qualified human resources.				

Number	Criteria	Yes	No	Uncertain	Remarks
1.8	Is the institution's vision and mission statement in line with the requirements of the Department of Health, SAQA, NQF, and the nursing ETQA?				
1.9	Does the institution have a policy statement containing its aims and objectives?				
1.10	Are the institution's policy statements in line with SAQA, NQF, and ETQA (SANC) policies?				
1.11	Are the institution's overall objectives spelt out clearly, measurable and in line with SAQA, NQF, and ETQA 's objectives?				
1.12	Does the institution have a strategic plan?				
1.13	Does the institution's strategic plan spell out the programme requirements?				
1.13.1	Does the institution's strategic plan spell out the mode of programme delivery?				
1.13.2	Does the institution's strategic plan include information on theory and practical contact periods and assessment approach? (Specify what your institution/department includes).				

CRITERION 2: QUALITY MANAGEMENT SYSTEMS

Number	Criteria	Yes	No	Uncertain	Remarks
2.1	Does the institution have a Quality Assurance policy?				
2.2	Is the Quality assurance policy reviewed continuously? (If yes, how often or when).				
2.3	Are the institution's Quality Management System objectives clearly outlined? (If yes, Is it relevant to the institution, SAQA, NQF, and ETQA's Quality objectives).				
2.4	Are the QMS objectives communicated to all staff by the leader(s)? (If yes, explain how).				
2.5	Are standard operating procedures used for monitoring and controlling quality assessment in the institution? (If yes, give examples).				
2.6	Are institutional leaders actively involved in quality management activities? (If yes, indicate how).				
2.7	Does the institution have a planned schedule for external verification of programmes, assessments, moderations, and results by the ETQA (SANC) (If yes, how often).				
2.8	Does the institution adhere to the legal requirements, which governs a nursing education institution?				
2.9	Are the regulations that govern nursing practice being integrated in the delivery of the programmes?				
2.10	Does the institution have standard operating procedures for quality assurance and improvement?				
2.11	Does management involve all staff in the development, implementation and evaluation of the institution's Quality Management system?				

CRITERION 3: QUALITY REVIEW MECHANISMS

Number	Criteria	Yes	No	Uncertain	Remarks
3.1	How often are programmes reviewed? (Indicate how and when).				
3.2	Are quality assessment tools for monitoring, controlling, and managing quality continuously reviewed? (If yes, how often are they revised?).				
3.3	Is there an active continuous cycle of quality assurance in the institution by way of monitoring/ reviewing/ research and feedback into the system?				
3.4	Is evidence gathered from reviews/ research/ monitoring used to improve the institution's activities? (If yes, give an example).				
3.5	Are mechanisms in place to obtain feedback from the educators, assessors, moderators, learners and other stakeholders? (If yes, specify).				
3.6	Are review findings reported back within the institution? (If yes indicate how?).				
3.7	Who in the institution is responsible for the programme reviewing? (Specify).				
3.8	Are corrective measures (quality improvements) communicated to everybody in the institution?				
3.9	Are quality reviews conducted in all institution functional areas/divisions? (How often and how is it done?).				
3.10	Does the institution obtain external customers' (students, health services and surrounding community members) feedback? (When and how?).				
3.11	Does the institution obtain internal customers' (educators, other working team members and management) feedback? (When and how?).				

CRITERION 4: PROGRAMME DELIVERY

Serial number (S/N)	Criteria N/A	Yes	No	Uncertain	Remarks
4.1	Does the institution have an operational plan for programme delivery? (If yes, specify).				
4.2	Does management and immediate supervisors inform all staff about the strategic plan? (If yes, indicate the mechanism used to inform staff).				
4.3	Are the changes in programmes delivery based on research, monitoring, review and feedback from stakeholders? (Student, health services, tutors)?				
4.4	Does programme delivery ensure that programmes are relevant to learners? (If yes, indicate how.)				
4.5	Is programme delivery learner-centered and flexible? (Validate briefly).				
4.6	Does target group analysis include learner identification and individual learning styles that assist the educator to plan teaching/facilitation strategies, learning aids and learning activities appropriately for the integration of knowledge, skills and attitudes?				
4.7	Is an induction/ orientation programme offered to all newly admitted learners? (Explain briefly).				
4.8	Is there a mode of programme(s) delivery specified for the institution? (If yes, what is it?)				

Number	Criteria	Yes	No	Uncertain	Remarks
	Continues: Programme delivery				
4.9	Does the mode of programme delivery provide learners with the opportunity to learn and experience in the real situation? (Specify the mode of exposure).				
4.10	Is there a link between different modules, which enable learners to integrate knowledge horizontally?				
4.11	Is the programme's learning material reader friendly and offered in a way, which stimulates critical and reflective thinking? (If yes, indicate how).				
4.12	Are assignments designed to encourage problem solving? (If yes, give an example).				
4.13	Are learners involved in programme design on a formal basis e.g. at decision-making level?				
4.14	Are learners involved in programme design and implementation informally through making decisions regarding the nature of assignments?				
4.15	Do the modes of delivery of all programmes include group work and practicals? (Specify).				
4.16	Are tutors being evaluated by learners on regular bases? (How often and what mechanism is used)				
4.17	Is the feedback received from learners about tutors being fed back into the system?				

