QUALITY MANAGEMENT OF SHORT COURSES AT HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA: A COMPARATIVE STUDY

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DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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ABSTRACT

This study is an attempt to conceptualise and enhance the quality management of the short course offerings at the Vaal University of Technology (VUT). The Higher Education Quality Committee (HEQC) conducted its first cycle of institutional audit exercises from 2004 – 2009 at private and public universities in South Africa. This study follows on the HEQC audit panel's report, with reference to VUTs offering of short courses (SCs). The HEQC informed the institution that the quality assurance system of SCs is not on par with the requirements of the HEQC. Therefore, it does not meet the minimum standards for an effective quality management system for SCs. It is imperative for the institution to conceptualise the quality management of SCs and to develop a system that ensures ongoing improvement. This study addresses this gap by conceptualising the quality management of SCs on national level in higher education. The study draws on good practices on national level that can inform the refinement of the existing quality assurance system for SCs at VUT.

The empirical study was conducted with public institutions of higher learning in South Africa. Quantitative data were collected from dedicated SCs and/or quality assurance or quality management offices at all 23 public institutions of higher learning. Five universities were identified as institutions with good practice, based on quantitative information that was gathered, analysed and interpreted during this study.

The study revealed that it is imperative for higher education institutions to develop quality assurance systems that are based on cyclical processes of ongoing improvement, such as the PDCA (Plan-Do-Check-Act), PIRI (Plan-Implement-Review-Improve) and ADRI (Approach-Deployment-Results-Improvement) models. A key assumption of the research is that quality assurance for SCs at VUT should be aligned with the institution's quality assurance system. The study highlights the value of the principles of Total Quality Management, the notion of continuous improvement, self-evaluation and external monitoring. Recommendations in this study suggest that VUT should conduct further institutional benchmarking exercises with the five institutions that received commendations and full delegations, in order to develop a conceptual model for understanding and enhancing its SC offerings.

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CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

The South African higher education system has been subject to tremendous changes since the democratic elections of 1994. The White Paper on Higher Education (RSA 1997:9) describes a transformed higher education system as one which will, amongst other things, provide equal access and equally fair chances of success to all students as well as the development of programmes leading to qualifications that will meet the country's employment needs in respect of highly skilled graduates (Gravett & Geyser 2008:6). During this time the South African Qualifications Authority (SAQA) and the National Qualifications Framework (NQF) were established as a result of the South African Qualifications Act (58 of 1995) (RSA 1995). An important aim of the NQF is that of contributing to lifelong learning whereby the framework provides a structure, which can recognise and acknowledge lifelong learning (SAQA 2004:32). Longworth and Davies (1996:21) define lifelong learning as the development of human potential. The recognition is, thus, that each individual has a learning potential with few limitations on that potential.

Within lifelong learning, short course provisioning is one of the aspects granting a learner the opportunity to learn on an ongoing basis and at the same time receive credits for that learning. For the purpose of this study, a short course is described as a type of short learning programme through which a learner may or may not be awarded credits, depending on the purpose of the programme (SAQA 2004:14). Tres (2007:404) defines a credit as a generally agreed-upon value used to measure student workload in terms of learning time required to complete course units, resulting in learning outcomes.

A provider of a short course, hereinafter referred to as SC, has a critical role to play in the resource-efficient delivery of, and the facilitation of flexible

access to, lifelong learning opportunities for the development of a 21st century workforce (SAQA 2004:1). This is essential within the new dispensation for higher education in the post-apartheid era, especially within the context of the national imperatives of the redressing of past inequities and accessibility of education (CHE 2004a:41). In 2000 SAQA initiated the recording of SCs to enable providers of such courses to be brought into the standard-setting and quality-assurance processes set up for the education and training system as a whole. The recording of SCs ended in November 2001. No new submissions were accepted, and since then all SC providers have been referred to the relevant Education and Training Quality Assurance body (ETQA) to initiate their accreditation processes (SAQA 2004:7). The ETQA for higher education in South Africa is the Higher Education Quality Committee (HEQC), a permanent sub-committee of the Council on Higher Education (CHE). In 2003, a communiqué was distributed by the CHE to all the higher education institutions, informing all stakeholders, "SAQA has indicated that it would like all SCs, which are offered by higher education institutions to be quality assured by the relevant ETQAs" (CHE 2003). According to Harman (1998:332), quality assurance has become an important element in higher education systems, which have adopted a self-regulation approach to relationships between government and higher education.

The HEQC is the national external quality assurance body and ETQA of all institutions of higher learning in the new dispensation of higher education (post apartheid education). The HEQC clearly states that institutions should seek to establish and sustain reliable information for internal quality-related planning, external audit and public reporting (CHE 2004b:5). The HEQC has statutory responsibility for conducting institutional audits and accreditation of Higher Education programmes as laid down in the Higher Education Act of 1994 (CHE 2007:4). As a result, the HEQC developed a national system for institutional audits on a six-year cycle, whereby quality assurance mechanisms of HEIs are audited. Over and above this function, the HEQC

had oversight responsibility for quality assurance arrangements in the following areas: SCs, certification arrangements, moderation of assessment, assessor training and development, and recognition of prior learning (Bhengu 2008). It was, therefore, a delegated function of HEIs to develop, implement and maintain the quality management of these functions. Consequently, the HEQC would grant accreditation to institutions with regard to the offering of SCs based on the effectiveness of a respective institution's quality management system for the particular area. Therefore, a request was made for HEIs to develop and maintain an effective quality assurance system, hereinafter referred to as QAS, for the above-mentioned functions. Within the Vaal University of Technology (VUT), the Quality Promotion Unit (QPU) developed a centralised-decentralised institutional QAS based on internal self-evaluation and external monitoring.

In May 2006 the HEQC conducted, as part of the Cycle 1 HEQC institutional audit exercises (from 2004 - 2009), an institutional audit at the VUT, after which an audit report was generated by the external review committee of the HEQC (CHE 2007:4). This report reflects the audit findings based on the validation of the Audit Portfolio (institutional self-evaluation report) provided by the VUT. The HEQC audit exercise follows a developmental approach. Therefore, audit recommendations and commendations in the audit report help institutions to strengthen their internal quality management systems, hereinafter referred to as QMS, as it feeds into planning processes on all institutional levels.

In October 2008, the HEQC introduced its Framework for Delegated Functions (CHE 2008), which provides institutions with directives for the assessment of the effectiveness of their internal mechanism in relation to, amongst others, SCs. Following the audit report, the institution received a letter from the Deputy Executive Director of the HEQC. This letter informs the VUT that, amongst other things, it should maintain or improve on the state of its QMS for delegated functions; the HEQC reserves the right to investigate

any deterioration of its QMS; and the HEQC reserves the right to withdraw the delegation of any of these functions should they determine that the institution no longer meets the criteria specified in the HEQC Framework for Delegated Functions (Bhengu 2008). In 2009, the VUT received a follow-up letter from the Deputy Executive Director of the HEQC, informing them that the quality management, hereinafter referred to as QM, of SCs "have not been adequately addressed in the institution's improvement plan" and should thus be refined (Bhengu 2009).

In February 2012, the CHE informed all institutions of higher learning about the cessation of delegation of specified quality assurance functions (Hay 2012). The letter states that, "the functions that the Higher Education Quality Committee (HEQC) previously delegated to higher education institutions in fulfilment of its role as the Education and Training Quality Assurer (ETQA) for higher education in terms of the SAQA Act no longer hold." Consequently, the HEQC will no longer require HEIs to submit a portfolio of evidence of their quality assurance of the delegated functions. The letter further states that institutions will now be required to report on the previously delegated functions, as part of the implementation of the different quality assurance frameworks of the HEQC. This implies that SCs, a previously delegated function, will now form part of the institutional audit conducted by the HEQC. SCs, therefore, continue to be reflected in the criteria and minimum standards of the HEQC's QAS.

It was evident that a need exist for the VUT to conceptualise the QM of SCs at the institution. As a result, the researcher conducted a benchmarking exercise with HEIs with a view to implementing a SC QAS, which is on par with the HEQC's requirements. The outcome of the benchmarking informed the VUT on best practices of a QAS for SCs in order to develop an effective QMS for SCs at the VUT.

1.2 PROBLEM STATEMENT

As mentioned above, the HEQC is of the opinion that the QAS of SCs at the VUT is not on par with the requirements of the HEQC and, therefore, does not meet the minimum standards for an effective QMS for SCs (Bhengu 2009). This study wishes to address this gap by conceptualising SC quality management in higher education and comparing QAS's on national level to identify good quality assurance practices, which can address the refinement and enhancement of the current QAS for SCs at the VUT.

From 1993 until 2006, the researcher was involved with the coordination of SCs within the VUT. In 2006, the VUT's SC department, the Unit for Lifelong Learning, was decentralised; resulting in the responsibility and accountability for the development, approval and quality assurance, hereinafter referred to as QA, of SCs residing within each of the university's faculties. Although decentralised, the understanding was that the provision of SCs should remain an activity that complements the University's core teaching and learning activity and aligns with the institution's commitment to lifelong learning (VUT 2006). It is the opinion of the researcher that, as a result of 'silo management', the VUT proved to have a fragmented QM and QA system for SCs. The SC function was again centralised in 2010 under the Enterprise Development Unit, and a delegated officer was appointed to manage all SCs offered at the institution. During a meeting with the newly appointed officer, the QPU emphasised the importance of the implementation of an institutional QM and QAS for SCs based on a centralised-decentralised mode. This need was emphasised by the newly appointed functionary for SCs.

With reference to the HEQC recommendations for SCs, the VUT should be able to demonstrate how it developed its QAS for SCs. This system should be on par with the VUT's institutional QAS, which is underpinned by the principles of total quality management, continuous improvement, self-evaluation and external monitoring. The consequence of not demonstrating

an effective QAS for SCs has serious implications with regard to the image and mandate of the institution to offer SCs. Hogg and Hogg (1995:36) shares these sentiments on an international level, and acknowledges that, in the United States of America an overall concern for continuous quality improvement on college campuses could significantly improve higher education and the satisfaction of its students and alumni.

The successful implementation of a QAS will address the recommendation of the HEQC audit report and will provide a formal methodology to assess the quality of SCs at the VUT.

1.3 OBJECTIVES OF THE STUDY

1.3.1 Primary objective

The main purpose of this study is to conceptualise an effective QAS for the quality management of SCs within the VUT by identifying components of good practices on QAS's at HEIs on national level. The implementation of a revised QAS for SCs will enhance the institution's offering of SCs, and contribute to the effective quality management of SCs at the VUT. With reference to the outcome of the national audits conducted by the HEQC (CHE 2011), many QAS's for institutions of higher learning in SA are on different levels of development. It is envisaged that this study may result in a framework for the implementation of a QAS for SCs on national level for institutions that have ineffective QAS's for SCs.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives are formulated for the study:

- To conduct a literature study on continuous quality improvement models, quality management and QAS concepts and processes
- To investigate and identify the philosophical and theoretical underpinnings of a QMS

- To conceptualise the QM and QAS of SCs within the context of higher learning.

1.3.3 Empirical objectives

The following empirical objectives were formulated to support the primary and theoretical objectives:

- To determine the characteristics of an effective QAS of SCs
- To measure good practice with regard to the QAS and QM of SCs on national level.

1.4 RESEARCH DESIGN

Research designs are plans and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell 2009:233). In order to conceptualise a QAS for SCs at VUT, the researcher conducted an in-depth literature study, followed by a quantitative data collection exercise. A survey design was adopted, and this involved the use of a questionnaire for data collection. McMillan and Schumacher (2001:602) define a survey research as the assessment of the current status, opinions, beliefs and attitudes by questionnaires or interviews from a known population. According to Cohen, Manion and Morrison (2001:169), surveys are set out to describe and to interpret ”what is”. Therefore, these characteristics of a survey are relevant to this study, as they will provide a mechanism to conceptualise SC QM practices at VUT, as well as compare systems on a national level to identify good practices. McMillan and Schumacher (2001:25) noted that educational research frequently uses surveys to describe attitudes, beliefs and opinions.

1.4.1 Literature review

A theoretical study of the different continuous improvement models and QM concepts was conducted. Policies and documents of institutions that are available on public domain were perused. Theory collected during literature

review was used to guide and inform all phases of the study. The study utilised a wide range of materials, which included textbooks on quality management, journal articles, conference papers and the Internet.

1.4.2 Empirical study

Quantitative data was collected from HEIs, with a focus on the identification of good practices, which may inform the conceptualisation of an effective QAS for SCs at the VUT. Evans and Lindsay (2002:413) define this process of benchmarking as, "measuring your performance against that of best-in-class companies, determining how the best-in-class achieve those performance levels, and using the information as a basis for your own company's targets, strategies and implementation."

A structured questionnaire was utilised as an instrument of measurement. De Vos, Strydom, Fouché and Delport (2007:166) emphasise that the basic objective of a questionnaire is to obtain facts and opinions about a phenomenon from people who are informed on a particular issue. This method will assist the researcher to examine and compare the current status with regard to QM of SCs at HEIs in SA. Closed-ended type of questions were utilised.

1.4.2.1 Target population

Creswell (2005:145) defines a target population as a group of individuals with some common defining characteristics that the researcher can identify and study. Bless, Smith and Kagee (2006:98) note that the target population is the entire set of objects or people, which is the focus of a research, and about which the researcher wants to determine some characteristics. This study was conducted within the SC and/or Quality Assurance or Quality Management offices of HEIs in SA. The majority of institutions of higher learning have dedicated officers and structures for the management, monitoring and coordination of the quality assurance of SCs. Therefore, it was possible to collect information by means of quantitative research

methods. The target population is restricted to the managers or relevant dedicated officers of the respective SCs or designated quality managers at institutions of higher learning in SA, to identify best practices on national level. All 23 universities were invited to participate in the research, including 11 traditional universities, six universities of technology and six comprehensive universities.

1.4.2.2 Sampling frame

According to Cooper and Schindler (2003:188), a sampling frame is a complete and correct list of population members only, regarded as the list of elements from which the sample is actually drawn. The sampling frame comprised a database of SCs or related quality managers, obtained from the respective human resource departments of each university.

1.4.2.3 Sampling technique

Due to the small population size, sampling was not relevant since the total population participated. De Vos *et al.* (2007:217) noted that if the researcher uses all the cases in the population it is called a census, and in this case, probability statistics were not used.

1.4.2.4 Sampling size

Huysamen (1993:50) argues that the size of the desired degree of reliability of the purpose of investigation will influence the desired degree of reliability of the purpose of investigation. Therefore, sample size can impact on the statistical test by making it either insensitive (at small sample sizes) or overly sensitive (at very large sample sizes). Within a census, the collection of data from the entire population will enable researchers to draw conclusions that are more accurate (Saunders, Lewis & Thornhill 2007:206). The size of the population is N=23. It was, therefore, practical to involve all public institutions of higher learning in SA for the purpose of data collection, therefore n=23.

1.4.2.5 Method of data collection

Twenty three (23) internet-type of questionnaires were mailed to the SC or related office of HEIs. A record was kept regarding to whom questionnaires were sent, as well as the date of distribution. Returned questionnaires were assigned an identification number, serially, as the questionnaires were returned. Quantitative information and data were collected by means of pre-coded questions. The basis of the development of the questions was attributed to the experience of the researcher as SC officer and the literature study. The responses of the pre-coded type of questions allowed the researcher to collect data that was easy to quantify and compare. Due to the small population size, no pilot study was conducted. However, to bring possible deficiencies in the measurement procedure to the fore, the questionnaire was circulated and pre-tested amongst experts in the field of quality management and SCs.

1.4.2.6 Measuring instrument

The questionnaire was divided into three sections, namely Section A, B and C. Section A mainly deals with institutional information including the profile of the respondent. Section B consists of Yes/No questions that enabled the respondents to reflect on the HEQC audit at their institution. Section C consists of a range of survey questions, which required responses on a six-point Likert scale, whereby responses ranged from strongly disagree to strongly agree. In survey research the use of scales is a useful way of measuring how respondents feel or think (Maree 2010:167). Maree (2010:167) further noted that the Likert scale is very convenient when the researcher wants to measure a construct. The Likert scale enabled the respondents to reflect on the current situation with regards to SCs at their respective institution.

1.4.3 Statistical analysis

The study used descriptive statistics to report the results. According to Saunders *et al.* (2007:138), a survey strategy allows you to collect

quantitative data, which you can analyse quantitatively using descriptive statistics. De Vos *et al.* (2007:217) noted that with census data, percentages and frequency counts are used to describe the data or show differences or similarities between groups.

1.4.4 Reliability and validity analysis

According to Maree (2010:37), researchers need to ensure that the way in which phenomena is explained is congruent with or matches reality (*inter alia* establishes the validity of the study). Scientific and responsible references to matters such as reliability and validity will demonstrate the responsible way in which the research has been conducted. As already mentioned, the researcher kept a record regarding to whom questionnaires were sent as well as the date of sending. Each returned questionnaire was numbered in order to identify the date of distribution as well as the respondent. Therefore, responses can be checked and verified.

To establish face validity, experts in the field of quality assurance, as well as the supervisor, assessed content validation of the questionnaire. The researcher made every attempt to produce findings that are valid, as well as presenting negative findings in order to add to the credibility of the study.

Reliability refers to the accuracy and precision of a measurement procedure. Sapsford (2007:107) noted that the measuring instrument should produce consistent measurements of the same thing. In this study, multiple indicators of a variable will be utilised to increase the reliability of measures. The Statistical Package for Social Sciences (SPSS), Version 20.0 for Windows, was used to analyse the captured data.

1.5 ETHICAL CONSIDERATIONS

There are very few ethical issues associated with questionnaires and other research when using the survey strategy (Saunders *et al.,* 2007:189). This is due to the nature of structured questions that are clearly not designed to explore responses and the avoidance of the in-depth interview situation,

where the ability to use probing questions leads to more revealing information. The ethical issues linked with a survey strategy are those associated with more general issues such as privacy, deception, openness, confidentiality and objectivity.

The researcher obtained permission to conduct the survey at the relevant SC or quality department of each HEI. The identity of the individual respondents remains anonymous, and findings are reported in aggregate. In addition, prior assurance was given to respondents that participation in the survey is anonymous and all responses will be kept confidential.

1.6 CHAPTER CLASSIFICATION

The study comprises the following chapters:

Chapter 1: Introduction and background to the study. This chapter provided a general overview to the study, including an introduction and background to the study. This chapter also contained the research problem, objectives of the study and research methodology.

Chapter 2: Literature review. This chapter provides a literature exploration with regard to quality management concepts, mechanisms and processes as well as continuous improvement models.

Chapter 3: Research design and methodology. This chapter describes the research process in depth, including the research design and methodology followed in the study.

Chapter 4: Data analysis and interpretation. This chapter focuses on an analysis of the data and the findings of the study. Results will be presented in accordance with a survey design.

Chapter 5: Conclusions and recommendations. In this chapter, the researcher summarises the findings of the study and presents conclusions

drawn from the study. There is also a discussion on limitations and recommendations for additional research.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The aim of the discussion in this chapter is to provide background regarding quality management, and the systems theory as the most important element that underpins quality management systems. The chapter will reflect on concepts that support the QAS of the VUT. It will provide background, not only on general quality concepts within the context of HEIs and SCs within the HEI environment, but also on the fundamental principles of Total Quality Management (TQM), and the notion of continuous improvement. According to Saunders *et al.* (2007:61), the key to writing a critical literature review is to link the different ideas found in the literature to form a coherent and cohesive argument, which is set in context and justifies research. Ary, Jacobs and Sorensen (2010:63) highlight this notion by noting that becoming familiar with theory in the field, and with previous research, prepares researchers for fitting the findings of their research into the body of knowledge in the field. Theory collected during this stage will, therefore be used to guide and inform all phases of the study, which will contribute to a better understanding of the QM of SCs within the context of HE. Relatively little research regarding the QM of SCs at HEIs has been conducted on a national, or even an international level.

As mentioned earlier in this study, systems theory underpins QMS. All HEIs are regarded as complex systems with interconnected and interdependent sub-systems.

2.2 SYSTEMS THEORY: HEIs AS SYSTEMS

According to Evans and Lindsay (2002:49), systems theory is the most important element in quality management, characterised by a holistic approach. Holtzhausen (2000:118) states that the general systems theory offers a way of focusing on the effects of the interrelationships of complex

phenomena (as parts of the system) on the system as a whole. In this research, the university is regarded as an open system with a range of interrelated and interconnected sub-systems that work together in order to achieve the institution's key priorities by means of synergy.

The systems approach is the basis of this research, since systems theory underpins the notion of integration. The effective delivery of SCs is a result of the successful integration of a number of functions on institutional level. The above-mentioned point of departure, *inter alia* the university as a system, concurs with Churchman's view (1968:11) of a system as a set of components that are linked together as internal customers and suppliers and work together for the overall objective of the whole. This viewpoint of customers in the system concurs with the principles of TQM. The latter can be regarded as a model that is customer centred.

Institutions of higher learning relate to Churchman's theory (1968:48) that every system is embedded in a larger system. This concurs with the statement of Brits (2010:44) with regard to institutions of higher learning that should not be viewed as individual separate units, but as contributing parts to the effective functioning of the whole. This "systems thinking" approach of interconnectedness of institutional functions is emphasised by the study of Griesel, Strydom and Van der Westhuizen (2002:30) who argue that the implementation of quality assurance will not easily result in transformation, accountability and improvement of the quality of higher education if each institution implements quality assurance in isolation from the others.

It is important, for the purpose of this study, to define the major concepts that will be utilised with regard to quality and quality management.

2.3 QUALITY CONCEPTS

Quality means different things to different people. The following are a few definitions on the concept 'quality' as viewed by quality professionals:

Kerzner (2006:833) defines quality as those products and services that are perceived to meet or exceed the needs and expectations of the customer at a cost that represents outstanding value. Phillip Crosby, a leading thinker in the TQM philosophy (as cited by Rao, Carr, Dambolena, Kopp, Martin, Rafii & Schlesinger 1996:43), articulated his view of quality as the following four absolutes of quality management:

- Quality means conformance to requirements
- Quality comes from prevention
- Quality performance standard is zero defects
- Quality measurement is the price of non-conformance.

In the educational setting, the HEQC (CHE 2011:12) outline the approach to quality as:

- Fitness for purpose: this refers to the ability of institutions to discharge their responsibilities in relation to their missions.
- Value for money: the efficiency and effectiveness with which institutions discharge their functions (teaching and learning, research and community engagement) in the context of their specific missions is a measure of the value society, the state and families receive from their investment.
- Transformation: in the HEQC's conceptualisation of quality, individual and social transformations are not independent of each other, nor are they different states of an evolutionary process.
- Fitness of purpose: one of the focuses of higher education reform internationally has been the achievement of a closer fit between societal needs and goals, and the work of HEIs with due regard to academic freedom and institutional autonomy.

Many organisations view the notion of customer satisfaction as being at the centre of quality management. Meyer (1998:32) refers to a QMS as a design

to manage the continuous improvement of all processes in an organisation in order to meet the expectations of the customers. This notion is supported by Gryna, Chua and DeFeo (2007:19), who noted, “managing for quality is the process of identifying and administering the activities needed to achieve the customer-driven objectives of an organisation.”

Whereas quality management encompasses all aspects of creating quality in an organisation’s core business, quality assurance is the activity of providing evidence to establish confidence in meeting quality requirements. Gryna *et al.* (2007:519) define quality assurance as all the planned and systematic activities implemented within the quality system to provide adequate confidence that an entity will fulfil requirements for quality. According to Evans and Lindsay (2002:4), quality assurance refers to any action directed toward providing customers with products (goods and services) of appropriate quality. Oakland (1998:13) defines quality assurance as the prevention of quality problems through planned and systematic activities. These will include the establishment of a good quality management system and the assessment of its adequacy, the audit of the operation of the system and the review of the system itself. Roffe (1998:75) concludes that in the United Kingdom, the purpose of quality assurance in higher education is to facilitate continuous quality improvement through the sharing of good practice and innovation.

As previously mentioned, the QMS of the VUT is based on the principles of TQM, with a strong focus on addressing the needs and expectations of the customer, *inter alia* the staff and students (as internal or primary customers), and the HEQC, government and industry. It is imperative, for the purpose of this study, to discuss the concept TQM.

2.3.1 Total Quality Management (TQM)

TQM is an integrated quality management model with generic quality management principles, techniques and processes that have been proven to

be effective and suitable for institutions of higher learning (Brits 2010:49). Willis and Taylor (1999:997) state that on international level, an increasing number of HEIs are adopting a TQM approach to enhance the institution's ability to attract and retain students by implementing processes to continually improve the quality in their core business, *inter alia* teaching and learning, research and community engagement. Gryna *et al.* (2007:10) believe that, in order to understand the TQM approach, it is important to investigate some of the theories of quality experts such as Deming and Juran, who are regarded as the two most influential thinkers behind the notion of TQM.

J.M. Juran is regarded as one of the prime architects of the quality revolution in Japan. Juran (as cited by Rao *et al.* 1996:40) expresses his approach to quality in the form of the Quality Trilogy. Managing for quality involves three basic processes:

- quality planning
- quality control
- quality improvement.

Juran's beliefs emphasise the importance of a balanced approach using managerial, statistical and technological concepts of quality.

W. Edwards Deming developed the TQM concept – a philosophy of management that is driven by competition and customer needs and expectations (Deming as quoted by Smit & Cronje 2001:51). Deming's beliefs can be regarded in terms of the following three broad philosophical categories:

- constancy of purpose
- continual improvement
- cooperation between functions.

According to Deming (as cited by Liston 1999:5), the principle for effective management of quality is improvement. In his “fourteen points”, Oakland (1998:354) emphasises the importance of staff training in order to equip them with the necessary skills to utilise (statistical) methods, which will help them to determine existing causes of error. Training of staff to utilise quality mechanisms is, therefore, important to ensure quality; they should be able to monitor their own work and act when defects are identified (Oakland 1998:354).

Oakland (1998:18) describes TQM as an approach that improves the competitiveness, effectiveness and flexibility of a whole organisation, each part must work together towards the same goals. This concurs with the systems theory of interconnected parts that operate to achieve the same goals by means of synergy. According to Theron (2002:82-90), the view of a university is one of a bureaucratic-professional organisation. It has professional decision-makers who communicate vertically on the implementation of the organisation’s written rules, standards, plans and goals. The university is an open-system that interacts with its external environment, as well as its subsystems; this interaction is central to the systems approach. This is on par with the views of Talcot Parsons and his theory of sociology as a system (as cited by Higgs & Smith 2006). According to his viewpoint, all people are constantly in communication with each other. It is therefore imperative that HEIs establish structures and systems that ensure interaction between subsystems or subunits (for example, the quality management office with the faculties and academic departments), which ensures effective communication and the achievement of mutual goals. It is also important that students should have sufficient knowledge of the institution. Effective communication to SC students, even prior to registration, is imperative. Institutions should ensure they have the necessary structures and systems in place to communicate effectively, not only to staff but also to students.

The objective of TQM is to create an organisation committed to continuous improvement. Although TQM was developed within an industrial environment, it is suitable for implementation by HEIs. Willis and Taylor (1999:1006) state that academic institutions should incorporate TQM in the core curriculum, in their administrative practices and in all operational levels. Gryna *et al.* (2007:424) further concurs with this sentiment by stating that maintaining the focus on improvement clearly requires a positive quality culture in the organisation by firstly determining the present quality culture, and then taking steps to change the culture to one that fosters continuous improvement.

The foundation on which a successful TQM effort rests includes customer focus, total participation and continuous improvement. According to Besterfield (2009:26), TQM requires six basic concepts:

- A committed and involved management to provide long-term top-to-bottom organisational support
- Focus on the customer, both internally and externally
- Effective involvement of the entire work force
- Continuous improvement of the business and production processes
- Treating suppliers as partners
- Establishing performance measures for the processes.

As mentioned previously, many institutions of higher learning on national and international level developed their QMS based on the principles of TQM (Brits 2005:1034). The TQM approach to quality management of an institution of higher learning in South Africa 'blends' with the national quality assurance body of the country, *inter alia*, the HEQC.

2.4 TQM AND THE HEQC APPROACH

2.4.1 HEQC

The South African Council for Higher Education was established to advise the Minister of Higher Education and Training on matters related to higher education, and is assisted by the HEQC, which has a quality assurance responsibility in higher education. The HEQC is a permanent sub-committee of the CHE. The HEQC defines quality assurance as the processes that ensure an institution's specified standards or requirements have been achieved (CHE 2004b:26).

The HEQC developed a national system for institutional audits on a six-year cycle, whereby quality assurance mechanisms of HEIs are audited. The HEQC is not prescriptive with regard to a national model for quality management. Institutions are therefore responsible to develop their own systems for quality. According to Brits (2005:1034), many institutions in SA implemented centralised-decentralised quality assurance systems underpinned by the principles and philosophy of TQM. The practice of internal self-evaluation and external peer review is an internationally accepted best practice in quality in higher education (ENQA 2009).

The cyclical process of continuous evaluation of programmes and the focus on remedial actions concur with the notion of continuous improvement. This is in line with international good practice and the characteristics of an effective quality management model.

2.4.2 Continuous quality improvement models

Continuous improvement is a fundamental cornerstone of TQM. The Japanese call the philosophy of continuous improvement "*kaizen*". *Kaizen* means gradual and orderly, continuous improvement, which subsumes all

business activities and everyone in an organisation (Evans & Lindsay 2002:409).

Gryna *et al.* (2007:59) regard continuous improvement as enduring efforts to act upon both chronic and sporadic problems and to make refinements to processes. For chronic problems, it means achieving better levels of performance each year; for sporadic problems, it means taking corrective action periodically. This notion is supported by Gitlow, Oppenheim, Oppenheim and Levine (2005:38), who noted within continuous improvement, "products, services and processes are improved in a relentless and continuous manner." On the international quality scene, some major universities in the United States are starting to use principles of quality improvement and customer service to students, in daily operations. As an example, the Penn State University's Integrated Model adopts Deming's systematic view of organisations in which quality stems from the comprehensive interface between suppliers, design, processes, output and customers (Hogg & Hogg 1995:40). This university has institutionalised the continuous improvement of the entire educational process by improving the competencies of incoming students, by developing curricula more responsive to customer needs and improving the effectiveness, efficiency of instruction, administrative operations and developing an effective feedback loop from customers to process. Dew and Nearing (2004:1) noted that, within the context of the academic community, continuous improvement is the body of knowledge that helps us learn how to better facilitate the learning that occurs through teaching and research.

As mentioned previously, the HEQC, which has the QA responsibility in HEIs in South Africa, state that institutions should be able to prove that they have sound systems in place for the enhancement of the quality of their core business of teaching and learning, research and community engagement. The notion of continuous improvement is imperative as a principle for ensuring the quality of an institution's core business. According to Evans and

Lindsay (2002:587), continuous improvement models were developed by quality management experts such as Shewhart, and refined by Deming. Shewhart developed the PDSA (Plan-Do-Study-Act) model. This model was adapted to PDCA (Plan-Do-Check-Act) cycle, which formed the basis for adapted models for continuous improvement such as PIRI (Plan-Implement-Review-Improve) and ADRI (Approach-Deployment-Results-Improvement).

For the purpose of this study, the following continuous improvement models (compatible with the educational setting) will be discussed: PDCA cycle, PIRI model and ADRI model.

2.4.2.1 PDCA cycle

As previously mentioned, Shewhart developed the PDCA cycle (Plan-Do-Check-Act cycle) to provide a framework for continuous improvement. Deming (as cited by Rao *et al.* 1996:201) generalised the PDCA cycle to any type of improvement activity, and made it an integral part of quality management. The following figure (Figure 2.1) illustrates Deming's view of Shewhart's PDCA cycle.

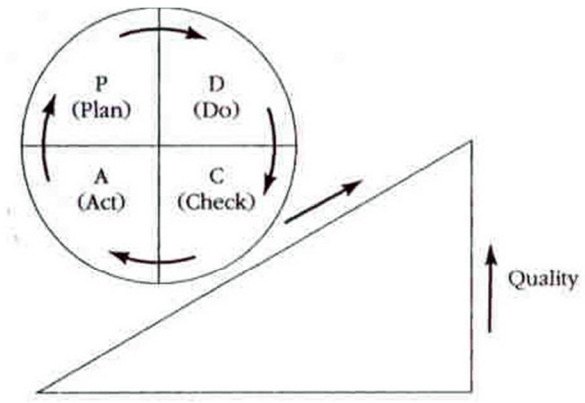

Figure 2.1: Deming's view of Shewhart's PDCA cycle (as cited by Rao *et al.* 1996:202)

The PDCA cycle is a reminder of the spiral of continuous improvement, as discussed in this study. In the Plan stage, the processes and standards are established; in the Do stage, the process is executed, then the work is Checked; and if there was a deviation from standard, Action had to be taken to correct the process (Rao *et al.* 1996:53). Through continued application of the cycle, an organisation achieves higher quality levels.

According to Brits (2010:44), the rationale for the evaluation or review of an organisation's subsystems and its functions, is to identify deficiencies and gaps in the system that should be remedied in order to reach an organisation's goals. Therefore, regular evaluations (Check-stage) should be conducted in order to ensure continuous improvement of quality, which defines an institution's quality assurance activities. Shiba, Graham and Walden (1993:57) support this idea, by noting that the PDCA principle of iteration allows a quality assurance system to make improvements in a systematic way, doing the best job possible within relatively short improvement cycles. They regard PDCA as a system for making continuous improvements to achieve ever-higher performance levels.

Thus, the PDCA cycle can be seen as the mechanism to ensure continuous improvement. The cycle is always shown as a circle to indicate the continuous nature of improvement; all types of improvement require iteration. Oakland (1998:27) refers to this process as the "helix of never-ending improvement".

As already mentioned, the PDCA cycle forms the basis for the development of adaptations of the model such as PIRI and ADRI, which are implemented not only within industry, but also with great success by institutions of higher learning.

2.4.2.2 PIRI model

The PIRI model is an adoption and adaption of the PDSA and PDCA models. Many international universities, such as the Griffith University (2008:1) utilise the Plan-Implement-Review-Improve (PIRI) model. An overall framework for quality assurance, based on this model, underpins the management of quality processes and outcomes at Griffith University. The PIRI model consists of the following elements:

P – Reflection on policies, goals and aims, vision, mission, strategies, budgets, reflection on audit recommendations

I – Implementation of above-mentioned plans/processes

R – Internal cycle of self-evaluation, external moderation

I – Adjustments in order to remedy deficiencies, which lead to improvements (for example, remedial action plans and processes).

Brits (2010:244) reported that the PIRI model is more relevant in a higher education environment in comparison with the PDCA model, and refers to the "check" phase of the PDCA model, which is replaced with "review". He is of the opinion that the concept "check" is more relevant to an industrial context and may create the illusion of "managerialism" within the context of higher education. "Act" is replaced with "Improvement"; the latter represents the adjustment and remedial action phases of the model, and is therefore a better description of this dimension (Brits 2010:244). Figure 2.2 illustrates the PIRI model for continuous improvement.

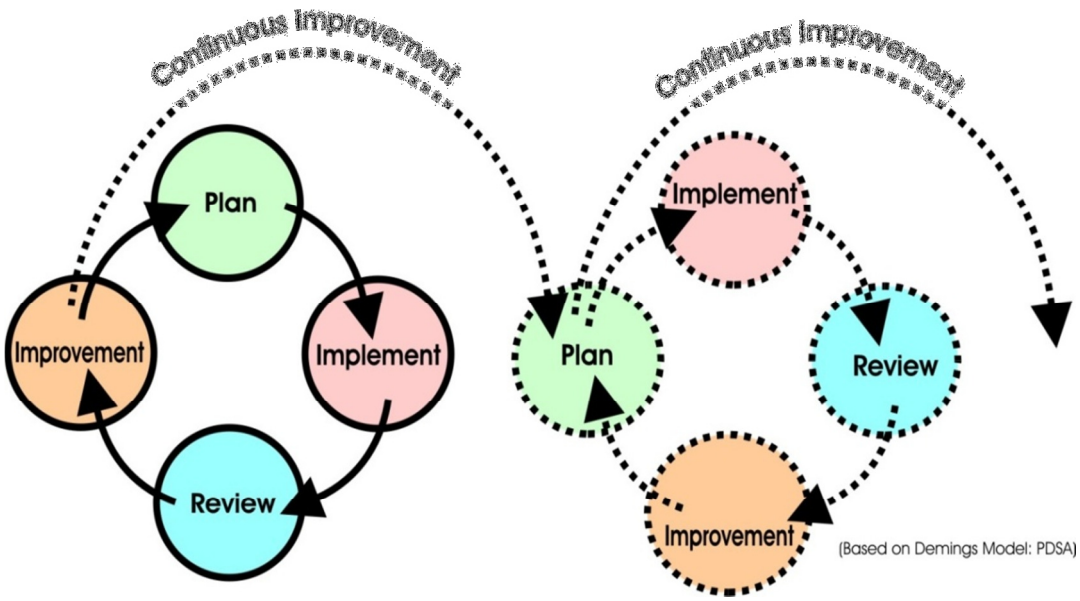

Figure 2.2: The PIRI Model for continuous improvement (Brits 2007:12)

Another adaptation of the PDCA, which is suitable for the implementation of higher education institutions, is the ADRI model.

2.4.2.3 ADRI model

The Approach-Deployment-Results-Improvement (ADRI) model, when applied to any university activity, supports a systematic and continuous cycle of improvement, which also correlates with the phases of the PDCA model. The ADRI model consists of the following dimensions:

A – Approach: thinking and planning

D – Deployment: also known as 'implementation' or 'process'

R – Results: every goal must have a reported result and every result should link back to a goal; monitoring and evaluating

I – Improvement: increasing success by means of more efficient and effective processes; goals should be continually set higher; learning/reflecting and adapting

As mentioned previously, continuous improvement is the driving force of sound quality management systems. It is, therefore, imperative for HEIs to

develop and implement a QAS that are based on cyclical processes of ongoing improvement, such as the PDCA, PIRI and ADRI models, discussed above.

In order to meet the purpose of this study of conceptualising QMS's for SCs at HEIs in South Africa, the major concepts with regard to quality management were discussed. The following is a concise reflection on SCs within the context of higher education.

2.5 SHORT COURSES

The provisioning of a wide range of courses and programmes, which fall outside the provision of formal qualifications, is a long tradition within HEIs throughout the world. Institutions refer to these activities as, amongst others, 'lifelong learning', 'continuing education', and 'short learning programmes'. Gravett and Geyser (2008:8) regard lifelong learning as the ability to learn on an ongoing basis, often outside formal educational structures, and at the same time receiving credits for that learning in the form of qualifications.

Meyer and Botha (2004:177) define the NQF as a set of principles and guidelines by which records of learner achievement are registered in order to obtain national recognition of acquired skills and knowledge, thereby ensuring an integrated system that encourages lifelong learning. The NQF makes it possible for individuals to have learning accredited in fairly small units, which can be "banked" until these units form part of a qualification, which can be carried to another institution, should the need arise. The aim of the NQF quality assurance systems is continuous improvement of learning provision practices, and alignment with the NQF's quality, outcomes-based training and assessment practices (Coetzee, Botha, Kiley & Truman 2007:315).

According to SAQA (2004:5), SC provisioning is associated with 'just in time' and 'just enough' learning to meet a specific need in workplace

environments. It is associated with continuing professional development, and also where learners require a targeted short learning programme to upgrade skills and knowledge. Coetzee *et al.* (2007:120) concur with this statement; they formulated short learning programmes as programmes that are comprised of a series of structured learning activities or events, intended to equip learners with the applied competence needed to fulfil a particular occupational role. Short courses and skills programmes are included in the concept of short learning programmes (SAQA 2004:11).

2.5.1 Short course provisioning

In 2000, SAQA initiated the recording of SCs to enable SC providers to be brought into the standards-setting and quality-assurance processes set up for the education and training system as a whole (SAQA 2004:7). A SC can be either credit-bearing or non credit-bearing. A credit-bearing SC is a type of short learning programme for which credits, in relation to the course's contribution to a unit standard and/or qualification, are awarded (SAQA 2004:14). A credit-bearing SC usually contains less than 120 credits. No credits are awarded for non credit-bearing SCs; the course is therefore, too short in terms of notional hours to meet the minimum requirements for one unit standard. Notional hours refer to the number of hours expected for a learner to spend towards the completion of the specified unit standards. These hours include contact time (teaching and learning) and non-contact time (learners' own work) (Gauteng 2012). In November 2001, the recording of SCs by SAQA ended, and since then all SC providers have been referred to the relevant ETQA to initiate their accreditation processes. As a result, the HEQC had oversight responsibility for quality assurance arrangements of SCs. It was, therefore, a delegated function of HEIs to maintain the quality management of SCs (*cf.* 1.1). In 2012, the CHE informed HEIs that this arrangement no longer held, and SCs currently form part of the implementation of the different quality assurance frameworks of the HEQC (Hay 2012). It is therefore still imperative for HEIs to develop and maintain effective QMS for SCs.

2.5.2 Impact of Skills Development Act on SC provisioning

The National Skills Authority (NSA) was set up to advise the Minister of Labour on policies and strategies for the new skills-building system (Coetzee *et al.* 2007:31). There are two important organisations responsible for implementing skills development. The first is the Department of Labour and the second is all the Sector Education and Training Authorities (SETAs). The SETAs cover every industry and occupation and their main function is to contribute to the development of skills (Botha *et al.* 2007:32).

The Skills Development Levies Act (9 of 1999) aims to promote skills development by means of a levy on the wage bills of all employers (RSA 1999). Funds raised as a result of the levy are then channelled into national skills development by means of the SETAs. The National Skills Fund will receive 20 percent of the levy and organisations will be able to claim for financing for up to 80 percent of the levy, less the set-up and running costs of the SETA (Du Toit, Erasmus & Strydom 2010:345). Providers of SCs are increasingly subjected to pressures created by employers for registration and accreditation as providers, in order to effect the repayment of a percentage of the levy grant (as per the Skills Development Levies Act) by SETAs (SAQA 2004:9). The implementation of the Skills Development Act, therefore, remains a key objective for the quality assurance of SC provisioning at institutions of higher learning.

2.5.3 Short course quality systems

The HEQC initially delegated the development, implementation and maintenance of QM of SCs to the respective providers of higher education. As from 2012, SCs (a previously delegated function – *cf.* 1.1) now form part of institutional audits conducted by the HEQC. Therefore, each HEI should conceptualise an effective QAS for the quality management of SCs. It is understood that each SC on offer must provide evidence of the QMS being in place. The systems should cover arrangements for quality assurance, quality

improvement and quality monitoring and evaluation. The HEQC furnished the institutions of higher learning with appropriate directives and procedures for the assessment of the effectiveness of their internal mechanisms in relation to the quality assurance of SCs (CHE 2008). The purpose of this document, HEQC Framework for Delegated Functions, was developed for institutions that have "strong internal quality systems" (CHE 2008:ii) to have the functions such as the offering of SCs, delegated as an institutional responsibility. This document stipulates criteria and minimum requirements for SCs. The quality assurance for SCs should include provision and planning of SCs, which includes factors such as the availability of staff capacity to offer SCs, the delivery costs of SCs, and the ability to recover the costs through fees and other revenue sources (CHE 2008:13).

The HEQC requires institutions that offer SCs to keep a register in place, which outlines the purpose, nature and status of SCs. "Such a register shall include course title and code, statement of purpose; outcomes; credit bearing status; admission requirements; assessment criteria and methods; teaching and learning strategies; coordination and delivery, including the venue, fees and other financial information as well as certification rules and procedures which clearly distinguish between certificates of competence and certificates of attendance" (CHE 2008:14). The integrity of the learner records and certification processes, and the monitoring responsibility with regard to these arrangements, should be clearly allocated and acted upon (CHE 2008:14). This includes effective mechanisms that ensure the integrity of learner records, quality assurance of certificates and avoidance of possible fraud or illegal issuing of certificates. The HEQC (CHE 2008:15) requires institutions to implement effective mechanisms that will ensure, with regard to the integrity of records, that certificates are signed by "appropriate levels of accountability".

The VUT's Quality Promotion Unit (QPU) developed a centralised-decentralised QAS. The QPU is responsible for the development of the

institution's QAS and for the facilitation and coordination of all quality assurance activities. The QPU oversees the quality assurance activities and monitors the progress with regard to remedial action plans on operational level. It also feeds management information to all institutional levels (operational, tactical and strategic) for planning and resource allocation purposes. The QAS of the VUT is based on internal self-evaluation and external monitoring, which is an internationally accepted best practice in quality management in higher education (Brits 2005:1034).

It is the responsibility of each institution of higher education to develop and implement a sound QAS for the offering of SCs. It is, therefore, imperative that universities develop a conceptual framework on the QM and QA of SCs. As already mentioned (*cf.* 2.3.1), the management of SCs at institutions of higher learning involves processes such as planning, control and improvement. The HEQC clearly states in their criteria document for delegation of the quality management of SCs that "an integrated institutional strategic planning framework and process for the provision of both whole qualifications and short courses" (CHE 2008:13) is required from providers. Therefore, institutions should take into account during planning, the factors that are identified during an institution's quality assurance activities. There should be an integration of information gathered during the quality assurance processes, which feeds into planning on all institutional levels. Data that are valuable quality management information includes availability of staff capacity to develop and offer the courses; "the impact of offering short courses and the quality of the services provided to students as well as the administrative capacity at all levels" (CHE 2008:13).

Policies and mechanisms should be in place for recording and quality assurance of SCs, which should be "widely known at the institution" (CHE 2008:13). These mechanisms include the development, implementation, monitoring and refinement of SC policies and procedures. This concurs with the statement of Gryna *et al.* (2007:256) with regard to the purpose of a

quality policy as “a broad guide to action”. The HEQC (CHE 2008:13) requires from institutions to have clear arrangements for the approval of the offering of SC programmes. The approval processes should be on par with that of the approval of institutional academic programmes. This should be the responsibility of an appropriate unit or governance structure (such as the senate) of the institution (CHE 2008:13).

For the purpose of this study, the continuous evaluation of the implementation of a SC policy is imperative. This takes place during the R-Review or C-Check phase of the above-mentioned PIRI/PDCA continuous improvement process (*cf.* 2.4.2.1 and 2.4.2.2). This review process is imperative, as it informs the adjustment (I-Improvement or A-Act phase) of the policy and the data gathered during the evaluation process informs the planning or re-planning phase (P-planning). Therefore, the monitoring of the SC policy implementation at an institution of higher learning is an important quality assurance mechanism to enhance the quality of SC delivery.