CRITERION 5: STAFF POLICIES

Number	Criteria	Yes	No	Uncertain	Remarks
5.1	Does the institution have policies for staff selection, recruitment, appointment, promotion, and termination? (Specify for which).				
5.2	Does the institution adhere to the Employment Equity Act when appointing staff?				
5.3	Does the institution have a mechanism for performance appraisal? (Specify).				
5.4	Is staff suitably qualified for teaching the different subjects offered in the programmes?				
5.5	Are all teaching staff registered assessors?				
5.6	Is a sufficient number of staff being appointed?				
5.7	Are the staff available in the clinical field on a regular basis to guide learners? (If yes, indicate how often).				
5.8	Do staff ensure the integration of theory and practice during programme delivery? (Specify the mechanism).				
5.9	Does the institution have a staff career path development policy and procedures? (If yes, state whether it allows for institutional, individual, and professional development needs).				
5.10	Do all staff have access to ongoing professional development?				
5.11	Are the teaching activities of staff informed by review, research and monitoring? (if yes, state how).				
5.12	Do peers and students assess staff's teaching outputs on a regular basis?				

CRITERION 6: LEARNER POLICIES

Number	Criteria	Yes	No	Uncertain	Remarks
6.1	Are the learner entry and exit levels outlined? (Support your answer).				
6.2	Does the policy for the selection of learners stipulate criteria and admission requirements?				
6.3	Do selection criteria take into account the demographic composition of SA (The historical disadvantaged and previous discrimination) and implement equity principles? (Support your answer).				
6.4	Are the criteria and procedures for learner selection consistent with the institutional programme, and the community specified requirements? (Substantiate).				
6.5	Has the institution facilitated the establishment of a student council? (If yes, indicate if its operational).				
6.6	Does the institution have a policy and procedures for RPL?				
6.7	Does the institution have a professional student counseling service?				
6.8	Does the institution have support services to provide guidance on career path and progression, planning of studies, reading and writing skills? (If yes, indicate which services are available).				
6.9	Is the institution able to identify the nature of support that learners require? (If yes, what type of support is given) .				
6.10	Does the delivery of programmes encourage learner participation? (Substantiate).				
6.11	Is career advise and guidance for further learning given to learners?				

CRITERION 7: ASSESSMENT POLICIES

Number	Criteria	Yes	No	Uncertain	Remarks
7.1	Does the institution have an assessment policy and procedures?				
7.2	Is the institution's approach to assessment in line with NQF principles?				
7.3	Are learners given feedback after assessment? (Give examples).				
7.4	Does the institution ensure that assessments identify and provide for leaner support? (If yes, indicate how).				
7.5	Is an integrative assessment approach used covering outcomes, critical cross-field outcomes, knowledge, skills, attitudes and values?				
7.6	Is assessment feedback fed back into programme development? (If yes, indicate how).				
7.7	Is the assessment policy mainly examination based?				
7.8	Are assessments ongoing and developmental? (If yes, state how).				
7.9	Are learners informed about assessment criteria, learning outcomes and assessment procedures and final results? (If yes, indicate which).				
7.10	Does assessment include self, peer and group assessment? (If yes, indicate which)				
7.11	Are moderators appointed for theoretical examination papers?				
7.12	Are external examiners appointed for practical examinations?				
7.13	Is there a policy for appeals and procedures?				

CRITERION 8: MANAGEMENT SYSTEMS AND POLICIES

Number	Criteria	Yes	No	Uncertain	Remarks
8.1	Does the institution have a governing body e.g a college council?				
8.2	Is a complete database of learner information and records kept?				
8.3	Is there a policy and procedures for accurate capturing, maintenance and regular updating of learner information and records? (If yes, specify).				
8.4	Does a policy and procedures exist for management, maintenance and upgrading of facilities, resources and materials? (If yes, specify).				
8.5	Are the financial resources able to sustain the learning services throughout the period of accreditation?				
8.6	Are there a sufficient number of classrooms for teaching?				
8.7	Is the library adequately equipped with sufficient resources for learners' study needs in the different programmes?				
8.8	Is a clinical laboratory available with sufficient equipment and models? (If yes, specify).				
8.9	Are a sufficient number of computers available for learners' study needs?				
8.10	Is the organisation having sufficient and suitable information technology required by the programmes' standards to achieve outcomes? E.g. computers and internet access. (Specify).				

Thank you for your contribution and support for this study.