The aim of this study is to conceptualise the QM and QA of SCs at HEIs. A benchmarking exercise will, thus be conducted in order to measure good practice with regard to the QA and QM of SCs on national level. A comparison of a range of SC processes, activities and practices with HEIs will be done with a view to identify best practices.

2.6 CONCLUSION

From this literature overview it can be concluded that within the context of higher education, systems theory underpins all quality management systems; all the people and all the functions (*inter alia,* subsystems) are integrated in a holistic manner, in order to achieve the institution’s vision, mission and key priorities. From a quality management point of view, this chapter shows how important the interaction and integration of different institutional subsystems are, to enhance the quality of SCs. The development of a QMS on institutional level, based on the notion of ongoing improvement, is imperative.

According to the literature study, the TQM approach, which has its origin in the industrial environment, can be adopted and adapted with success, by institutions of higher learning. TQM is a customer-centred approach. The foundation on which a successful TQM effort rests includes customer focus, total participation and continuous improvement. Since the HEQC stated that institutions should develop their own systems for quality, many institutions in South Africa implemented centralised-decentralised QAS's that are underpinned by the principles and philosophy of TQM (Brits 2005:1034). As a result, institutions developed the practice of internal self-evaluation, and external peer review is an internationally accepted best practice in quality in higher education. The cyclical process of continuous evaluation of programmes and the focus on remedial actions concur with the notion of continuous improvement. The following continuous quality improvement models (compatible with the educational setting) were discussed: PDCA cycle, PIRI model and the ADRI model. The study concluded that the PIRI and ADRI models are more relevant in a higher education environment. These models depict the cyclical process of ongoing improvement.

The research focuses on short course provisioning, which is associated with continuing professional development and upgrading of skills and knowledge. The implementation of the Skills Development Act pressurised providers of SCs to obtain registration and accreditation as providers. Therefore, the quality assurance of SC provisioning remains a key objective of HEIs.

This chapter also outlined the importance of the HEQC Framework for Delegated Functions document (CHE 2008) which stipulates criteria and minimum requirements for the quality management of SCs at HEIs.

In the next chapter, an overview is provided of the research design and methodology used in the study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter will describe the research process in depth, including the research design and methodology that was followed. The purpose of a research design is to specify a plan for generating empirical evidence that will be used to answer the research questions (McMillan & Schumacher 2006:22). Cooper and Schindler (2003:146) assert that the research design constitutes the blueprint for the collection, measurement and analysis of data. They regard the design as an activity- and time-based plan, which is always based on the research question. There are several types of research designs, namely quantitative, qualitative and multiple method research approaches (Saunders *et al.* 2007:145). In this study, quantitative and qualitative approaches are suitable methods and will be discussed.

3.2 RESEARCH APPROACH: QUANTITATIVE AND QUALITATIVE

Research methodology focuses on the process of research and the decisions that the researcher has to take to execute the research project (Brynard & Hanekom 2006:36). Two methodologies are of importance in all scientific investigation; quantitative methodology and qualitative methodology.

Maree (2010:8) defines quantitative research as a process that is systematic and objective in its ways of using numerical data from only a selected subgroup of a universe (or population) to generalise the findings to the universe that is studied. The quantitative category includes experiments, surveys and content analysis (De Vos *et al.* 2007:133). Qualitative methodology refers to research that produces descriptive data – generally the participant's own written or spoken words pertaining to their experience or perception (Brynard & Hanekom 2006:37). According to Coldwell and

Herbst (2004:13), as a general rule, information is considered qualitative in nature if it cannot be analysed by means of mathematical techniques.

In this study, data collection was conducted by means of a quantitative research method. A survey design was employed, which involved the use of a questionnaire as data collection method. Brynard and Hanekom (2006:37) explain that quantitative research requires methods such as surveys to describe and explain phenomena. The methods could include techniques such as quantitative analysis and questionnaires. Surveys provide an opportunity to examine correlations among the participants' responses and to look for possible patterns of cause and effect (McBurney & White 2007:237). Cresswell (2005:354) noted that survey research designs are procedures in quantitative research in which investigators administer a survey to a sample, or to the entire population of people, in order to describe the attitudes, opinions, behaviours or characteristics of the population.

The above data collection method will assist the researcher, not only to conceptualise QM of SCs at HEIs, but also to benchmark the current status with regard to the QM of SCs on national level. From an industrial point of view, Evans and Lindsay (2002:413) define benchmarking as "measuring your performance against that of best-in-class companies, determining how the best-in-class achieve those performance levels and using the information as a basis for your own company's targets, strategies and implementation." Through benchmarking, an institution discovers its strengths and weaknesses and learns how to incorporate the best practises into its own operations. Therefore, this study utilises benchmarking to conceptualise the notion of best practices with regard to the QM of SCs on national level. Benchmarking in this study will inform the researcher's understanding of the notion of QM of SCs.

The following section will discuss sampling design procedures.

3.3 SAMPLING DESIGN PROCEDURE

3.3.1 Target population

Powers, Meenaghan and Toomey (1985:235) define a population as a set of entities representing all the measurements of interest to the researcher. McBurney (2001:248) refers to the population as the sampling frame. A population is the totality of persons, events, organisation units or sampling units with which the research problem is concerned. Creswell (2005:145) further defines a target population as a group of individuals with some common defining characteristics that the researcher can identify and study. Spata (2003:13) noted that the target population is a set of all the people or subjects the researcher is interested in knowing about, and from which the sample is selected.

This study was conducted within the SC and/or Quality Assurance or Quality Management offices of HEIs in SA. The majority of HEIs have dedicated officers and structures for the management, monitoring and coordination of the quality assurance of SCs. It was, therefore, possible to collect information from relevant and informed institutional staff members by means of quantitative research methods. The target population was restricted to the managers or relevant dedicated officers of the respective SC office or designated quality managers at institutions of higher learning in SA, to identify best practices on national level. The study focusses on the QAS of SCs, therefore, in the absence of a dedicated SC staff member at an institution, the quality manager or a related functionary were requested to complete the research survey questionnaire. All 23 universities were invited to participate in the research, including 11 traditional universities, six universities of technology and six comprehensive universities.

3.3.2 Sampling frame

Dillman, Smyth and Christian (2009:42) refer to a sample frame as the list from which a sample is to be drawn in order to represent the survey population. According to Cooper and Schindler (2003:188), a sampling frame is a complete and correct list of population members only, and regarded as the list of elements from which the sample is actually drawn. Hair, Lukas, Miller and Ortinau (2008:238) further noted that the sample frame is a list of all eligible sampling units related to the population. The sampling frame for this study comprised of a database of SCs or related quality managers, obtained from the respective human resources departments of each university.

3.3.3 Sampling technique

Due to the small population size, sampling was deemed not relevant, since the total population participated. De Vos *et al.* (2007:217) noted that if the researcher uses all the cases in the population it is called a census, and in this case, probability statistics were not used.

3.3.4 Sampling size

According to Malhotra (2004:318) sample size refers to the number of elements to be included in the study. Huysamen (1993:50) argues that the size of the sample will be influenced by the desired degree of reliability of the purpose of investigation. Therefore, sample size can impact on the statistical test by making it either insensitive (at small sample sizes) or overly sensitive (at very large sample sizes). Within a census, the collection of data from the entire population will enable researchers to draw conclusions, which are more accurate (Saunders *et al.* 2007:206). The size of the population was N=23. It was therefore practical to involve all public institutions of higher learning in SA for the purpose of data collection; therefore, n=23.

3.3.5 Method of data collection

Wegner (2008:25) noted that the questionnaire is a data collection instrument used to gather primary data in all survey-based studies. Kent (1993:62) asserts that the questionnaire is a data capture instrument, which lists all questions a researcher wishes to address to each respondent and provides space or some mechanism for recording the responses.

There are various ways to apply questionnaires. De Vos *et al.* (2007:167) outlined the following different types of questionnaires:

- Mailed questionnaires
- Telephonic questionnaires
- Self-administered questionnaires
- Questionnaires delivered by hand and
- Group-administered questionnaires.

This study used mailed questionnaires. Grinnell and Williams (cited in De Vos *et al.* 2007:167) describe a mailed questionnaire as a questionnaire, which is mailed in the hope that the respondent will complete and return it. Twenty-three (23) questionnaires were mailed to the SC or related offices of HEIs. The researcher takes cognisance of the advantages and disadvantages of using questionnaires in research in order to minimise data errors.

3.4 THE QUESTIONNAIRE

3.4.1 Advantages and disadvantages of questionnaires

According to Brynard and Hanekom (2006:46), the advantage of questionnaires is that respondents have time to think about the answers to the questions. Moreover, a large number of respondents, distributed over a large geographical area, can be reached. Coldwell and Herbst (2004:48) and Kidder (1981:148) stated that questionnaires are inexpensive to administer,

can be completed anonymously and are easy to compare and analyse. An added advantage is that respondents can check personal records if necessary (Maree 2010:157). The utilisation of questionnaires for the purpose of this study is therefore appropriate for the following reasons:

- The respondents are distributed over a large geographical area (universities are situated in the following provinces: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Western Cape, North West Province and Limpopo).
- This research was conducted with limited financial support and resources.
- Given the sensitivity of certain questions, which might influence the response of the respondent, it was advisable to utilise questionnaires as a mechanism to collect information anonymously.

The disadvantage of questionnaires is that the researcher is not on hand to explain uncertainties, which may result in biased or distorted answers by the participant (Brynard & Hanekom 2006:46). More challenges, as posed by Coldwell and Herbst (2004:48), are that the questionnaires are regarded impersonal instruments, the researcher does not get the full story and surveys might need a sampling expert. Maree (2010:157) further expresses that low response rates are very common with questionnaires and that the respondent can give the questionnaire to someone else to complete. The researcher is of the opinion that the respondents are professional SC administrators or quality managers of institutions of higher learning; therefore, the possible need to clarify questions is limited.

3.4.2 Constructing the measurement questions

Cooper and Schindler (2003:364) suggest that four questions should guide the researcher in selecting appropriate question content:

a. Should this question be asked? Will it contribute significantly towards answering the research question?

b. Is the question of proper scope and coverage? A question is regarded as inadequate if it does not provide the information you need to interpret responses fully.
c. Can the participant adequately answer this question, as asked? Respondents should have the necessary knowledge and understanding of concepts used in the questionnaire.
d. Will the participant willingly answer this question, as asked? Questions should be asked in such a way that the respondents will be willing to answer, and topics regarded as 'too sensitive' will not be asked.

Theory gathered during the literature review was used to guide the development of a questionnaire in order to understand the current situation with regard to SCs at HEIs with reference to chapter one (*cf.* 1.1). Some of the questions in Section C of the questionnaire were informed by the minimum standards and requirements of the HEQC (CHE 2008) which the researcher regards as good practice for the QM of SCs at HEIs. The questions in Section C that are not directly linked to the abovementioned requirements, reflect on institutional procedures and systems for the quality management and assurance of SCs, which are valuable for informing the researcher's conceptualisation of a QMS for SCs in HEIs. Furthermore, the experience of the researcher as SC officer also informed the development of the questions. An example of the questionnaire is attached as Annexure B.

3.4.3 Structure of questionnaire

A covering letter accompanied all questionnaires on the VUT's official letterhead (see Annexure A). De Vos *et al.* (2007:170) express that in all circumstances; a covering letter must be an integral part of the questionnaire and may constitute the first page of the questionnaire. Saunders *et al.* (2007:382) further stress the importance of a covering letter by mentioning that a good covering letter will affect response rates and response accuracy. An example of the letter is attached as Annexure A.

The questionnaire was divided into three sections.

Section A dealt with institutional information including the profile of the respondent and covered aspects such as, position held in the department, work experience, a description of the respective SC or quality office and the university at which the participant is employed.

Section B consisted of Yes/No questions that enabled respondents to reflect on the HEQC audit at their institution.

Section C contained a range of survey questions. These questions seek to obtain the views or perceptions of respondents on the quality management aspects of SCs, within their respective department. According to McBurney and White (2007:238), survey questions can be divided into two basic categories: open-ended and closed-ended. An open-ended question permits the respondents to answer in their own words. A closed-ended question limits the respondents to alternatives determined in advance by the questionnaire's designers. This study utilised closed-ended questions. McBurney and White (2007:239) outline the following advantages and disadvantages of closed-ended questions. Closed-ended questions are easier to code and analyse, and there are fewer off-the-wall responses. The respondents do not need to be as articulate to formulate their answers as they do with an open-ended question. Some of the disadvantages are that the issues being studied may be too complex to reduce to a small set of alternatives, or the respondent may not agree with any of them, resulting in simplistic answers. Babbie and Mouton (2001:233) remarked that a typical questionnaire will probably contain as many statements as questions, especially if the researcher is interested in determining the extent to which respondents hold a particular attitude or perspective.

In Section C, the participant's views were noted on a six-point Likert rating scale, in order to facilitate capturing of levels of responses (see Appendix B).

An advantage of Likert-type items is that points can be assigned to the various responses, and thus measures of central tendency, variability, correlation and the like, can be calculated (Ary *et al.* 2010:393). Maree (2010:167) points out that a Likert scale provides an ordinal measure of a respondent's attitude.

3.4.4 Administering the questionnaire

A record was kept regarding to whom questionnaires were sent, as well as the date of distribution. As completed questionnaires were returned, each one was assigned an identification number. Babbie (2008:287) noted that these numbers should be assigned serially, as the questionnaires are returned. Quantitative information and data were collected by means of pre-coded questions. The responses to the pre-coded type of questions allowed the researcher to collect data, which is easily quantified and compared.

3.4.5 Pre-testing the questionnaire

A pilot study was not conducted, due to the small population size. As previously mentioned in this study, the researcher worked for many years with peers in the SC environment of HEIs. It was, therefore, relatively easy to circulate, as a pre-test exercise, the draft questionnaire to experts in the field. This exercise focused on content validation of the questionnaire in order to establish face validity. This process eliminated irrelevance and other possible technical errors. The refined draft was re-submitted to the critical readers for their perusal and final comments.

The next session will discuss the preliminary data preparation procedures undertaken for this study prior to statistical analysis.

3.5 DATA PREPARATION

Before data can be analysed, they have to be prepared. According to Coldwell and Herbst (2004:96), data preparation ensures that the data are accurate and that they are converted from a raw form to a classified or

reduced form for appropriate analysis and interpretation. Kumar, Aaker and Day (2004:356) support this notion by describing that the raw data obtained from the questionnaires must undergo preliminary preparation before they can be analysed using statistical techniques that involve editing the data, coding responses into categories and tabulating responses into frequencies or tables. Hair *et al.* (2008:392) assert that data preparation is regarded as a process of converting data from a questionnaire into a format that can be analysed. Generally, there are three processes involved in data processing, namely editing, coding and tabulation (Coldwell & Herbst 2004:97).

3.5.1 Editing

Editing detects errors and omissions, corrects them when possible, and certifies that minimum data quality standards have been achieved. The editor's purpose is to guarantee that data are accurate, consistent, uniformly entered, complete and arranged to simplify coding and tabulation (Cooper & Schindler 2003:455). Two types of editing are identified, namely field editing and central editing.

3.5.1.1 Field editing

Coldwell and Herbst (2004:97) assert that the field edit occurs as soon as possible after administering the questionnaire. They note that questionnaires must be checked for completeness, legibility, comprehensibility, consistency and uniformity. In this study, the field edit was conducted as soon as the questionnaire had been administered, and before thanking the respondents for their participation. The researcher undertook the field editing. The respective respondents in the SCs or quality assurance environment answered all questions.

3.5.1.2 Central editing

Loubser, Martins and Van Wyk (1996:299) remarked that central editing is a more thorough scrutiny of the questionnaires done by the researcher. To ensure consistency of treatment, it is best if one individual handles all the

completed instruments (Coldwell & Herbst 2004:97). Due to the small population size, the researcher herself handled the central-office edit. This approach is supported by Cooper and Schindler (2003:456) who noted, “in a small study research, the use of a single editor produces maximum consistency.”

3.5.2 Coding

Wegner (2008:131) asserts that each questionnaire must be carefully scrutinised to ensure all categorical (fixed-response) responses are coded and have a valid code. Coding is the name given to the procedure whereby complex descriptions are broken into simpler meanings and are allocated a code, usually a number (Bradley 2007:329). Cooper and Schindler (2003:456) explain that coding involves assigning numbers or other symbols to answers, in order to group the responses into a limited number of classes or categories. For the current study, a six-point Likert scale was used where ‘strongly agree’ was coded six, and ‘strongly disagree’ was coded one.

3.5.3 Tabulation

Tabulation is a process of counting the number of cases that fall into various categories (Coldwell & Herbst 2004:101). In this study, computer tabulation was utilised. The statistical analysis package used is the Statistical Package for the Social Sciences (SPSS, Version 20.0 for Windows). The advantage of using a package like SPSS, is that it will enable a person to score and to analyse quantitative data very quickly and in many different ways (Bryman & Cramer 2009:21).

The next section deals with ethical issues pertaining to the study.

3.6 ETHICAL ISSUES

Ethics comprise norms or standards of behaviour that guide moral choices about our behaviour and relationships with others. The goal of ethics in research is to ensure that no one is harmed or suffers adverse

consequences from research activities (Cooper & Schindler 2001:112). Maree (2010:41) notes that an essential ethical aspect is the issue of the confidentiality of the results and findings of the study and the protection of the participants' identities. In this study, letters of consent were obtained for permission to conduct the survey at the relevant SC or quality management departments of each HEI (see Annexure C). The respondents received prior assurance that participation in the survey is anonymous and all responses will be kept confidential. Another important ethical issue is the right to full disclosure about the research. Mouton (2001:244) notes that the aims of the investigation should be communicated as fully as possible to the informant. There is an obligation to reflect on the foreseeable repercussions of research, and publication on the general population being studied. The covering letter addressed to each participant outlined the anticipated consequences of the research, in this study (Appendix A).

3.7 STATISTICAL ANALYSIS

According to De Vos *et al*. (2007:218), analysis means the categorising, ordering, manipulating and summarising of data to obtain answers to research questions. The purpose of analysis is to reduce data to an intelligible and interpretable form so that the relations of research problems can be studied, tested, and conclusions drawn.

3.7.1 Types of quantitative data

Researchers wanting to use quantitative data need to understand what kind of data they are working with to appreciate the possibilities and limitations associated with that particular kind of numerical data. Denscombe (2007:255) differentiate amongst the following types of quantitative data: nominal, ordinal, interval, ratio, discrete and continuous data. For this study, ordinal data was utilised. Ordinal data are based on counts of things assigned to specific categories, which stand in some clear, ordered, ranked relationship (Denscombe 2007:255). This means that the data in each category can be compared with the data in the other categories as being higher or lower than

those in the other categories are. Denscombe (2007:255) further noted that the most obvious example of ordinal data comes from the use of questionnaires in which respondents are asked to respond on a Likert scale. With ordinal data, one does not know the cause of the order, or by how much they differ. Maree (2010:167) asserts that the Likert scale provides an ordinal measure of a respondent's attitude. In this study, six response categories were used where respondents could reflect whether they agree or disagree with a statement.

3.7.2 Descriptive statistics

Descriptive statistics can be divided into a way of representing or describing data, either graphical, numerical or through tabulation (Anderson, Sweeny & Williams 2000:12). Saunders *et al.* (2007:434) also noted that descriptive statistics enable a researcher to numerically describe and compare variables.

Tustin, Ligthelm, Martin and Van Wyk (2005:523) assert that the most fundamental of these techniques is the construction of frequency distribution and other techniques, which include measures of central location, measures of variability and measures of skewness and kurtosis. For the purpose of this study, frequency distribution was used for Section C of the questionnaire.

3.7.2.1 Frequency distribution

De Vos *et al.* (2007:222) indicate that the simplest form of data analysis is univariate (one variate at a time) analysis. This means that all the data gathered on one variable need to be summarised for easy comprehension and utilisation. This summary can take on different forms, such as a tabular or graphic display, or visual representation of the data. This display provides useful information to the researcher in and of itself, and provides the foundation for more sophisticated analysis at a later stage.

The first, most elementary type of summary and display of data collected on one variable is the frequency distribution. Nardi (2006:128) notes that a

frequency table or distribution shows how often the respondents to each item (a variable) gave each response (a value). A frequency table is therefore, a simple device for arraying data (Cooper & Schindler 2003:488).

A variety of frequency distributions exists: simple frequency distribution; grouped frequency distributions for continuous data; relative frequency distribution; and cumulative frequency and percentage distributions.

For the purpose of this study, the cumulative frequency and percentage distributions were utilised. According to De Vos *et al.* (2007:226) situations occasionally arise where the concern is not with the frequencies themselves, but rather with the number of percentage of values “greater than” or “less than” a specified value. The cumulative frequencies are obtained by adding the individual frequencies successively. The same data can also be presented using a bar chart or a pie chart. According to Cooper and Schindler (2003:488), the values and percentages are more readily understood in graphic format and visualisation of the sector categories, and their relative sizes is improved.

The cumulative percent is useful only for ordinal or interval/ratio measures, since it requires that the values accumulate in some order (Nardi 2006:129).

3.7.3 Tests of significance

Tests of statistical significance have been developed to ascertain whether the results obtained by data analysis are statistically significant. These tests are usually performed on either the 0.05 or the 0.01 level of significance (De Vos *et al.* 2007:242).

In selecting a significance test, one needs to know, at a minimum, the number of samples, their independence or relatedness, and the measurement level of the data (Cooper & Schindler 2003:557). Statistical

tests include the Z and t-tests, analysis of variance and the Chi-square. In this study, analysis of variance were utilised for Section B.

3.7.3.1 Analysis of variance (ANOVA)

This technique (also referred to as ANOVA) is used when there are more than two dependent groups that need to be compared on a single quantitative measure or score (Maree 2010:229). This technique will therefore, test whether groups have different average scores. In this study, the three different types of HEIs (traditional universities, comprehensive universities and universities of technology) were tested for significant differences. The indicator used in ANOVA to determine statistical significance is the *F*-ratio (Bordens & Abbott 2011:443). *F* is calculated as the mean explained sum of squares, divided by the mean residual sum of squares (Sapsford 2007:199).

If the predicted outcome was not achieved in the ANOVA, then an alternate was sought using a post hoc test. According to Field (2009:372), post hoc tests consist of pairwise comparisons designed to compare all different combinations of the treatment groups.

The next section will outline the reliability and validity of measures.

3.8 RELIABILITY AND VALIDITY

3.8.1 Reliability

Litwin (1995:6) defines reliability as a statistical measure of how reproducible the survey instrument's data are. Panter and Sterba (2011:129) further define reliability as the consistency of measurement instrument scores across replications of the measurement procedure. Denscombe (2010:144), who noted that reliability relates to the methods of data collection and the concern that they should be consistent and not distort the findings, supports this

notion. Neuman and Kreuger (2003:179) suggest the following procedures to increase the reliability of measures:

- Clearly conceptualise all constructs. In this study, each measure indicates only one specific concept.
- Increase the level of measurement. Indicators at higher levels of measurement are more likely to be reliable than less precise measures, because the latter pick up less detailed information.
- Use multiple indicators of a variable. In Section C of this study's measuring instrument, two or more questions (indicators) were used to measure each aspect of a variable.
- Use pre-tests, pilot studies and replications. With reference to this study, a preliminary version of the questionnaire was tested before applying the final version.

3.8.2 Validity

Validity concerns the accuracy of the questions asked, the data collected and the explanations offered (Denscombe 2010:143).

Several types of validity are typically measured when assessing the performance of a measuring device: face, content, criterion and construct. In the current study face validity and content validation were used to measure validity.

3.8.2.1 Face validity

According to Litwin (1995:35), face validity is based on a cursory review of items by untrained judges, and is a much more casual assessment of item appropriateness. Bordens and Abbott (2011:133) attest that face validity describes how well a measurement instrument appears to measure what it was designed to measure. The supervisors and colleagues assessed the face validity of the questionnaire used in this study by reviewing and commenting on the coverall construction thereof.

3.8.2.2 Content validity

Litwin (1995:35) describes content validity as a subjective measure of how appropriate the items seem to a set of reviewers who have some knowledge of the subject matter. Experts in the field of quality assurance assessed content validity of this study's questionnaire. Although content validity is not quantified with statistics, it is presented as an overall opinion of a group of informed experts.

3.9 CONCLUSION

In this chapter, the research design was discussed in depth, with reference to relevant research methodologies and how they are utilised in this study in order to reach the research objectives. A quantitative approach was utilised whereby quantitative data were collected from HEIs in order to identify universities that have effective QA systems for SCs.

Concepts such as target population, sampling methods, sampling frame, sample size and the data collection method were discussed, as well as their relevancy and how they were implemented in the empirical study in order to reach the research objectives.

Statistical analysis and the components thereof were also discussed. The use of frequency distribution as a data summary tool was discussed and the graphical representation of frequency distributions, namely the bar chart (for this study) was described. The ANOVA technique was discussed as a test of statistical significance. This technique was utilised to test for significant relationships and differences amongst the three different types of HEIs.

The research findings conducted in the next chapter will attempt to identify good practices with regard to the quality management of SCs on national level at institutions of higher learning in SA.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter presents and interprets the data collected from the participants.

The questionnaire consisted of two parts: a part that would enable the respondents to reflect on the HEQC audit at their institution, followed by twenty-six pre-coded questions.

The rationale for the use of the questionnaire was to collect data and information that would assist the researcher to:

- Identify good practices with regard to the quality management of SCs on national level at institutions of higher learning in SA.
- Inform the conceptualisation of an effective quality system for SCs at the VUT.

In the case of a quantitative study, data need to be presented graphically to see what the general trends in the data are, and to fit statistical models to the data (Field 2009:18). Data analysis in this study was undertaken in two phases: first, pre-testing the questionnaire with experts in the field and secondly, the consolidation of the main survey findings through a detailed analysis.

4.2 ANALYSIS AND INTERPRETATION OF THE MAIN SURVEY

The descriptive analysis for Sections B and C of the questionnaire was undertaken through frequencies and percentages, to describe the respondents' reflection on the current situation concerning SCs at their respective institutions. These data were used to identify good practices with reference to the quality management of SCs at HEIs. As previously mentioned, the statistical data gathered, as well as the literature study,

informs the researcher's conceptualisation of SCs. This section of the study will analyse and discuss the gathered data by means of a questionnaire that was submitted to HEIs. The literature study is integrated with the statistical data in order to conceptualise the notion of QM of SCs at public HEIs in South Africa. Twenty-three questionnaires were distributed and nineteen completed questionnaires were returned, resulting in a response rate of 82 percent.

A discussion on the descriptive illustration of Sections B and C of the main survey findings follows.

4.2.1 Section B

Section B sought information on the HEQC's first cycle of institutional audits (during 2004-2009) in terms of the overall management of SCs, conducted at each institution that participated in the empirical study. Each question will be phrased, followed by an analysis and interpretation of the data.

Question B1: The institution received a commendation during the HEQC audit on the quality management of SCs

The HEQC audit reports utilise the concepts 'recommendations' and 'commendations'. A commendation is an indication that the audit panel acknowledge 'good practice' with regard to a function that was audited. Therefore, the assumption can be made that an institution that receives a commendation for SCs has an effective QMS in place. It is important for the purpose of this study to identify those institutions that received commendations and full delegation of SCs (*inter alia,* QMS for SCs are on par with the minimum standards of the HEQC) and to identify their best practice with regard to the quality assurance and management of SCs. Figure 4.1 illustrates that 42 percent (n=8) of the institutions that participated in the research did receive a commendation from the HEQC on the QM of SCs whilst 58 percent (n=11) reported that they did not receive a commendation.

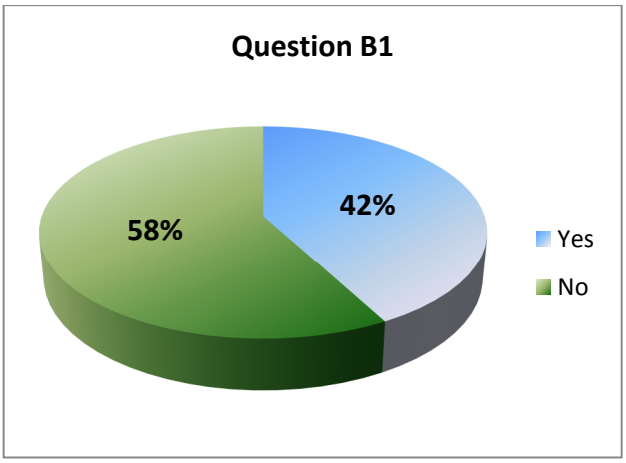

Figure 4.1 Institutions that received a commendation from the HEQC

One of the empirical objectives of this study is to measure good practice with regard to the QA and QM of SCs on national level (*cf.* 1.3.3). According to Figure 4.1, only 42 percent of the institutions that were audited can be viewed as institutions that implement best practice (according to the decision of the HEQC audit panels) with regard to the QM of their SC function. This emphasises the need for a re-conceptualisation of the QM of SCs, not only for the VUT, but also for the majority of HEIs in South Africa. This emphasises the relevancy of this study.

Question B2: The institution received a letter after the HEQC audit stating that the institution meets the criteria and minimum standards of the HEQC for SCs and, therefore, the HEQC fully delegated the SC function to the institution

The notion of 'delegated functions' is discussed in the literature study (*cf.* 1.1; 2.5.3). If the HEQC granted an institution full delegation of a function during the first audit cycle, it can be regarded that the institution is viewed by the HEQC as fit to perform, for the purpose of this study, the function of SCs (CHE 2008:3). These institutions aligned their SC procedures, QM and QA mechanisms with the minimum requirements of the HEQC as stipulated in their document, Framework for delegated functions (CHE 2008).

Figure 4.2 reports on the state of an institution's delegated functions, with specific reference to SCs. The HEQC fully delegated the SC function to 32 percent (n=6) of the institutions whilst 68 percent (n=13) of the institution's SC function did not meet the minimum standards of the HEQC for SCs.

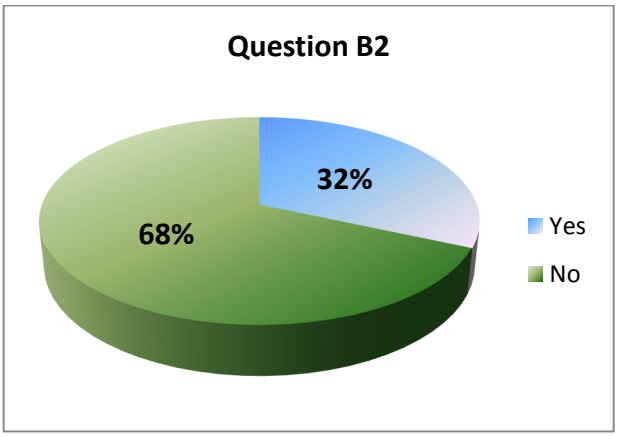

Figure 4.2 Institutions that received full delegation for SCs from the HEQC

Figure 4.2 should be read in conjunction with the results of Figure 4.1, as they are both related to the outcome of the HEQC cycle 1 audit regarding the overall judgment of the QM of SCs and the meeting of the minimum standards that the HEQC set for SC management. Question B1 and B2 measured related but different variables. As already mentioned, the data collected from question B1 measures how many institutions received commendations for SCs, which gives an indication of the HEQC's satisfaction level with regard to the QM of SCs on national level. There is a strong link between the statistical data of Figure 4.1 and Figure 4.2. Figure 4.2 is an indication of how many institutions received "full delegation" for the management of SCs at their institutions, *inter alia,* an indication of the percentage of institutions that have QMS's for SCs that are on par with the minimum standards of the HEQC for SCs. In order to identify best practice, as one of the main objectives of this study, the data collected and the information gathered, with regard to the respective institutions, informed the process of benchmarking and conceptualisation of SC quality management.

The assumption is made that an institution that receives a commendation for the QM of SCs will also receive a full delegation from the HEQC.

Table 4.1: HEIs that received a commendation and/or delegation for quality management of SCs

INSTITUTION	COMMENDATION	DELEGATION
U01	No	Yes
U02	Yes	No
U03	No	No
U04	Yes	Yes
U05	Yes	No
U06	Yes	Yes
U07	Yes	Yes
U08	No	No
U09	No	No
U10	Yes	Yes
U11	Yes	No
U12	No	No
U13	No	No
U14	No	No
U15	No	No
U16	No	No
U17	Yes	Yes
U18	No	No
U19	No	No

Table 4.1 shows that, although there is a strong correlation between institutions that receive commendations and recommendations (U04; U06; U07; U10 and U17), one institution received a delegation but without a commendation (U01). The researcher regards this as a contradiction because it indicates that the panel that audited the SC function for the respective institution did not find it suitable to commend the institution for its QM of SCs, while the HEQC granted the institution full delegation. A reason for this contradiction might be that the respondent was misinformed regarding

the HEQC institutional audit finding on SC matters. The researcher does not regard it a contradiction if an institution received a commendation from an audit panel but was not granted full delegation from the HEQC. The occurrence of these contradictions are limited, Table 4.1 shows three institutions that received commendations without delegation (U02; U05, U11).

The outcome of this comparison of institutions that received commendations and delegations informs the researcher's attempt to identify institutions with good practice (*cf.* 1.3.3, 1.4.2). The following institutions can be regarded, according to Table 1, as institutions with good practice with regard to their QM of SCs, as they received both commendations and full delegations: U04; U06; U07; U10 and U17.

4.2.2 Section C

The researcher utilised the requirements and minimum standards for SCs as published in the HEQC framework for delegated functions (CHE 2008). These requirements and a few generic standards for SC, with reference to the standards of the VUT, informed the formulation of the questions in Section C of the questionnaire. This part of the questionnaire consisted of a range of survey questions which required responses on a six-point Likert scale, whereby responses ranged from one = strongly disagree to six = strongly agree. The frequency variables were coded as Q1 – Q26 (Q = question followed by the number of the respective question as it appears on the questionnaire).

The participating universities were numbered as U01 – U23. The abbreviation 'U' is used for 'university', which refers to all public HEIs as respondents in this study. Although a relatively high percentage of respondents submitted their completed questionnaires per institution, a small percentage of institutions did not participate or furnish the researcher with completed forms as requested. No response was received back from U20, U21, U22 and U23. The data was captured using the Statistical Package for

Social Sciences (SPSS, Version 20.0 for Windows) from which the descriptive statistics were generated.

Data collected from the pre-coded questions were subjected to frequency counts whereby, the responses of the respective respondents were added together in order to find the highest frequency of occurrence. The responses were quantified and presented in the form of percentages in a table; a frequency table. The numbers of the tables correspond with the numbers of the questions posed in Section C of the questionnaire. Within a frequency distribution, the different response categories of the variable are shown together with the frequency (number) of respondents, and also the frequency expressed as a percentage of the sample size, in each of the different categories (Maree 2010:184). For the purpose of data interpretation, the researcher utilised the values as indicated in the column 'valid percentage' per question. The researcher views any value higher than three on the graphs as significant, and for the purpose of this study, any value higher than five (for example, a value of six) will be an indication of good practice. In this study, the concept 'best practice' will be utilised to refer to an institution that incorporated SC practices of above-average performance levels and which exceeded that of the rest of the institutions that participated in this study. Within some of the questions, the researcher has combined the data as follows: responses for 'disagree' and 'moderately disagree' might be combined as well as responses for 'agree' and 'moderately agree'. These percentage combinations will assist the researcher in the interpretation of the data.

Question 1: Our institution has arrangements in place to monitor the implementation of the short course policy

The HEQC requires each HEI in South Africa to provide evidence of an effective QMS, which "covers arrangements for quality assurance, quality improvement and quality monitoring and evaluation" (*cf. 2.5.3).* Although this requirement refers to the development and implementation, as well as

evidence of the effectiveness of an institution's QMS, it implies from a TQM point of view that all sub-systems of the institution should have evidence of effective quality arrangements in place. This includes appropriate policies and an effective arrangement for the quality assurance and monitoring of the implementation of a policy for SCs (*cf* 1.2; 2.5.3). Therefore, there should be dedicated officers and structures in place to facilitate these processes of which monitoring of the implementation of the policy for SCs form an integral part to ensure effective management of SCs.

Table 4.2: Arrangements to monitor the implementation of SC policy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	3	2	10.5	10.5	15.8
	4	3	15.8	15.8	31.6
	5	6	31.6	31.6	63.2
	6	7	36.8	36.8	100.0
	Total	19	100.0	100.0	

Table 4.2 depicts that 15.8 percent of the respondents moderately agree that their institution has arrangements in place to monitor the implementation of the SC policy while 36.8 percent strongly agree. A 5.3 percent strongly disagreed that they do not have arrangements in place for the monitoring of policy implementation. U02 strongly disagreed with this statement.

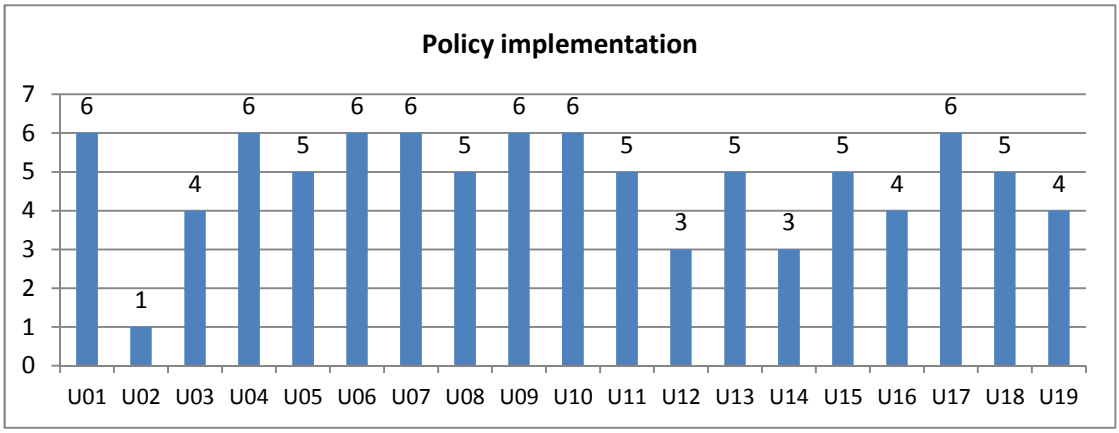

Figure 4.3: Policy implementation

According to Figure 4.3, the respondents of U01, U04, U06, U07, U09, U10 and U17 have best practice with regard to the arrangements in place at their institutions for the monitoring of their SC policy implementation. Either an assumption can be made that U02 does not have a policy in place for SCs, or there is no arrangements in place to monitor the implementation of the institution's policy. The majority of institutions have mechanisms in place to monitor effectively the implementation of their SC policies.

Question 2: Our mechanisms for the quality assurance of Short Courses are widely known in the institution

Effective communication and dissemination of information is imperative in any QAS. According to the literature study, a university is an open-system with a range of interconnected sub-systems (*cf.* 2.2). Interactions between these sub-systems are imperative and ensure effective communication including dissemination of information (*cf.* 2.3.1). A QAS of a HEI should be widely known in the institution. It is therefore, imperative that sub-systems, such as academic departments, are well informed and equipped to ensure ongoing improvement of SCs (*cf.* 2.3.1).

Table 4.3: Widely known mechanisms for the QA of SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	6	31.6	31.6	31.6
	4	6	31.6	31.6	63.2
	5	4	21.1	21.1	84.2
	6	3	15.8	15.8	100.0
	Total	19	100.0	100.0	

Table 4.3 indicates that 31.6 percent of the respondents moderately disagree that the mechanisms for the QA of SCs are widely known in the institution while 31.6 percent moderately agreed. Only 15.8 percent strongly agree with this statement.

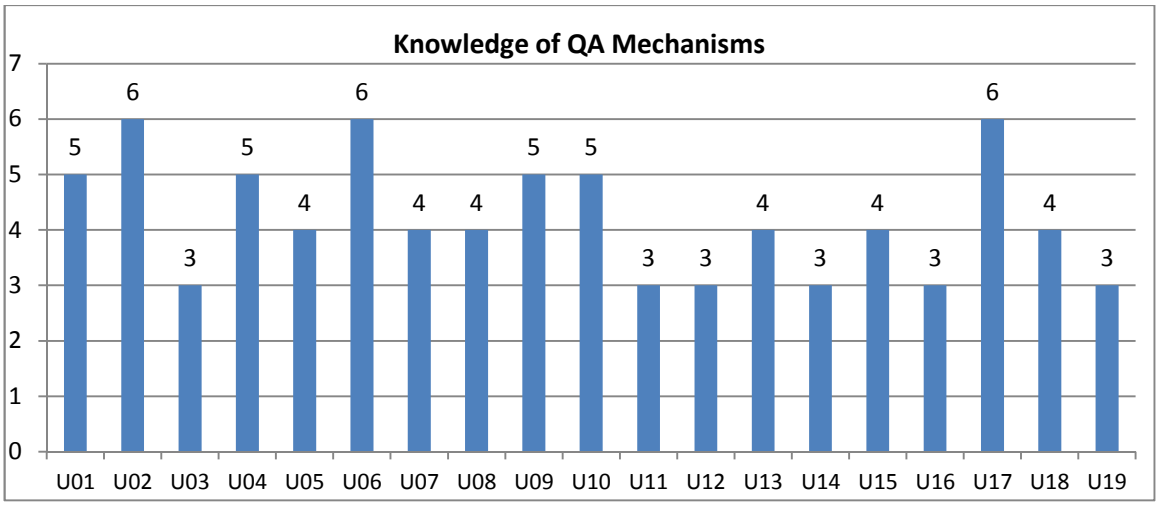

Figure 4.4: Knowledge of QA mechanisms

Figure 4.4 illustrates that U02, U06 and U17 have good practice with regard to the staff's (the implementer's) knowledge of QA mechanisms for SCs in their institutions. As many as six institutions shows a lack of knowledge with regard to quality mechanisms that are in place at their institutions (U03; U11; U12; U14, U16 and U19). The lack of knowledge of staff with regard to mechanisms to detect deficiencies may have a negative impact on the quality improvement process at the majority of institutions. As mentioned, only 15.8 percent of the respondents strongly agreed that the mechanisms for the QA of SCs at their institutions are widely known. Therefore, institutions should embark on more effective initiatives to ensure effective interaction between faculties and departments offering SCs, and the dedicated central office and structures for SC management. Capacity building exercises and initiatives to enhance effective communication and dissemination of information between the structures for the management of SCs and the respective faculties and departments is imperative.

Question 3: There is a quality assurance system in place that ensures the regular reviews of all arrangements for short courses

The literature study emphasises the importance of self-evaluation exercises and external monitoring of programmes as "internationally accepted" best

practice of any QAS of a HEI (*cf.* 2.4.1). The review of programmes should be regular and cyclical processes that identify deficiencies, which inform remedial action processes (*cf.* 2.4.2.1) should exist.

Table 4.4: A QAS is in place that ensures the regular reviews of all SC arrangements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	15.8	15.8	15.8
	4	7	36.8	36.8	52.6
	5	4	21.1	21.1	73.7
	6	5	26.3	26.3	100.0
	Total	19	100.0	100.0	

Table 4.4 indicates that only 15.8 percent of the respondents disagree that there is a QAS in place that ensures the regular reviews of all arrangements for SCs. The majority (57.9%) of respondents (a combination of 36.8% and 21.1%) are of the opinion that a system is in place for regular reviews of SCs. 26.3 percent strongly agree with this statement. U02, U12 and U13 disagree with the statement.

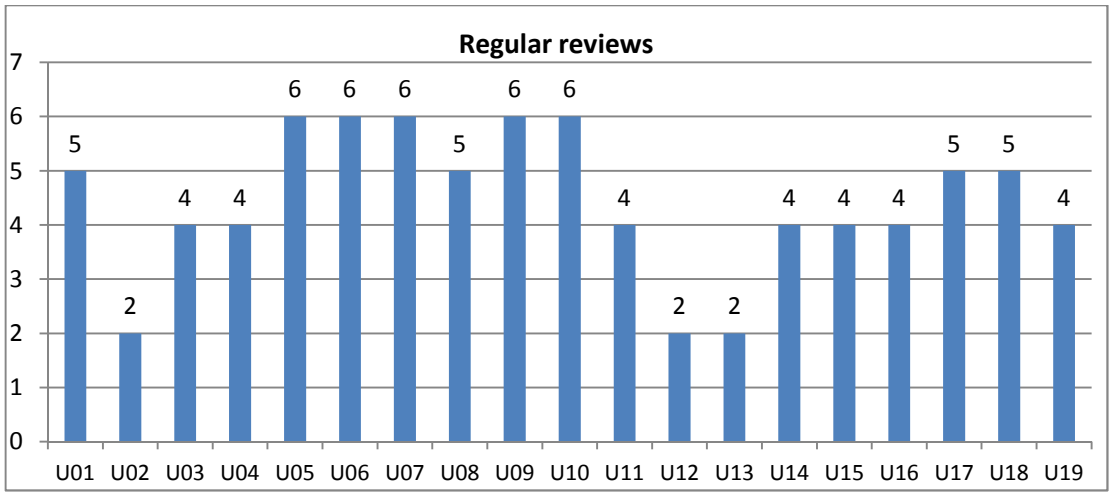

Figure 4.5: Regular reviews

Although U05, U06, U07, U09 and U10 Figure 4.5 indicates that they conducted reviews of SCs on a regular basis, universities such as U02, U12 and U13 indicate significantly low values for this question. This may indicate that some institutions have no sufficient systems in place that review SCs on a regular basis, which will have a negative impact on the continuous improvement of SCs.

Question 4: At our institution, continuous improvement of our short courses takes place by means of a quality management model that is based on the principles of a cyclical process of planning, doing, reviewing, adjustments and (re-)planning

This question relates to Question 3. This question focussed on not only continuous processes of reviews but also a model or a conceptual framework that ensures continuous improvement. The literature study offers a comprehensive discussion on the notion of continuous improvement. Shewart developed a model that ensures ongoing improvement, namely the PDCA cycle. The PDSA, PIRI and ADRI models were adaptations of this model. A framework for ongoing improvement is a valuable quality management mechanism to ensure cyclical processes of ongoing improvement (*cf.* 2.4.2.1, 2.4.2.2 and 2.4.2.3).

Table 4.5: Continuous improvement of SCs takes place by means of a quality management model that is based on the principles of a cyclical process of planning, doing, reviewing, adjustments and (re-)planning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	4	21.1	21.1	26.3
	3	2	10.5	10.5	36.8
	4	5	26.3	26.3	63.2
	5	3	15.8	15.8	78.9
	6	4	21.1	21.1	100.0
	Total	19	100.0	100.0	

Table 4.5 depicts that 36.9 percent of the respondents (a combination of 5.3% and 21.1% and 10.5%) disagree that continuous improvement of SCs takes place by means of a quality management model. The majority (63.2%) of the respondents (a combination of 26.3% and 15.8% and 21.1%) agree that a quality management model for continuous improvement of SCs exist.

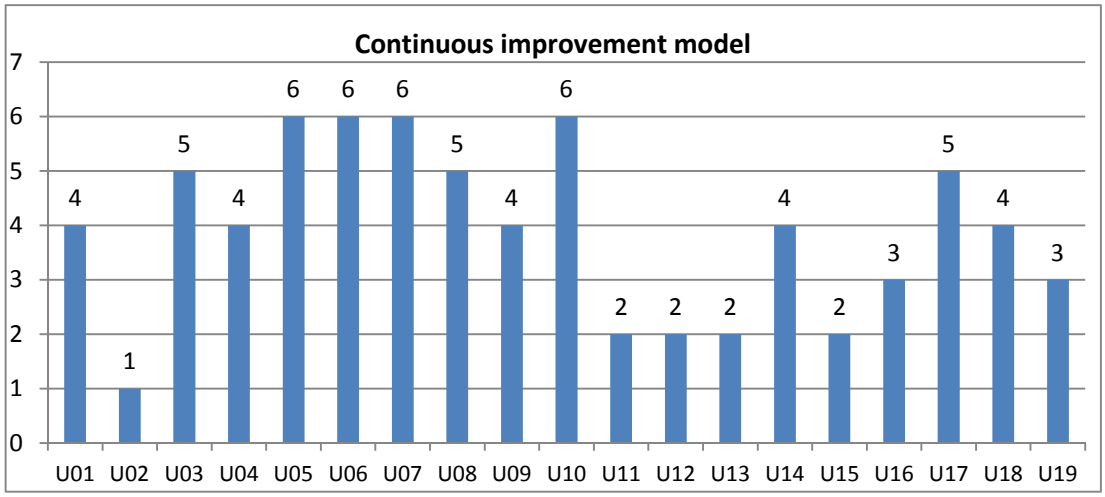

Figure 4.6: Continuous improvement model

As depicted by Figure 4.6 it appears that U05, U06, U07 and U10 have good practice with regards to the continuous improvement of SCs by means of a

quality management model. The significant low values of U02, U11, U12, U13, U15, U16 and U19 emphasises the need for a conceptual framework that will ensure the ongoing improvement of SCs in higher education. Based on the literature review, the assumption can be made that if step-by-step processes of systematic continuous improvement processes are not implemented, especially with regard to the regular review of the implementation of SC programmes, the identification of deficiencies followed by appropriate adjustments and re-planning, it will have a negative impact on the effective QM for the provision of SCs.

Question 5: Mechanisms and processes are in place for the approval of short courses by the appropriate academic unit or governance structure at our institution (for example, Senate)

The HEQC requires institutions of higher learning to have clear arrangements in place for the approval of SC programmes by an appropriate unit or governance structure (*cf.* 2.5.3).

Table 4.6: Mechanisms and processes are in place for approval of SCs by appropriate academic units or governance structures

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	5.3	5.3	5.3
	4	3	15.8	15.8	21.1
	5	6	31.6	31.6	52.6
	6	9	47.4	47.4	100.0
	Total	19	100.0	100.0	

According to Table 4.6, only 5.3 percent of the respondents moderately disagree that their institution has mechanisms and processes in place for the approval of SCs by an appropriate governance structure. A 47.4 percent of the respondents (a combination of 15.8% and 31.6%) agree that mechanisms are in place while 47.4 percent strongly agree with this statement.

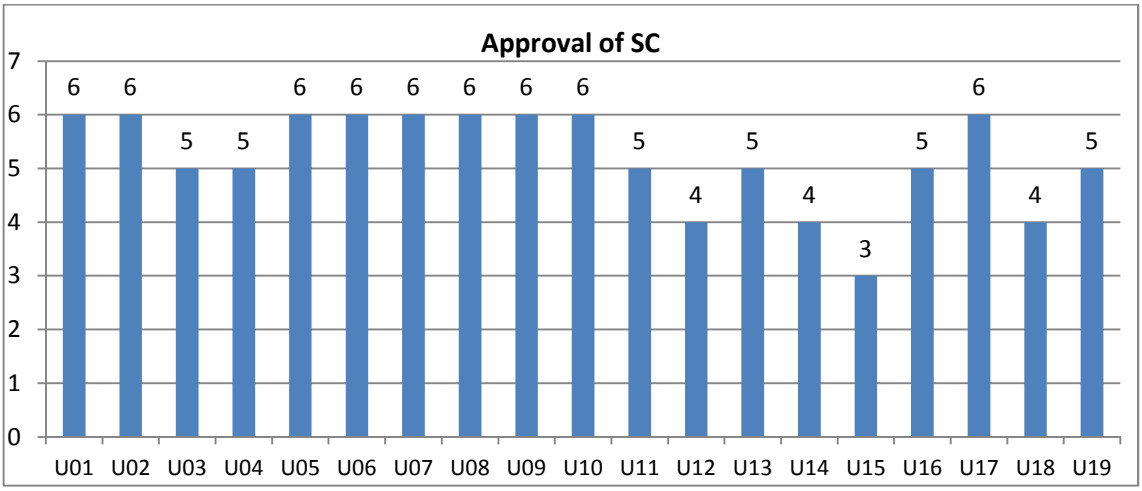

Figure 4.7: Approval of short courses

Figure 4.7 illustrates that the following universities have best practice with regard to mechanisms in place for the approval of SCs: U01, U02, U05, U06, U07, U08, U09, U10 and U17. The above-mentioned results indicate that the majority of HEIs that offer SC programmes have arrangements in place for the approval of SC programmes. The majority of SC programmes are submitted to the respective universities appropriate governance structures for final approval (as in the case of the offering of academic programmes).

Question 6: The planning for the provision of short courses at our institution takes into account a range of issues such as availability of staff to develop and offer the courses, admin capacity, fees, revenue sources, etc.

According to the literature study, QM involves processes such as planning, control and improvement (*cf.* 2.3.1). Models such as ADRI, PIRI and PDCA/PDSA have 'planning' as a phase of the ongoing cycle of improvement. The HEQC requires institutions to include, in the planning for the offering of SCs, the availability of staff to develop and offer SCs, appropriate academic support structures and administrative capacity, at all institutional levels (*cf.* 2.5.3).

Table 4.7: Planning for the provision of SCs takes into account a range of issues

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	5.3	5.3	5.3
	3	1	5.3	5.3	10.5
	4	4	21.1	21.1	31.6
	5	5	26.3	26.3	57.9
	6	8	42.1	42.1	100.0
	Total	19	100.0	100.0	

Table 4.7 indicates that only 10.6 percent of respondents (a combination of 5.3% and 5.3%) disagree that planning for the provision of SCs takes into account a range of issues. The majority (47.4%) of respondents (a combination of 21.1% and 26.3%) agree to this statement while 42.1 percent strongly agree. U02 strongly disagree that this is the case, which indicates that in comparison with the above-mentioned 42.1 percent of institutions, this institution does not have effective systems and planning frameworks in place for the quality management of SCs.

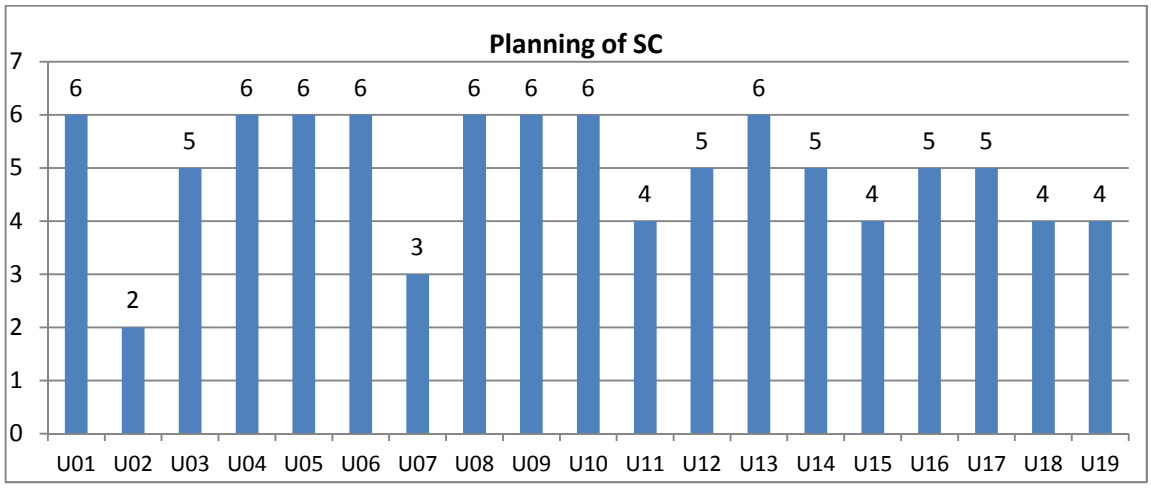

Figure 4.8 Planning of short courses

Figure 4.8 shows that U01, U04, U05, U06, U08, U09, U10 and U13 are of the opinion that they have good practice with regard to the planning of SCs at their respective institutions.

Question 7: The quality assurance system at our institution is effective for identifying deficiencies and gaps that hamper the quality of our short course programmes

The literature study discussed the purpose of reviews as mechanisms to identify deficiencies and gaps that should be remedied in order to reach an institution's priorities and goals (*cf.* 2.4.2.1). As per the literature study, the PIRI model's dimension 'R' refers to reviews followed by 'Improvement' *inter alia*, adjustments in order to address the deficiencies and gaps (*cf.* 2.4.2.2). The PIRI/PDCA/PDSA/ADRI models are underpinned by the principle of iteration, which allows a QAS to detect gaps in the system and to make improvements systematically.

Table 4.8: The QAS is effective for identifying deficiencies and gaps that hamper the quality of SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	10.5	10.5	10.5
	2	1	5.3	5.3	15.8
	3	3	15.8	15.8	31.6
	4	8	42.1	42.1	73.7
	5	4	21.1	21.1	94.7
	6	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

As detected in Table 4.8, 31.6 percent of respondents (a combination of 10.5% and 5.3% and 15.8%) disagree that the QAS at their institution is effective for identifying deficiencies and gaps that hamper the quality of SC programmes. A total of 68.5 percent of respondents (a combination of 42.1 and 21.1% and 5.3%) agree to this statement. U02 and U05 strongly disagree with the effectiveness of the QAS of SCs at their institution.

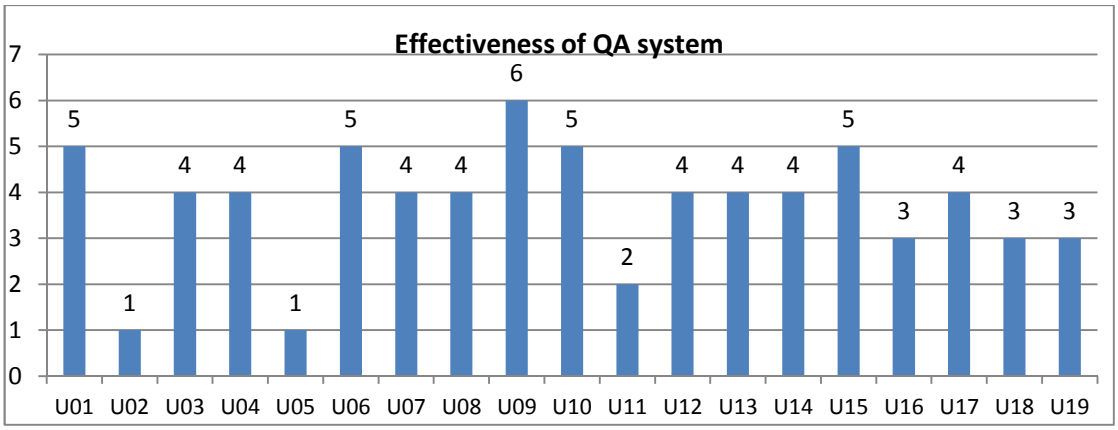

Figure 4.9 Effectiveness of quality assurance system

According to Figure 4.9, it appears that U09 has best practice with regard to the effectiveness of the QA system with relation to SC programmes. This graph indicates the alarming fact that many institutions do not have effective QAS in place for SCs. The absence of an effective QAS for SCs at an institution may impede the detection and remedy of deficiencies, which hampers the ongoing improvement of SC programme offerings.

The majority of institutions have systems in place for the quality assurance of SCs but the respondents are not convinced that the systems are effective, therefore, indicated that they 'moderately agree' to the statement that their SC QAS is effective (U03; U04, U07, U08, U12; U13; U14; U17), the latter includes VUT (*cf.* 1.3.1). Therefore, it is a national tendency that with regard to the requirements of Criterion 2 of the HEQC (CHE 2008:13*), inter alia* the standards for delegation of effective systems for the quality management and assurance of SCs, standards are not met by the majority of HEIs. Only 26.4 percent of the respondents agree and strongly agree that their systems are effective. This outcome enhances the relevancy of this study, not only for the VUT but also on national level.

Question 8: At our institution, the outcome of the above-mentioned quality assurance processes of reviews feeds into remedial action plans to ensure continuous improvement

Information gathered during quality assurance activities on institutional level should feed into planning activities on all levels of the institution, *inter alia* operational and strategic levels. This concurs with the QA process after an external audit. Audit recommendations should feed into planning of remedial actions as an effort to strengthen the QMS of the audited institution (*cf.* 1.1*).* The integration of quality management, planning and resource allocation is, therefore, imperative for a sound QMS (Brits 2010). Planning is an integrated process that is informed by information collected with regard to staff capacity, the impact of SCs on the offering of academic mainstream programmes, support to students and administrative capacity, amongst others (*cf.* 2.5.3).

Table 4.9: Outcome of QA processes of reviews feeds into remedial action plans to ensure continuous improvement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	3	15.8	15.8	21.1
	3	3	15.8	15.8	36.8
	4	5	26.3	26.3	63.2
	5	5	26.3	26.3	89.5
	6	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

Table 4.9 indicates that 5.3 percent of the respondents strongly disagree that the outcome of QA processes of reviews feed into remedial action plans to ensure continuous improvement. A total (15.8%) of the respondents disagree with this statement while the majority (52.6%) of the respondents (a combination of 26.3% and 26.3%) agree with the statement in the question. A total of 10.5 percent of the respondents strongly agreed. U2 strongly disagree with the statement.

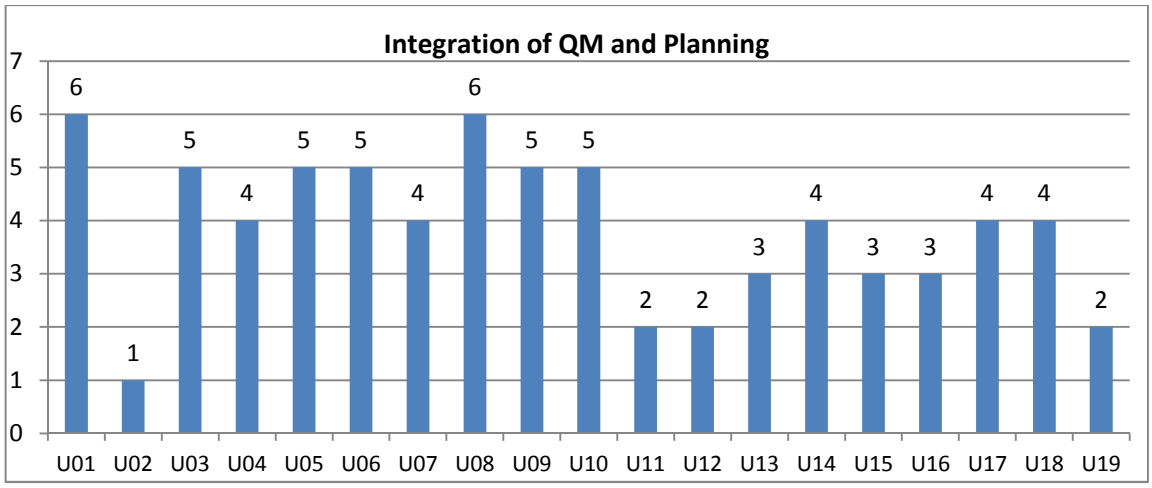

Figure 4.10: Integration of quality management and planning

Figure 4.10 depicts that the respondents of U01 and U08 are convinced that integration takes place, *inter alia* the outcomes of QA processes of reviews feeds into remedial action plans to ensure continuous improvement. The majority of respondents are not convinced that there is strong evidence of integration of QM and planning at their institution with regard to the offering of SCs. It is, unfortunately not clear, if the problem of integration appears on operational or strategic levels, or on both of these levels at the relevant institutions.

Question 9: The management of short courses at our institution is underpinned by systematic processes of planning, implementation, reviews, adjustments and re-planning (e.g. PDCA/ADRI models)

This question focused on the implementation of PDCA/ADRI or any related model or framework that has the dimensions of planning, implementation, reviews and adjustments as part of an ongoing cycle of improvement (*cf.* 2.4.2). The question is related to Question 6. Question 6 focuses only on one aspect of the above-mentioned model *inter alia* "planning". The implementation of a model or systematic process of planning, implementation, reviews and adjustment ensures ongoing enhancement of the offering of SC programmes.

Table 4.10: Management of SCs is underpinned by systematic processes of planning, implementation, reviews, adjustments and re-planning (PDCA/ADRI models)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	10.5	10.5	10.5
	2	2	10.5	10.5	21.1
	3	4	21.1	21.1	42.1
	4	5	26.3	26.3	68.4
	5	4	21.1	21.1	89.5
	6	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

Table 4.10 informs the researcher that 10.5 percent of the respondents strongly agree that the management of SCs is underpinned by PDCA/ADRI models. A total of 10.5 percent of the respondents strongly disagreed with the statement. A 31.6 percent of the respondents (a combination of 10.5% and 21.1%) disagree, while 47.4 percent (a combination of 26.3% and 21.1%) agree with the statement.

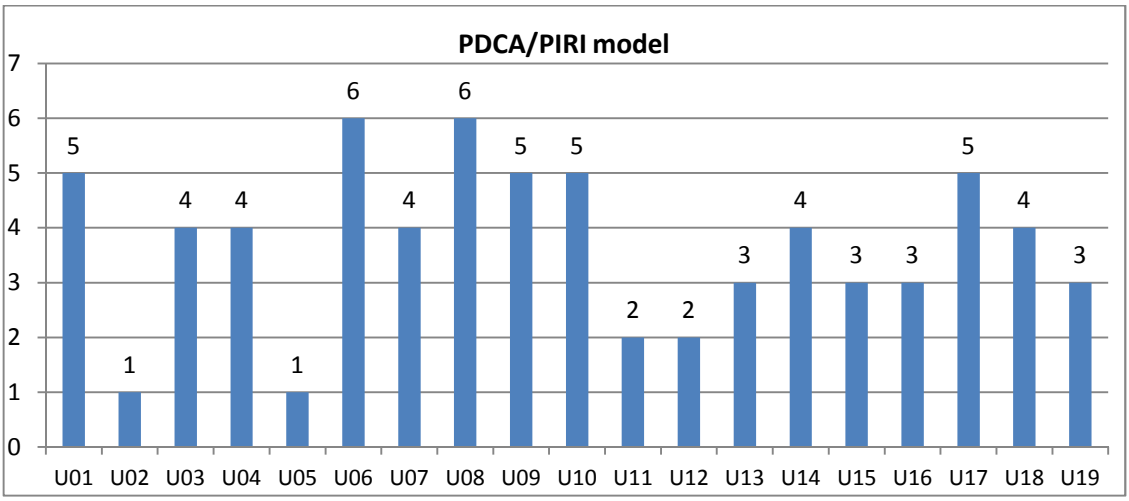

Figure 4.11: PDCA/PIRI model

According to Figure 4.11, two universities (U06 and U08) have models/processes in place (good practice) that are underpinned by the notion of planning, implementation, reviews and adjustments. As many as 24.1 percent of the respondents indicated that they do not have a specific model,

or processes that include the dimensions of the PDCA/PIRI/ADRI models for continuous improvement, in place.

Question 10: There is more than one approach to the quality management of short courses at our institution

This question was asked in order to make provision for those universities that implement more than one approach to the QM of SCs. A diverse approach may occur in the case of a decentralised QMS, when there is more than one site of delivery.

Table 4.11: More than one approach to the QM of SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	4	21.1	21.1	26.3
	3	4	21.1	21.1	47.4
	4	3	15.8	15.8	63.2
	5	4	21.1	21.1	84.2
	6	3	15.8	15.8	100.0
	Total	19	100.0	100.0	

Table 4.11 indicates that 15.8 percent of the respondents strongly agree to the statement that there is more than one approach to the QM of SCs while 5.3 percent strongly disagreed. A total of 21.1 percent of the respondents moderately disagree and 15.8 percent of the respondents moderately agreed with the statement. U02 strongly disagree that this is the case.

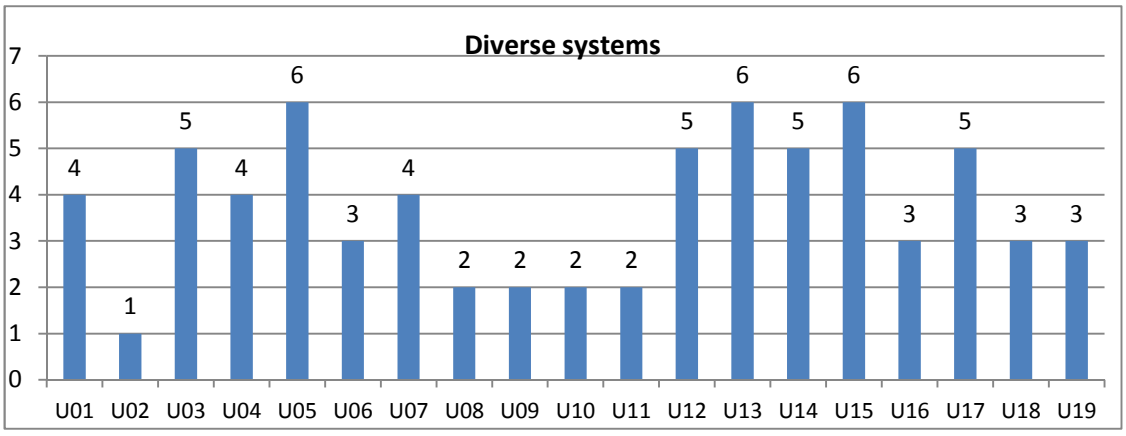

Figure 4.12: Diverse systems

Figure 4.12 shows that the following institutions do not have a diverse approach to the QM of SCs: U02; U08; U09; U10; U11, U16; U18 and U19. It might be that the institutions that have a value of 4-5 for this question, have a more decentralised approach of different quality assurance processes or structures that deal with the QM of SCs (in department, faculty or sites of delivery levels).

Question 11: It is the responsibility of each faculty to implement systems and mechanisms to ensure quality enhancement of short courses at our institution

This question relates to the previous question concerning determining the ownership and responsibility for the enhancement of SCs on operational level. This is imperative for any decentralised system to develop and implement effective quality management systems that are on par with best practice. This is also on par with the systems approach (*cf.* 2.2). It is not only the responsibility of a central office to ensure the quality enhancement of SCs, but of all functions of the institution; that should work as interrelated and interconnected sub-systems. They should work together in order to achieve mutual objectives and synergy. Faculties and departments should take ownership of the quality of the SC programmes that they offer especially within a decentralised system.

Table 4.12: Faculty responsibility to implement systems and mechanisms to ensure quality enhancement of SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	6	31.6	31.6	36.8
	4	3	15.8	15.8	52.6
	5	6	31.6	31.6	84.2
	6	3	15.8	15.8	100.0
	Total	19	100.0	100.0	

Table 4.12 indicates that 31.6 percent of respondents disagreed with the statement that it is the faculty's responsibility to implement systems to ensure quality enhancement of SCs. A 47.4 percent of the respondents (a combination of 31.6% and 15.8%) agreed with the statement. A total of 15.8 percent strongly agree that the responsibility lies within the faculty. U04 strongly disagreed with the statement.

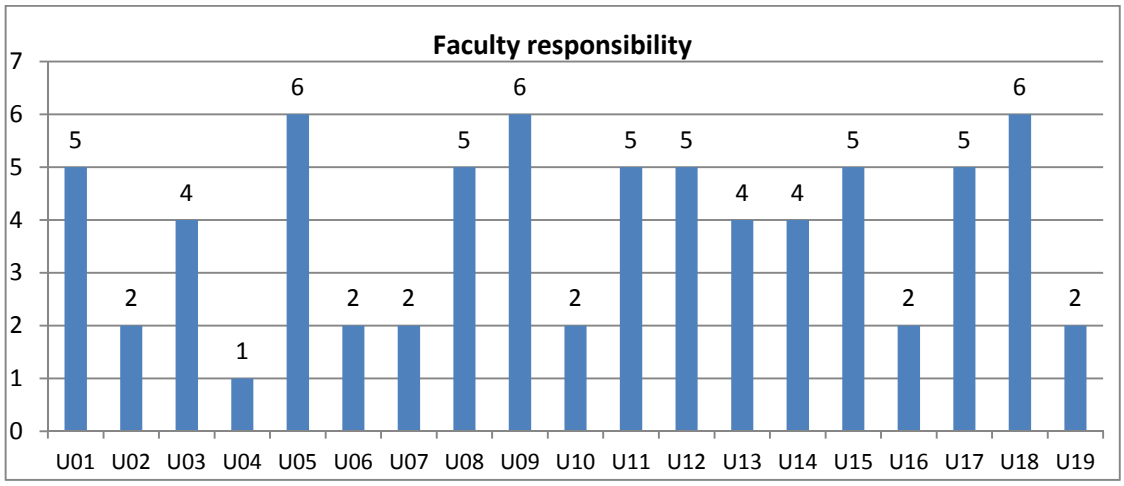

Figure 4.13: Faculty responsibility

According to Figure 4.13, the respondents of U05, U09 and U18 strongly agree that their respective faculties implement mechanisms for the quality enhancement of SCs. The graph indicates that there are institutions that regard the QM of SCs at their institutions as primarily the responsibility of the faculties/departments. There might also be a decentralised or a centralised-decentralised approach to the quality assurance of SCs at U02, U04, U06, U07, U10, U16 and U19. A centralised-decentralised approach can be viewed as an approach where the quality management office and the sub-systems of an institution that offers SCs are mutually responsible for the effectiveness of its quality assurance of SC offerings. A total of 47.4 percent of the respondents indicated that their institutions regard the quality enhancement of their SC programmes as the primary responsibility of the respective faculties. As high as 36.9 percent disagreed with this statement, which indicates, as mentioned above, that the responsibility for the

enhancement of the quality of SCs resides with other structures (for example, the quality management office).

Question 12: The head/manager of the SC office has overall accountability for the implementation of quality management systems for SCs

This question relates to Question 11 but determines if the head/manager of the SC Office is, *per se,* accountable for the implementation of the QMS for SCs. Some HEIs have centralised systems for the administration and quality management of SCs (*cf.* 2.5.3).

Table 4.13: The head of SC office has overall accountability for the implementation of QMS for SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	21.1	21.1	21.1
	2	5	26.3	26.3	47.4
	3	2	10.5	10.5	57.9
	4	2	10.5	10.5	68.4
	5	3	15.8	15.8	84.2
	6	3	15.8	15.8	100.0
	Total	19	100.0	100.0	

Table 4.13 indicates that 15.8 percent of the respondents reported that the head of the SC office has overall accountability for the implementation of a QMS for SCs. A 26.3 percent of the respondents (a combination of 10.5% and 15.8%) agree with this statement. The majority, 36.8 percent of respondents, disagreed (a combination of 26.3% and 10.5%). A total of 21.1 percent strongly disagreed that the head of the SC office has overall accountability – this being U11, U12, U14 and U15.

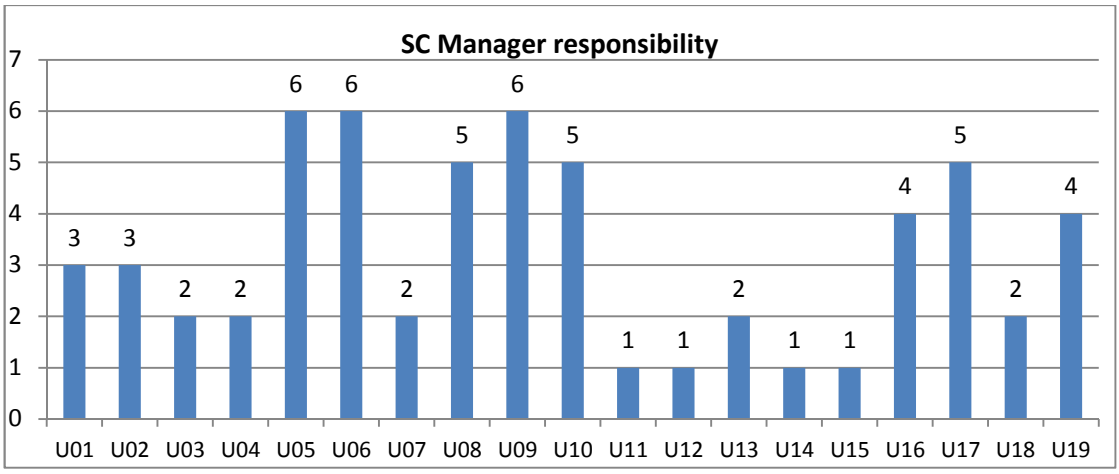

Figure 4.14: Short course manager's responsibility

According to Figure 4.14 U05, U06 and U09 reported that the head/manager of the SC office has overall accountability for the implementation of QMS for SCs. While some of the institutions have possible decentralised systems for the quality assurance and management of SC offerings (U11; U12; U14 and U15), there is evidence of possible centralised-decentralised type of systems at U03; U04, U07, U13 and U18. The majority (57.9%) disagree that the responsibility for the implementation of a QMS of SCs is the responsibility of a SC manager.

Question 13: At our institution, a short courses register is in place that has information on the status of courses i.e. course title and code, outcomes, credit bearing status, admission requirements, assessment criteria and methods, teaching and learning strategies, venue, fees and other financial information

As mentioned in the literatures study (*cf.* 2.5.3), an institution that offers SCs should have a SC register in place according to the requirements of the HEQC (CHE 2008:14).

Table 4.14: A SC register is in place that has information on the status of courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	15.8	15.8	15.8
	2	1	5.3	5.3	21.1
	4	4	21.1	21.1	42.1
	5	5	26.3	26.3	68.4
	6	6	31.6	31.6	100.0
	Total	19	100.0	100.0	

Table 4.14 depicts that 79 percent of respondents agree to the statement that a SC register is in place, while 21.1 percent disagree. U02, U12 and U13 reported that a SC register is not in place.

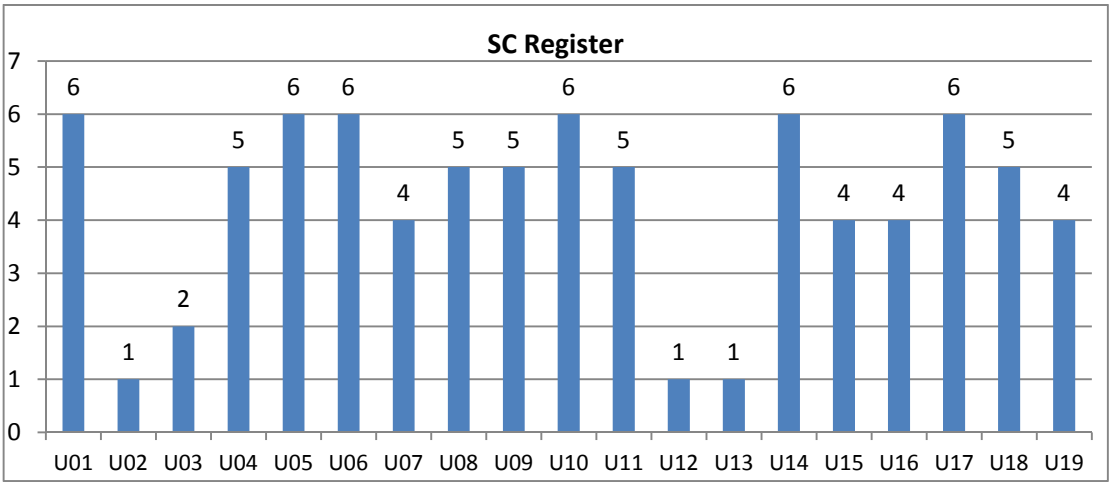

Figure 4.15: Short course registers

According to Figure 4.15, six universities (U01, U05, U06, U10, U14 and U17) strongly agree that a SC register exists at their institution. The majority of institutions implement mechanisms that capture information on the status of SCs except for U02, U03, U12 and U13.

Question 14: Certificates of short courses are issued at our institution on par with the institution's relevant policy for certification processes

The issuing of certificates for SC signals the achievement and knowledge that the learners have acquired. Certification rules and procedures, that

clearly distinguish between certificates of competence and attendance, should be implemented by institutions that offer SCs (*cf*. 2.5.3).

Table 4.15: Certificates issued on par with institution's relevant policy for certification processes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	3	2	10.5	10.5	15.8
	4	4	21.1	21.1	36.8
	5	4	21.1	21.1	57.9
	6	8	42.1	42.1	100.0
	Total	19	100.0	100.0	

The majority (42.2%) of the respondents (a total of 21.1% and 21.1%) agree that SC certificates are issued on par with the relevant policy for certification processes. Only 10.5 percent of respondents moderately disagree and 5.3 percent strongly disagree with the statement. A total of 42.1 percent of the respondents strongly agreed that this is the case. U02 reported that SC certification arrangements are not on par.

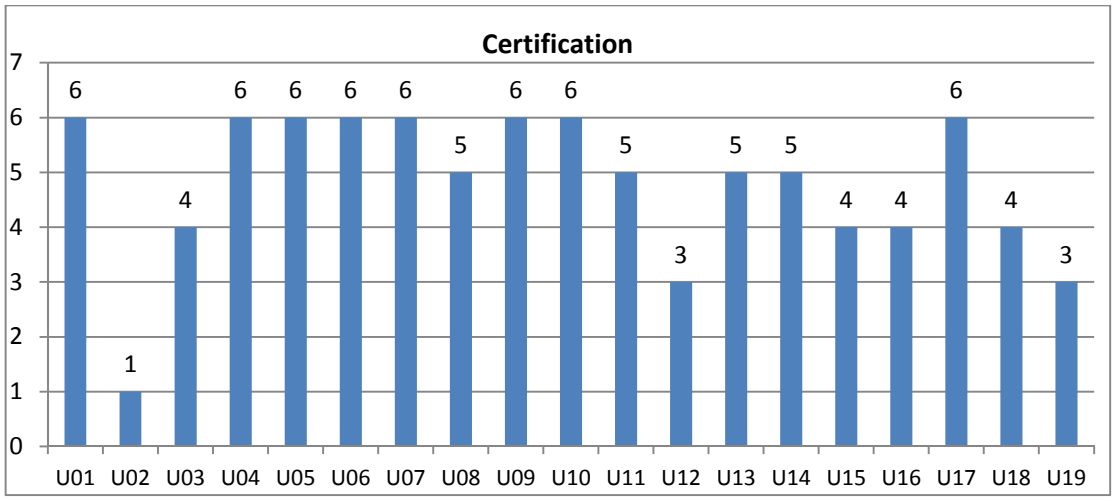

Figure 4.16: Certification

As depicted in Figure 4.16, U01, U04, U05, U06, U07, U09, U10 and U17 are issuing SC certificates on par (best practice) with the institution's relevant policy for certification processes. The graph indicates that there is only one

institution, which needs to align its certification procedures and rules to the standards as set by the HEQC (U02).

Question 15: Clear and efficient arrangements are in place at our institution that ensures the integrity of learner records and certification processes

The HEQC requires from institutions that offer SCs to have clear and efficient arrangements in place to ensure the integrity of learner records and certification processes, which include effective mechanisms to ensure the issuing of certificates and the avoidance of fraud or illegal issuing of certificates (*cf*. 2.5.3).

Table 4.16: Efficient arrangements in place to ensure integrity of learner records and certification processes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	2	10.5	10.5	15.8
	4	4	21.1	21.1	36.8
	5	7	36.8	36.8	73.7
	6	5	26.3	26.3	100.0
	Total	19	100.0	100.0	

Table 4.16 indicates that 5.3 percent of the respondents strongly disagree that arrangements are in place that ensure the integrity of learner records and certification processes. A total (57.9%) of the respondents (a combination of 21.1% and 36.8%) agree to the statement while 26.3 percent strongly agree that arrangements are in place.

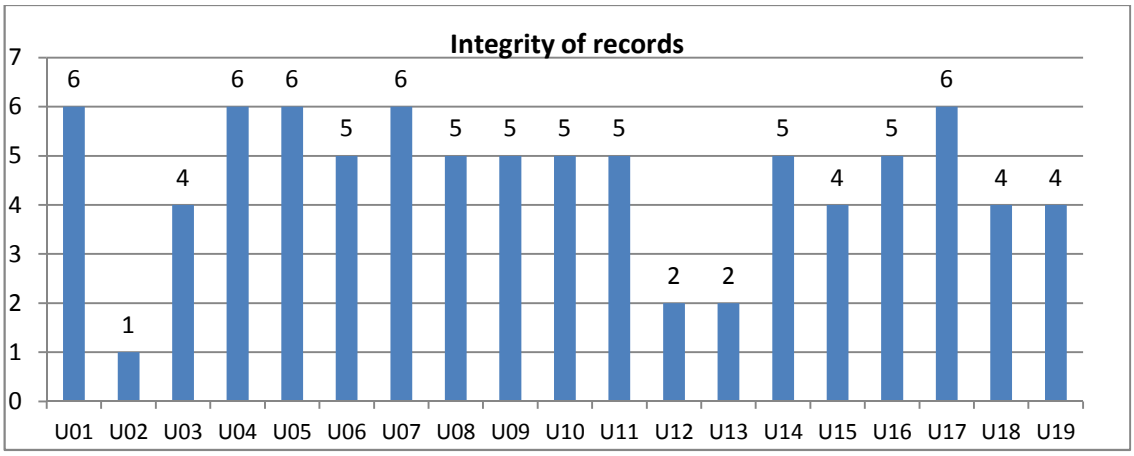

Figure 4.17: Integrity of records

Above graph (Figure 4.17) depicts that the respondents of U01, U04, U05, U07 and U17 indicate good practice with regard to efficient certification arrangements, which would ensure integrity of records. A total of 63.1 percent of the respondents are of the opinion that they have arrangements in place that ensure the integrity of SC records.

Question 16: We improved our quality management system by means of benchmarking with other institutions

This question will identify institutions that refined their QMS for the offering of SCs by means of benchmarking exercises. As discussed in the literature study, the concept benchmarking refers to the measuring of your own performance with that of best in class and by using the information gathered during this exercise as a basis for the alignment of your own institution's targets, strategies and implementation (*cf.* 1.4.2; 2.5.3).

Table 4.17: QMS improved by means of benchmarking with other institutions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	10.5	10.5	10.5
	2	4	21.1	21.1	31.6
	3	4	21.1	21.1	52.6
	4	1	5.3	5.3	57.9
	5	6	31.6	31.6	89.5
	6	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

According to table 4.17 an equal amount (10.5%) of respondents either strongly agreed or strongly disagreed that they improved their QMS by means of benchmarking with other institutions. A total (42.2%) of respondents (a combination of 21.1% and 21.1%) disagreed with this statement while 36.9 percent (a combination of 5.3% and 31.6%) agreed. U02 and U05 strongly agreed that they improved their QMS by benchmarking.

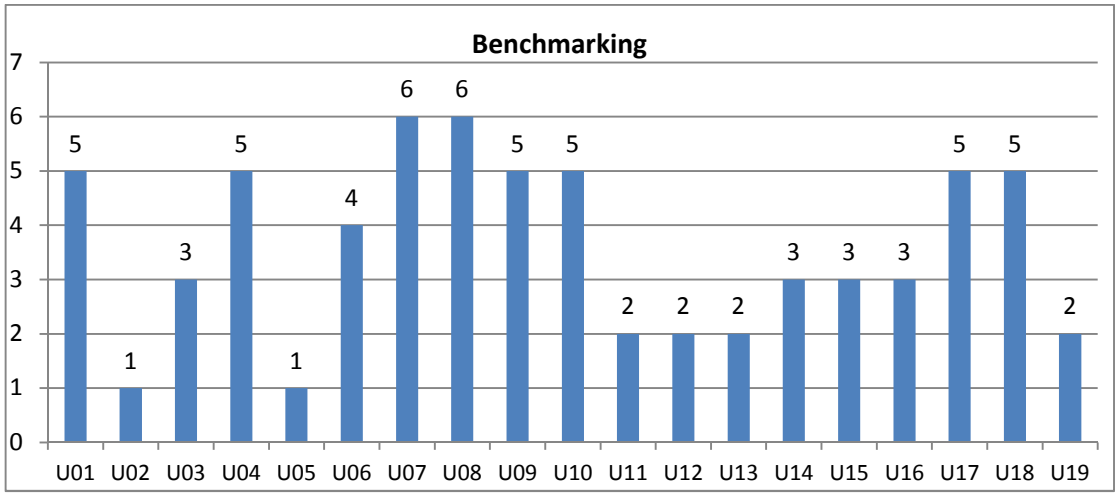

Figure 4.18: Benchmarking

Figure 4.18 illustrates that only two universities (U07 and U08) indicate good practice with regard to the improvement of QMS by means of benchmarking. According to the graph, there is a lack of benchmarking exercises amongst HEIs to enhance their QMS for the offering of SCs. Of significant value in this regard are U02, U05, U11, U12, U13 and U19. Institutions such as U01; U04; U07; U08; U09; U10; U17 and U18 utilise benchmarking exercises to inform the refinement of their quality systems for SCs.

Question 17: There are no concerns with regard to the quality management of short courses at our institution

This question is based on the opinion of the respondents with regard to the effectiveness of their QMS. It reflects on the respondents' opinion on 'major

concerns' that he/she is aware of, which might be an indication of an ineffective system. This information will be valuable to triangulate with the information collected during the empirical phase of this study to assist the researcher to identify institutions that have best practice.

Table 4.18: No concerns with regard to the QM of SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	21.1	21.1	21.1
	2	5	26.3	26.3	47.4
	3	3	15.8	15.8	63.2
	4	2	10.5	10.5	73.7
	5	5	26.3	26.3	100.0
	Total	19	100.0	100.0	

Table 4.18 depicts that none of the respondents indicated they strongly agree to the statement that there are no concerns with regard to the QM of SCs. The majority (63.2%) of respondents (a combination of 21.1% and 26.3% and 15.8%) disagree to the statement whereas a total (36.8%) of the respondents (a combination of 10.5% and 26.3%) agree they have no concerns. A total of 21.1 percent of the respondents strongly disagree that they are completely satisfied with the QM of SCs. U02, U05, U13 and U16 strongly disagreed to the statement.

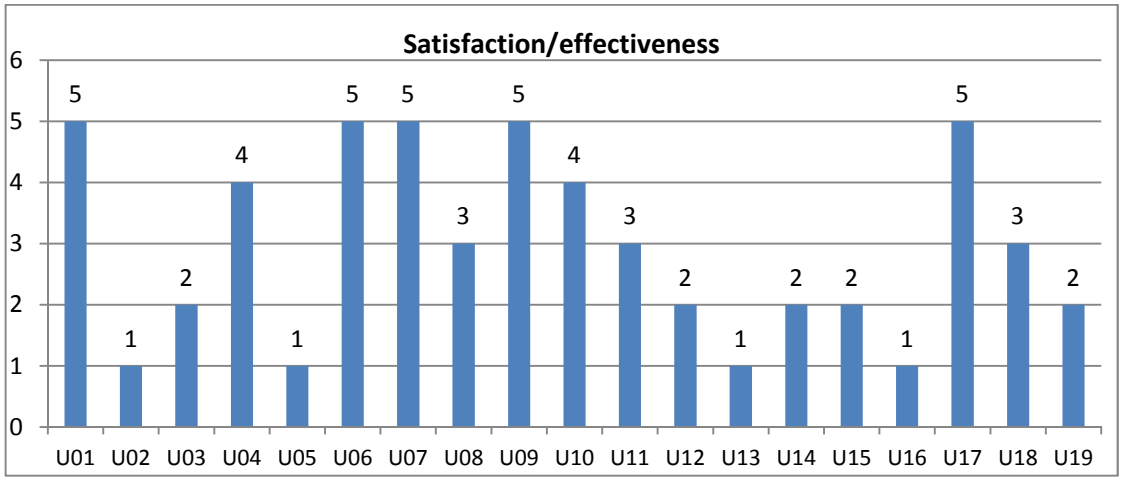

Figure 4.19: Satisfaction/effectiveness

Figure 4.19 indicates that none of the universities are convinced that they have no concerns with regard to the QM of SCs at their institution. Although the responses can be regarded as subjective views of the respondents, the graph indicates that only five respondents are of the opinion that they do not experience major problems with regard to the quality management of their SCs. Of significant value is the responses of U02; U03; U05; U12; U13; U14;U15, U16 and U19 who indicate that there are concerns with regard to the QM of SCs at their respective institutions.

Question 18: Our quality management system for short courses is on par with 'good practice'

This question relates to Question 17 but focusses on the respondents' opinion with regard to the effectiveness of their QMS for SCs in relation to "best practice" (*cf.* 1.4.2; 2.4.1; 2.5.3; 3.2).

Table 4.19: QMS for SCs on par with 'good practice'

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	1	5.3	5.3	10.5
	3	6	31.6	31.6	42.1
	4	3	15.8	15.8	57.9
	5	5	26.3	26.3	84.2
	6	3	15.8	15.8	100.0
	Total	19	100.0	100.0	

According to Table 4.19, 42.2 percent of respondents (a combination of 5.3% and 5.3% and 31.6%) disagree with the statement, while 42.1 percent of respondents (a combination of 15.8% and 26.3%) agree that they are on par. A total of 15.8 percent strongly agree to this statement.

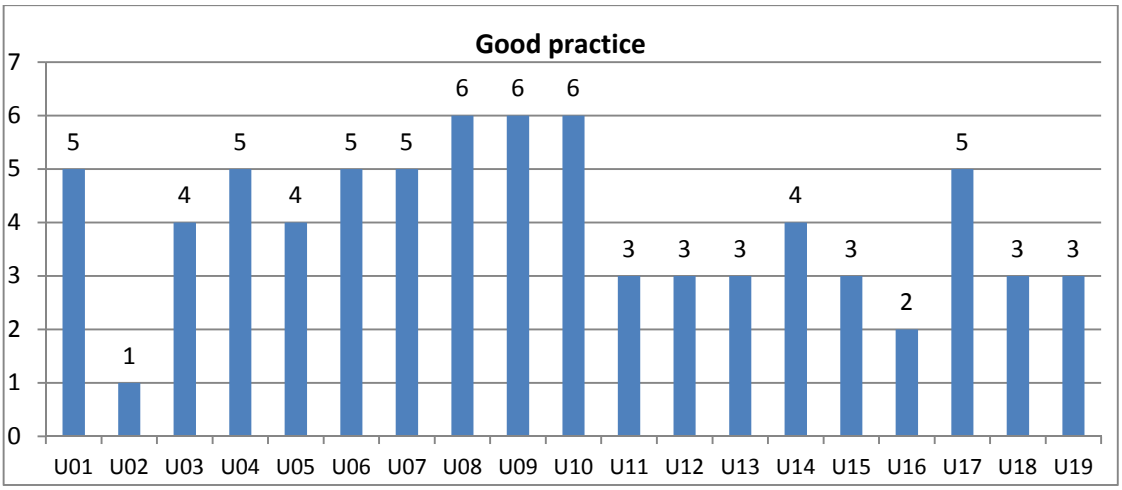

Figure 4.20: Good practice

According to Figure 4.20, the respondents of U8, U9 and U10 are convinced that their institutions' QMS for SCs is on par with good practice. As mentioned above, an alarming 36.9 percent of respondents are of the opinion that their institutions' QMS for SCs is not on par with good practices.

Question 19: We report to Senate on the offering of our short course programmes

This question relates to Question 5. Whereas, Question 5 focusses on an appropriate governance structure of an institution that approves the offering of SCs, this question focusses on the line of communication, and more specifically, reporting to Senate (*cf*. 2.5.3).

Table 4.20: Report to Senate on offering of SC programmes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	10.5	10.5	10.5
	2	2	10.5	10.5	21.1
	3	3	15.8	15.8	36.8
	4	3	15.8	15.8	52.6
	5	2	10.5	10.5	63.2
	6	7	36.8	36.8	100.0
	Total	19	100.0	100.0	

The majority (36.8%) of respondents strongly agree that they report to Senate on the offering of SC programmes. Only 10.5 percent of respondents

strongly disagree, while an equal amount (26.3%) of respondents (a combination of 10.5% and 15.8%) either agree or disagree to the statement. U02 and U06 strongly disagree that they report to Senate on SC matters.

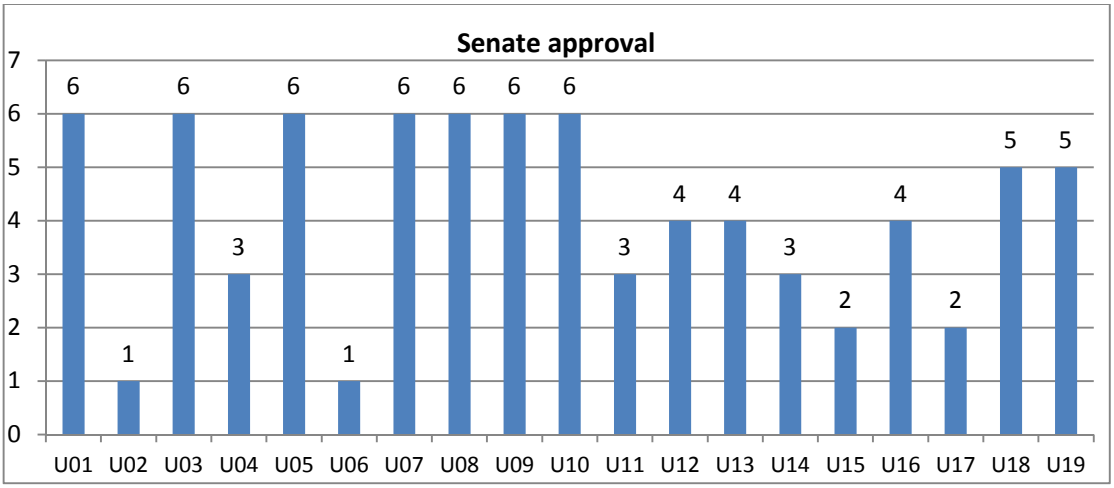

Figure 4.21: Senate approval

Figure 4.21 depicts that U01, U03, U05, U07, U08, U09 and U10 report to Senate on the offering of SC programmes.

Question 20: Senate approves the offering of credit bearing short courses

This question is related to Question 19 but focus on the approval of credit-bearing programmes. Credit bearing SCs are types of SCs for which credits, in relation to the courses' contribution to a unit standard or qualification, are awarded (*cf.* 2.5.1; 2.5.3). This question will assist the researcher to determine if the Senate of respective institutions as the highest governing body (cf. 2.5.3) approves the credit bearing courses.

Table 4.21: Senate approves offering of credit bearing SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	10.5	11.1	11.1
	3	1	5.3	5.6	16.7
	4	4	21.1	22.2	38.9
	5	3	15.8	16.7	55.6
	6	8	42.1	44.4	100.0
	Total	18	94.7	100.0	
Missing	System	1	5.3		
Total		19	100.0		

According to Table 4.21 the majority (83.3%) of respondents agree that Senate approves the offering of credit bearing SCs. A total of 16.7 percent of respondents disagree with the statement.

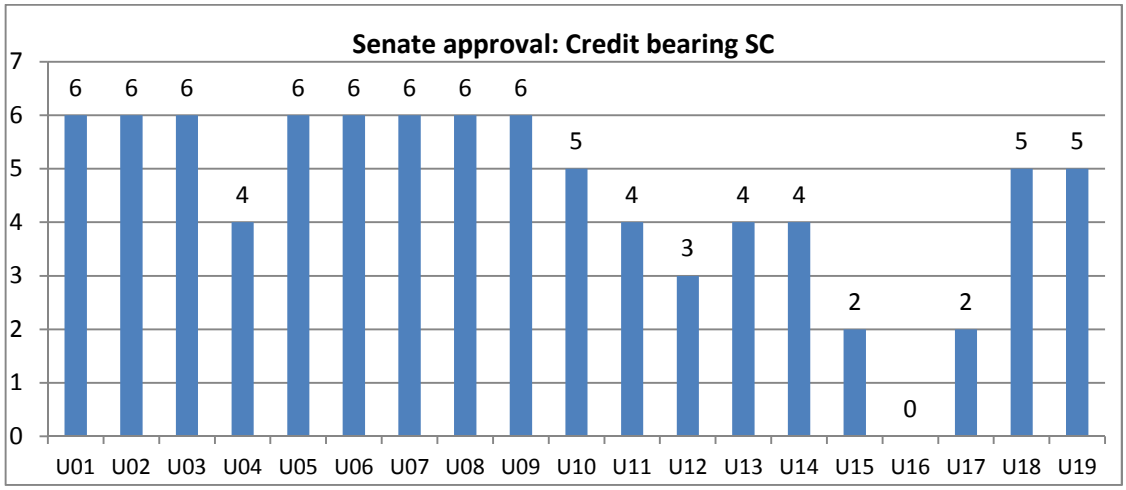

Figure 4.22: Senate approval of credit bearing short courses

Figure 4.22 illustrates that U01, U02, U03, U05, U06, U07, U08 and U09 strongly agree (good practice) that Senate approves the offering of credit bearing SCs at their institution. One of the institutions, U16, did not answer the question.

Question 21: Senate approves the offering of non-credit bearing SCs

The HEQC requires institutions to approve the SCs (also non-credit bearing) by an "appropriate academic unit or governance structure" (*cf*. 2.5.3). This

question relates to Question 20, but focusses on the approval of non-accredited bearing SCs by senate.

Table 4.22: Senate approves the offering of non-credit bearing SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.3	5.3	5.3
	2	3	15.8	15.8	21.1
	3	2	10.5	10.5	31.6
	4	6	31.6	31.6	63.2
	5	3	15.8	15.8	78.9
	6	4	21.1	21.1	100.0
	Total	19	100.0	100.0	

Table 4.22 illustrates that 31.6 percent of respondents disagree that Senate approves the offering on non-credit bearing SCs, while 68.5 percent agree that this is the case. U02 strongly disagree with the statement.

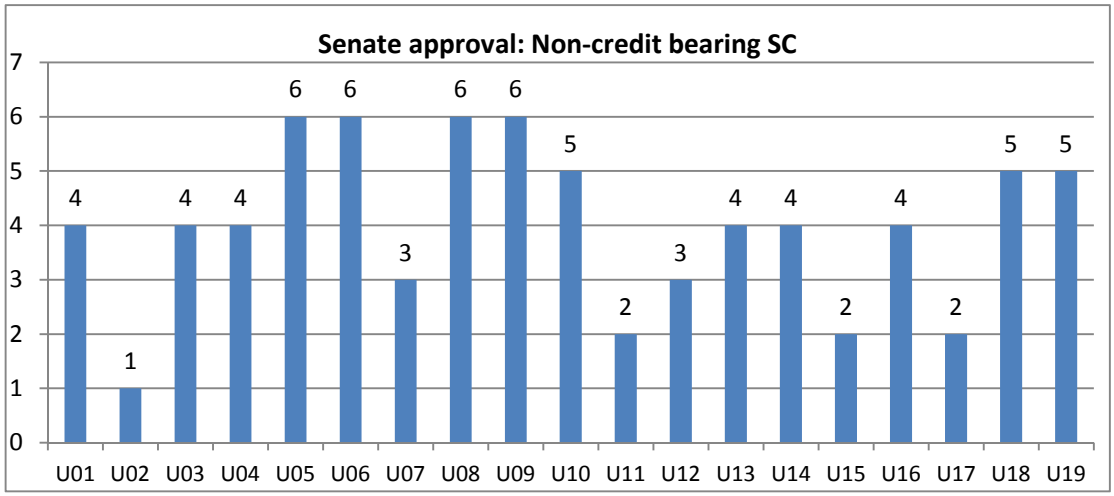

Figure 4.23: Senate approval of non-credit bearing short courses

As illustrated by Figure 4.23, the following institutions reported they strongly agree that Senate approves their non-credit bearing SCs, at the following universities: U05, U06, U08 and U09. Overall, the majority of institutions indicated their non-credit bearing SCs are approved by Senate.

Question 22: New SC proposals are approved by a faculty committee

This question relates to Questions 19, 20 and 21. Data on Question 22 determines the percentage of institutions that approve their new SCs on faculty level (*cf*. 2.5.3).

Table 4.23: New SC proposals approved by a faculty committee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	5.3	5.3	5.3
	3	2	10.5	10.5	15.8
	4	6	31.6	31.6	47.4
	5	4	21.1	21.1	68.4
	6	6	31.6	31.6	100.0
	Total	19	100.0	100.0	

Table 4.23 depicts that 31.6 percent of the respondents strongly agree that a faculty committee approves new SC proposals while 5.3 percent strongly disagree with the statement. A 52.7 percent of respondents agree to the statement while 10.5 percent disagree. Only U10 reported that a faculty committee does not approve new SC proposals.

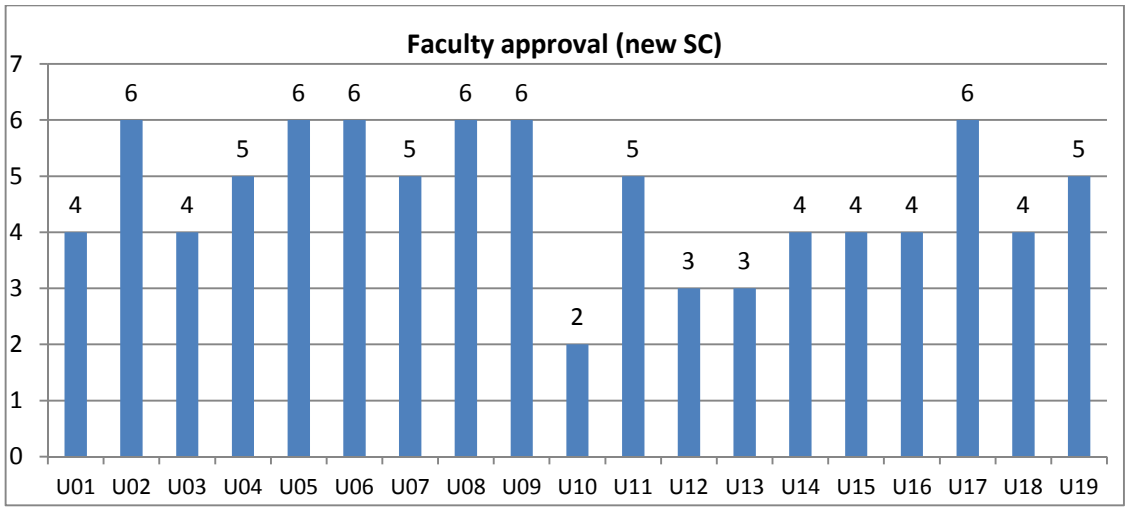

Figure 4.24: Faculty approval of new short courses

In Figure 4.24, U02, U05, U06, U08, U09 and U17 indicated that a faculty committee approves all new SC proposals. The majority of institutions have

systems in place where their respective faculties are involved in the approval of new proposals for SC programmes.

Question 23: Credit bearing short course certificates are signed by the appropriate level of accountability of our institution (i.e. the Registrar, Deputy Vice Chancellor, etc.)

The HEQC requires institutions to develop and implement effective mechanisms that will ensure the integrity of certificates, which includes that certificates should be signed by appropriate levels of accountability (*cf.* 2.5.3).

Table 4.24: Credit bearing SC certificates are signed by an appropriate level of accountability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	10.5	10.5	10.5
	3	3	15.8	15.8	26.3
	4	4	21.1	21.1	47.4
	5	2	10.5	10.5	57.9
	6	8	42.1	42.1	100.0
	Total	19	100.0	100.0	

According to Table 4.24, 31.6 percent of respondents agree that credit bearing SC certificates are signed by the appropriate level of accountability at the institution, while 26.3 percent disagree with the statement. A total of 42.1 percent of respondents strongly agree that this is the case.

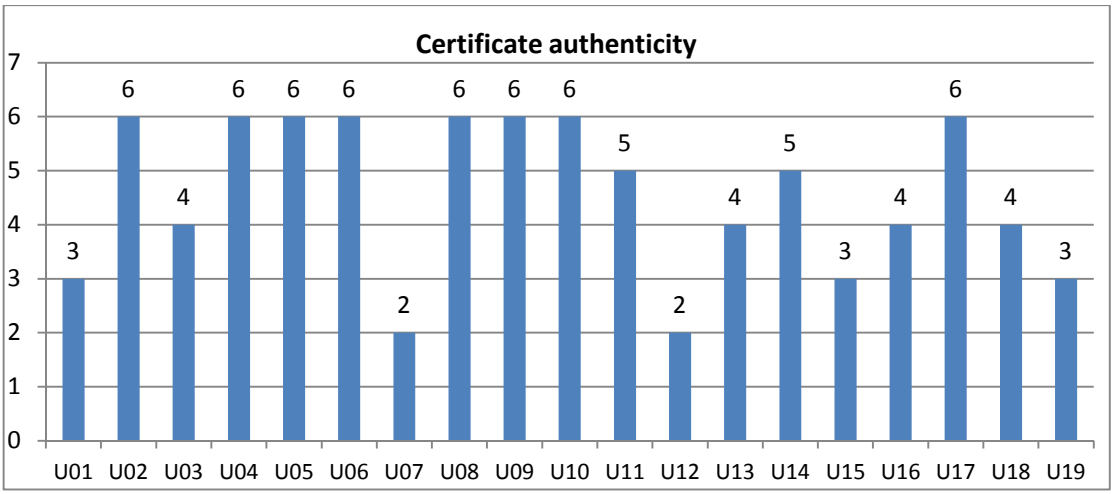

Figure 4.25: Certificate authenticity

Figure 4.25 depicts that the respondents of U02, U04, U05, U06, U08, U09, U10 and U17 indicate good practice with regard to certificate authenticity. None of the universities strongly disagrees with the statement. The fact that only 42.1 percent of the institutions strongly agree that credit-bearing certificates are signed by appropriate levels of accountability at their institutions is a grave concern from a quality assurance point of view. Therefore, the assumption can be made that many HEIs do not have effective mechanisms in place with regard to the signing of certificates on an appropriate level. Credit bearing SCs should be signed by senior managers such as the Registrar or the Vice-Chancellor or an equivalent member in line with the policy of the institution.

Question 24: After the completion of each short course, an evaluation of participants' learning experiences are conducted

The notion of self-evaluation is emphasised in the literature study (*cf*. 2.4.1; 2.4.2.2; 2.5.3). The PIRI process is discussed, as well as continuous improvement models such as PDSA/PDCA and ADRI. The 'R', 'S' and 'C' are generic concepts that refer to Reviews/Study/Check dimensions of the models for continuous improvement. These models are usually implemented on all institutional levels and for all sub-systems. Reviews and evaluations are usually conducted in order to collect information from the 'customers'

(students and staff), as valuable information that feeds into the remedial action planning process. Class reviews and programme evaluations are mechanisms to determine the satisfaction levels of the students with regard to the 'service' rendered to them (teaching and learning, academic support, etc.). Therefore, it is imperative that SC students should reflect on programmes offered to them by means of class evaluations, this information forms part of the management information, which will be used to remedy deficiencies and enhance the quality of SCs on operational level.

Table 4.25: Evaluation of participants' learning experiences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	10.5	10.5	10.5
	3	1	5.3	5.3	15.8
	4	3	15.8	15.8	31.6
	5	9	47.4	47.4	78.9
	6	4	21.1	21.1	100.0
	Total	19	100.0	100.0	

Table 4.25 indicates that the majority (84.3 percent) of respondents positively indicated that an evaluation of participants' learning experiences is conducted after completion of each SC. Only 15.8 percent (a combination of 10.5% and 5.3%) of respondents disagree with the statement.

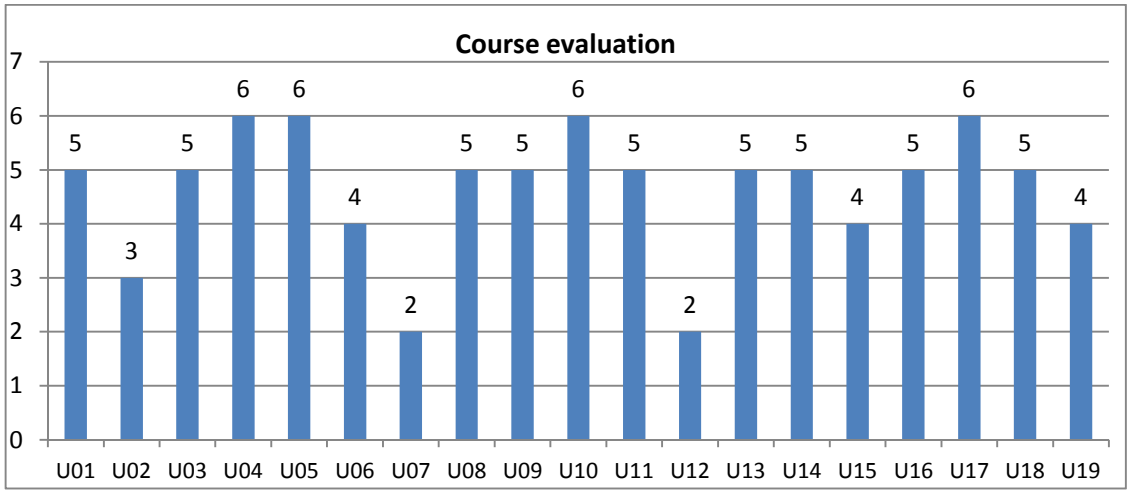

Figure 4.26: Course evaluation

According to Figure 4.26, U04, U05, U10 and U17 reported that their institution does conduct a course evaluation after completion of each SC. The majority of institutions; therefore, are gathering information from the students in order to detect deficiencies and translate the information into management information, which can inform remedial action planning.

Question 25: There is a short course brochure available at our institution

The students' knowledge of the institution includes information on the programmes available, with all the necessary information. Interaction between all members of a system, such as a university, is central to the systems approach (*cf.* 2.2). All staff members in the system should constantly be in communication with each other. This requires appropriate structures and systems (*cf*. 2.3.1). Brochures are forms of knowledge sharing, and are valuable mechanisms of communication to students prior to registration for a specific SC programme.

Table 4.26: Availability of SC brochure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	15.8	15.8	15.8
	2	2	10.5	10.5	26.3
	3	3	15.8	15.8	42.1
	4	3	15.8	15.8	57.9
	5	6	31.6	31.6	89.5
	6	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

Table 4.26 indicates that 10.5 percent of respondents strongly agree that a SC brochure is available at their institution, while 15.8 percent indicate that they strongly disagree with the statement. U02, U05 and U06 reported that a SC brochure does not exist at their institution.

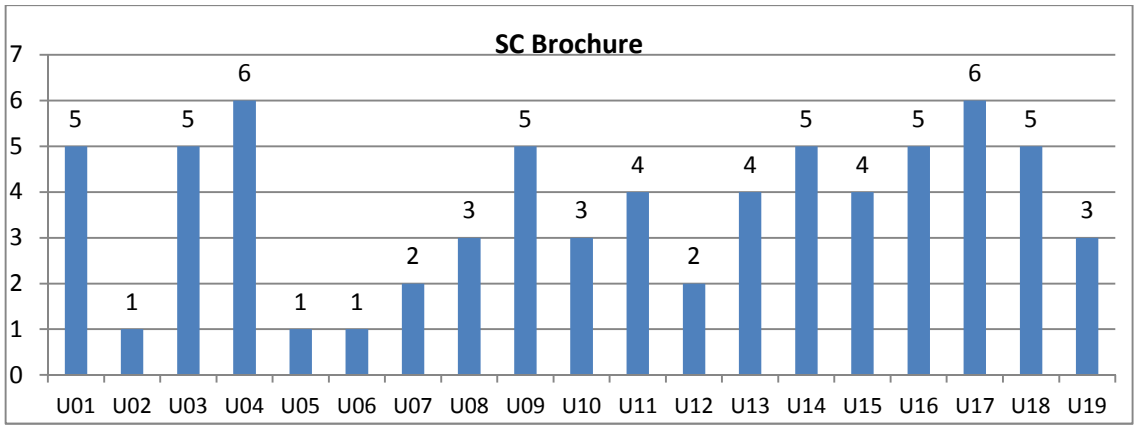

Figure 4.27: Short course brochure

According to Figure 4.27, only two universities (U04 and U17) indicated that a SC brochure is available at their institution. Institutions such as U01, U03, U09, U11, U14, U13, U14, U15, U16, U18 have some sort of information available about their SC offerings.

Question 26: Our institution has a policy for short course management

This question relates to Question 1. Question 1 reflects on the effective monitoring of the implementation of a SC policy. SC policies should be developed, implemented, widely known and continuously be reviewed (*cf.* 1.2; 2.5.3). Answers to this question will help the researcher to interpret the respondents' answers to Question 1, and will give an overview of the development and implementation of SC policies on national level.

Table 4.27: Availability of policy for SCs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	5.3	5.3	5.3
	5	2	10.5	10.5	15.8
	6	16	84.2	84.2	100.0
	Total	19	100.0	100.0	

Table 4.27 indicates that the majority (84.2%) of respondents strongly agree that their institution has a policy for SC management.

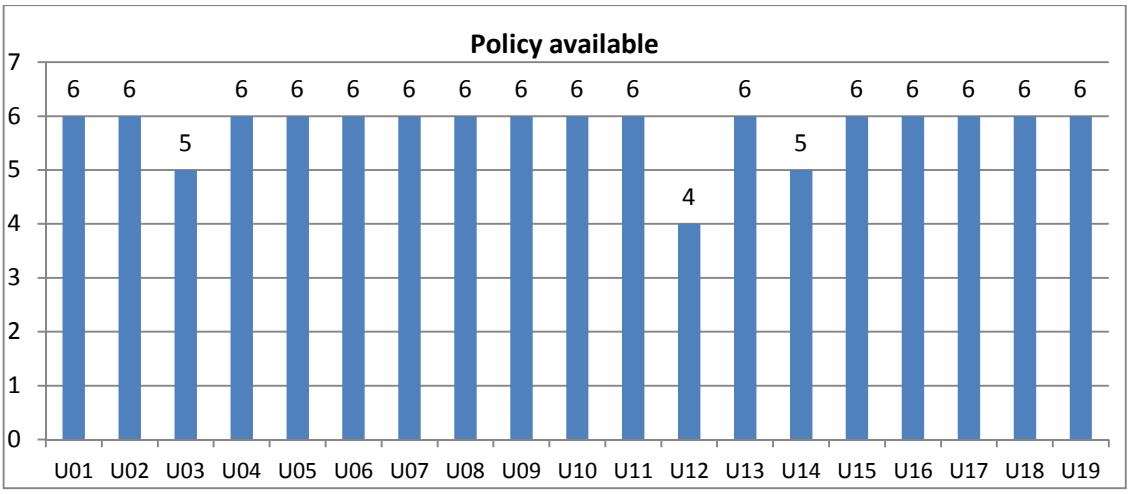

Figure 4.28: Policy available

Figure 4.28, shows that U01, U02, U04, U05, U06, U07, U08, U09, U10, U11, U13, U15, U16, U17, U18 and U19 indicate good practice with regard to a policy for SC Management.

4.2.3 Identification of HEIs with possible best practice: universities that received commendations and full delegation of SCs

The questions in Section C of the questionnaire were informed by the minimum standards and requirements of the HEQC (CHE 2008), which the researcher regards as good practice for the QM of SCs at HEIs (9 questions). The questions in Section C that are not directly linked to the above-mentioned requirements (17 questions), reflect on institutional procedures and systems for the quality management and assurance of SCs, which are valuable for informing the researcher's conceptualisation of a QMS for SCs in HEIs (*cf.* 3.4.2).

The following table (Table 4.28) shows the number of the questions as it appears on the questionnaire, with the relevant questions that relate to the above-mentioned HEQC requirements:

Table 4.28: Questions that relate to the HEQC requirements

Number	Question
1	Our institution has arrangements in place to monitor the implementation of the short course policy
2	Our mechanisms for the quality assurance of short courses are widely known
3	There is a quality assurance system in place that ensures the regular reviews of all arrangements for short courses
5	Mechanisms and processes are in place for the approval of short courses by the appropriate academic unit or governance structure at our institution
6	The planning for the provision of short courses at our institution takes into account a range of issues such as availability of staff to develop and offer the courses, admin capacity, fees, revenue sources, etc.
13	At our institution, a short course 'register' is in place that has information on the status of courses i.e. course title and code, outcomes, credit bearing status, admission requirements, assessment criteria and methods, teaching and learning strategies, venue, fees and other financial information
14	Certification of short courses are issued at our institution on par with the institution's relevant policy for certification processes
15	Clear and efficient arrangements are in place at our institution that ensure the integrity of learner records and certification processes
23	Credit bearing short course certificates are signed by the appropriate level of accountability of our institution (i.e. the Registrar, Deputy Vice Chancellor, etc.)

The researcher identified institutions that received commendations and full delegation for SCs from the data gathered from respondents to Section B of the questionnaire (see Table 4.1). The researcher regards these institutions as universities with possible best practices due to the positive outcome of their audits on QM during the Cycle 1 HEQC institutional audits (*cf.* 1.1). The HEIs that indicated they received commendations and full delegation from the HEQC during this cycle are U04, U06, U07, U10 and U17, according to Table 4.1.

The following table (Table 4.29) reflects on the respondents of the above-mentioned five institutions' responses to the questions relating to the HEQC requirements and standards. As already mentioned, the responses per question ranged from 1 = strongly disagree, 2 = disagree, 3 = moderately disagree, 4 = moderately agree, 5 = agree to 6 = strongly agree. The frequency variables were coded as Q1 – Q26 (Q = question followed by the number of the respective question as it appears on the questionnaire). Only questions 1, 2, 3, 5, 6, 13, 14, 15 and 23 are related to the HEQC requirements and minimum standards (CHE 2008).

Table 4.29: Values of questions related to HEQC requirements

HEIs	Questions related to HEQC requirements								
	1	**2**	**3**	**5**	**6**	**13**	**14**	**15**	**23**
U04	6	5	4	5	6	5	6	6	6
U06	6	6	6	6	6	6	6	5	6
U07	6	4	6	6	3	4	6	6	2
U10	6	5	6	6	6	6	6	5	6
U17	6	6	5	6	5	6	6	6	6

The only institutions that did not agree or strongly agree with the statements were U04 on Question 3, U07 on Questions 2, 6, 13 and 23. The only institution that indicated values of significance is U07, who moderately disagree on the statement of Question 6 and disagree on the statement of Question 23. Therefore, the majority of institutions that implement good practice with regard to the QM of SCs adhere to the minimum standards and requirements of the Framework for Delegated Functions (CHE 2008).

The following table (Table 4.30) shows the responses of the above-mentioned institutions that implement best practice. The questions that are

indicated in Table 4.30 are not directly linked to the HEQC Framework Document (CHE 2008). Answers to these questions give an indication of the respective institutions' processes and procedures with regard to the QM of SCs.

Table 4.30: Questions not directly related to the HEQC framework document

HEIs	Questions not related to HEQC requirements																
	4	**7**	**8**	**9**	**10**	**11**	**12**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**24**	**25**	**26**
U04	4	4	4	4	4	1	2	5	4	5	3	4	4	5	6	6	6
U06	6	5	5	6	3	2	6	4	5	5	1	6	6	6	4	1	6
U07	6	4	4	4	4	2	2	6	5	5	6	6	3	5	2	2	6
U10	6	5	5	5	2	2	5	5	4	6	6	5	5	2	6	3	6
U17	5	4	4	5	5	5	5	5	5	5	2	2	2	6	6	6	6

Four of the five institutions that received commendations and delegation for the QM of SCs are implementing cyclical processes of planning, doing, reviewing, adjustments and re-planning (Question 4), in order to ensure continuous improvement. The respondent of U04 indicates that he/she 'moderately agree' with the statement. As depicted by Table 4.5, as many as 36,9 percent of all institutions that participated in this study lack cyclical process with the above-mentioned dimensions that ensures continuous improvement.

Respondents indicate that they moderately agree and agree with the statement that their QAS's are fit to identify gaps and deficiencies (Question 7). Not one of the five institutions' QAS is, according to the respondents, effective to identify deficiencies. Only two of the five institutions agree with the statement but not one strongly agree with this statement. The statistics on all 19 institutions' values for this question (Table 4.8 and Figure 4.9)

emphasise the fact that as many as 31.6 percent of the institutions do not have effective QAS's for SCs. Question 8 deals with the utilisation of the outcome of reviews for remedial action purposes. The five institutions agree and moderately agree with this statement. In comparison with the statistics of all institutions that reflected on the question, 21.1 percent indicated that they disagree or strongly disagree with the question (Table 4.9 and Figure 4.10).

Question 9 relates to Question 4, the latter focusses on the implementation of cyclical processes of planning, implementation, review and adjustment; whereas Question 9 measures how many institutions implement a QAS that is underpinned by the PDCA/ADRI approach. The majority of the five institutions have a QAS that is underpinned by the above-mentioned PDCA/ADRI model. The outcome of the values for this question per institution, correlate with the answers to Question 4, except for U07. U07 has cyclical processes in place to ensure planning, doing, reviewing and adjustments (Table 4.5 and Figure 4.6) but this system is not necessarily based on the PDCA/ADRI model (Table 4.10 and Figure 4.11).

The data with regard to the approach to quality management (Question 10) shows that three institutions (one agree and two moderately agree) follow a possible centralised-decentralised approach. It is evident from the data (Figures 12 and 13), as well as the data of the five institutions with regard to questions 10 and 11, that their institutions have different systems in place for the quality management of SCs. This ranges from strong centralised approaches (for example, U17) to variations of centralised-decentralised approaches (U4, U6, U7 and U10) with more than one approach to quality management of SCs but not solely as the responsibility of the respective faculties. Three of the five institutions regard the quality management of its SCs as the responsibility of a central office or a SC manager (U6, U10, U17) – Question 12.

While the statistics of Table 4.17 and Figure 4.18 indicate that there is a general lack of benchmarking exercises to improve quality management of SCs on institutional levels (Question 16), the five institutions that most possibly implement best practice are utilising benchmarking exercises to inform the refinement of their quality management of SCs. This has a direct impact on the fact that the five institutions implement 'good practice' (Question 18). There is therefore, a relation between the fact that they conduct benchmarking exercises and the improvement of their systems to a level of 'good practice'.

Questions 19 and 20 are related; Question 19 states that the respective institutions report to Senate with regard to the offering of SC programmes, while Question 20 reflects on the approval of credit bearing programmes. It is clear that only two of the five institutions report to Senate for the offering of their SC programmes, while all of the five institutions' credit bearing courses is approved on Senate level accept for U17. Three of the five institutions submit the approval of their non-accredit bearing programmes to Senate (Question 21). Except for U10, four of the five institutions' new SC proposals are approved on faculty levels (Question 22). This is on par with the statistics of Table 4.23 and Figure 4.24.

Four of the five institutions (except for U07) indicate that they usually conduct an evaluation of the participants' course experience after completion (Question 24) which is on par with the findings of the majority (84.3%) of institutions that participated in this study (Table 4.25 and Figure 4.26). Only two of the five institutions (U04 and U17) have brochures available for SCs (Question 25), this is on par with the findings of all the institutions that took part in the study, *inter alia* the majority institutions have information available that informs students on SC programmes. The five universities' reflection on the statement in Question 26 with regard to the availability of a SC policy, is on par with the findings as indicated in Table 4.27 and Figure 4.28. The majority of institutions (84.2%) have SC policies in place.

4.2.4 Differences between types of HEIs

If a quantifiable variable is divided into three or more distinct groups using a descriptive variable, one can assess the likelihood of these groups being different occurring by chance alone by using one-way analysis of variance or one-way ANOVA (Saunders *et al.* 2007:448). Therefore, this technique will test whether groups have different average scores. In this study, the three different types of HEIs (traditional universities, comprehensive universities and universities of technology) were tested for significant differences. The statistic used in ANOVA to determine statistical significance is the *F*-ratio (Bordens & Abbott 2011:443). Saunders *et al.* (2007:448) noted that if the likelihood of any difference between groups occurring by chance alone is low, this will be represented by a large *F* ratio with a probability value (*p*-value) of less than 0.05 – this is termed statistically significant.

Table 4.31 illustrates that the *F* ratio value of 1.160 with two and 16 degrees of freedom (df) has a probability of occurrence, by chance alone, of less than 0.338 if there is no significant difference between the three groups.

Table 4.31: Using ANOVA to indicate significant differences between the three types of HEIs

Average

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.560	2	.780	1.160	.338
Within Groups	10.758	16	.672		
Total	12.318	18			

Therefore, the conclusion is that there is no statistically significant difference ($F = 1.160$, $p>0.05$) between the responses of the three different types of universities.

Due to the fact that the level of significance was greater than 0.05, post hoc tests were deemed unnecessary.

4.3 CONCLUSION

This chapter reported on the empirical results of the study. A descriptive analysis for Sections B and C was undertaken. The researcher integrated the literature study with the statistical data in order to conceptualise the notion of QM of SCs at public HEIs in South Africa.

Frequencies and percentages were utilised to describe the respondents' reflection on the current situation concerning SCs at their respective institutions. The researcher identified institutions that received commendations and full delegation for SCs from the data gathered from respondents to Section B of the questionnaire. The researcher regards these institutions (U04, U06, U07, U10, U17) as universities with possible best practices due to the positive outcome of their audits on QM during the Cycle one HEQC institutional audits. Questions in Section C that relate to HEQC requirements for SCs were identified and responses to these questions by the above-mentioned five institutions were tabulated. The study indicated that the majority of institutions that implement good practice with regard to the QM of SCs adhere to the minimum standards and requirements of the Framework for Delegated Functions (CHE 2008).

Tests of statistical significance (ANOVA) were undertaken to ascertain whether the results obtained by data analysis are statistically significant. The three different types of HEIs (traditional universities, comprehensive universities and universities of technology) were tested, and no statistically significant difference ($F = 1.160$, $p>0.05$) between the responses of the three different types of universities were found.

The analysis will assist in determining what recommendations will be appropriate to conceptualise an effective QM system for SCs at VUT. This

will be discussed in Chapter 5. This chapter will also suggest possible further research opportunities to be taken up by fellow researchers.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this chapter is to discuss the main findings that the researcher obtained in the study. This will be done by a short review of the theoretical basis of the study followed by a summary of the results of the empirical research. The interpretation of the literature study and the outcome of the empirical study will be utilised to inform the recommendations in this chapter.

5.2 GENERAL REVIEW

The main purpose of this study was to conceptualise an effective QAS for the QM of SCs within the VUT by identifying components of good practices on QAS's at HEIs on national level (*cf.* 1.3.1).

The findings and recommendations should be understood within the context of the following theoretical and empirical objectives of this study.

5.2.1 Theoretical objectives

Theoretical objectives in this study were achieved through an in-depth analysis of relevant literature. In order to achieve the primary objective, the following theoretical objectives were formulated for the study (*cf.* 1.3.2):

- To conduct a literature study on continuous quality improvement models, QM and QA concepts and processes
- To investigate and identify the philosophical and theoretical underpinnings of a QMS
- To conceptualise the QM and QA of SCs within the context of higher learning.

With reference to the first theoretical objective regarding conducting a literature study on continuous quality improvement models, QM and QA concepts and processes, data was obtained from different sources such as textbooks on QM, journal articles, the Internet and other literature sources. The literature study assisted the researcher to gain a deeper understanding of QM and quality systems within the context of higher education, as well as an understanding of the different continuous quality improvement models (*cf.* 2.4.2).

The second theoretical objective, which was concerned with the investigation and identification of the philosophical and theoretical underpinnings of a QMS, was obtained through a thorough study of systems theory, as the most important element in QM (*cf.* 2.2), and a discussion of the different quality concepts, including TQM (*cf.* 2.3).

With reference to the third theoretical objective, which concerned conceptualising the QM and QA of SCs within the context of higher learning, the literature study assisted the researcher to reach a deeper understanding of the concepts QM and QA of SCs within the context of higher learning (*cf.* 2.5.3).

5.2.2 Empirical objectives

The following empirical objectives were formulated to support the primary and theoretical objectives (*cf.* 1.3.3):

- To determine the characteristics of an effective QAS of SCs
- To measure good practice with regard to the QAS and QM of SCs on national level.

As mentioned previously, the main purpose of this study was to conceptualise an effective QAS for the QM of SCs within the VUT. The following are conclusive remarks on the major findings and

recommendations, based on the literature study and the outcome of the empirical study.

5.3 FINDINGS AND RECOMMENDATIONS

The following findings reflect on the primary objective of the study and the above-mentioned theoretical and empirical objectives.

The majority of institutions that participated in this study are of the opinion that there are concerns with regard to the QM of SCs at their institutions. This is evident from an alarming 63.2 percent of HEIs that reported that they disagree with the statement that they have no concerns with regard to the QM of SCs (Q17). This concurs with the finding on the responses of the respondents to question seven that reflects on the effectiveness of QMS for SCs. Although the majority of the institutions have QM and assurance systems in place, only 26.4 percent of the respondents are convinced that their systems are effective. This outcome agrees with the finding of question 18 ("our QMS for SCs is on par with good practice"), where a significantly low number of respondents (36.9 %) are of the opinion that their institution's QMS for SCs is not on par with good practices. This finding emphasises the need and relevance of this study and corresponds with the problem statement (*cf.* 1.3).

Of importance is the finding that there is a general lack of benchmarking exercises (Q16) to improve QM of SCs on institutional levels, except for the five institutions that most probably implement best practice. Not only did these institutions receive commendations from their respective audit teams for effective QMS for SC, but were of the few institutions that received full delegation from the HEQC (*cf.* Table 4.1). These two factors were a clear indication to the researcher that the above-mentioned five institutions implement good practice with regard to QMS for SCs, which suggests that their QMS for SCs is on par with the minimum standards of the HEQC. The data (Q16) revealed that the institutions mentioned above are using

benchmarking exercises to inform the refinement of the QM for SCs. The fact that the five institutions implement good practice would indicate there is a correlation between institutions that use benchmarking exercises to inform the refinement of the QM for SC, and the implementation of good practice. It appears that institutions that received commendations and delegation for SCs refine their systems through ongoing benchmarking exercises.

FINDING 1:

The majority of institutions implemented quality management and assurance systems for SCs but the effectiveness of these systems are questionable.

FINDING 2:

There is in general a lack of benchmarking practices with regard to SCs among HEIs.

FINDING 3:

Benchmarking practices enhance the QM of SCs.

Recommendation 1:

VUT should benchmark with the five institutions that received commendations and full delegations in order to enhance its QM of SCs.

VUT developed a QMS based on the principles of TQM. The notion of ongoing improvement or continuous improvement underpins the TQM model. According to the literature study, a framework for ongoing improvement is a valuable QM mechanism to ensure cyclical processes of ongoing improvement (*cf.* 2.4.2). Seven universities (Q4) reported significantly low values to the existence of a continuous improvement model. The literature study revealed that continuous improvement is the driving force of sound QMS (*cf.* 2.4). It is, therefore, imperative for HEIs to develop and implement QAS's that are based on cyclical processes of ongoing improvement, such as the PDCA, PIRI and ADRI models. Two of the questions in the questionnaire

focused on the planning and review phases of a continuous improvement model. Although the majority of institutions reported that they conduct reviews of SCs on a regular basis (Q3), some institutions indicated that they do not have sufficient systems in place to review SCs on a regular basis, which could have a negative effect on the continuous improvement of SCs. The majority of the respondents were of the opinion that they have good practice with regards to the planning of SCs (Q6). Planning and regular reviews is one of the minimum requirements of the HEQC for an effective QMS for SCs (*cf.* 2.5.3). All of the five institutions that received commendations and recommendations implement cyclical processes of planning, implementation, reviews and adjustments.

FINDING 4:

There is a lack of implementation of continuous improvement models for SCs.

FINDING 5:

The institutions that receive commendations and full delegations for the management of SCs implement models for continuous improvement

Recommendation 2:

VUT should refine its QAS to implement a continuous improvement model (for example, PIRI) that ensures cyclical processes for the enhancement of SCs.

Criterion 3 of the HEQC Framework for Delegated Functions (CHE 2008) document stipulates the criterion for certification as follows, “Clear and efficient arrangements ensure the integrity of learner records and certification processes. Oversight and monitoring responsibility is clearly allocated and acted upon.”

In order to meet this criterion, the SC office should meet the following minimum requirement: Certificates for credit-bearing SCs should be signed by appropriate levels of accountability at the institution (*cf.* 2.5.3). It is of grave concern that only 42.1 percent of respondents strongly agree that their credit-bearing SC certificates are signed by appropriate levels of accountability (Q23). Four of the five institutions that received commendations and recommendations from the HEQC, indicate good practice with regard to certificate authenticity. These institutions indicated that credit-bearing certificates are signed by appropriate levels of accountability. According to the HEQC, integrity of the certification process is critical to ensuring the trust of the broader society in the value of the qualification awarded.

FINDING 6:

There is, in general, a lack of security arrangements to ensure authenticity of SC certificates.

Recommendation 3:

At VUT, the Registrar and the Vice-Chancellor, or equivalent, should sign certificates for credit-bearing SCs.

As already mentioned, the majority of institutions reported that they have a QAS in place that ensures regular reviews of all arrangements for SCs (Q3). Question seven dealt with the effectiveness of their institution's QAS and the data revealed that only one institution regarded their QAS as effective. Based on this data, the assumption is that all the HEIs have a QAS in place, but it is not considered sufficiently effective. The answer to this contradiction (institutions have QAS in place but they are not effective to enhance the quality of SC) can be found in the outcome of question two, "mechanisms for the quality assurance of SCs are widely known in the institution", where only three universities strongly agreed to the statement. The literature study revealed that HEIs are regarded as open systems with interconnected sub-

systems (*cf.* 2.2) and effective communication is imperative in such a system. The lack of knowledge of staff with regard to mechanisms to detect deficiencies may have a negative impact on the effectiveness of the QAS of the respective institution. Therefore, it can be concluded that the dissemination of SC information is imperative. The central system for QA of SCs should ensure that silo management and ineffective communication is addressed by means of structures that enhances effective communication, for example sub-committees with representative members of all functional levels, especially key academic support divisions, quality office, DVC Academic, faculty representatives, and members of the SC office.

Institutions should embark upon establishing effective communication channels between the structures for SC management and faculties/departments. All relevant parties should receive communications on information such as mechanisms for regular review of the effectiveness of QMS for SCs.

FINDING 7:

In general, staff has a lack of knowledge of the QAS and mechanisms for SCs.

Recommendation 4:

VUT should develop and implement mechanisms that will ensure effective communication and knowledge of the QA of SCs.

One of the HEQC requirements for an effective SC system is that a SC register should be in place. Although the majority of institutions reported that this is the case, 21.1 percent disagree with this statement (Q13). As the HEQC regard implementing and maintaining a SC register as one of the minimum requirements for effective quality management of SCs, it is considered to be an HEQC minimum standard, and compulsory at each institution.

FINDING 8:

The implementation of an SC register is imperative for the effective management of SCs.

Recommendation 5:

VUT should have a register in place, which outlines, amongst other things, the purpose, nature and status of SCs.

Recommendation 6:

The SC register should be integrated into the management information system of VUT in order to keep a record of courses, and to inform processes of planning, resource allocation, reviews and improvement.

Question 25 referred to the availability of a SC brochure at institutions. 42.1 percent of respondents indicated that their institution does not have a SC brochure. All course-related information can be encapsulated in such a brochure.

FINDING 9:

A SC brochure is a valuable marketing mechanism that ensures effective communication and the students' knowledge of courses.

Recommendation 7:

VUT should develop and implement a SC brochure as a valuable tool of communication that will enhance the current and potential students' knowledge of the institution and its SC offerings.

As much as 84.2 percent of the respondents indicated that their institutions developed and implemented policies for SCs (Q26). It is according to this study imperative that institutions should ensure that these policies are widely known. The study emphasises the importance of the effective implementation

of a SC policy, which should be monitored on a continuous basis. VUT currently has a centralised-decentralised system, and it is the responsibility of the faculties to offer SCs, while the administrative responsibility resides with a central office. The policy for SCs should be revised and aligned with the new structures and best practice as identified in this study.

FINDING 10:

The majority of institutions developed and implemented approved policies for the offering of SCs.

Recommendation 8:

VUT should revise its policy for SCs and align it with best practices as identified in this study.

Recommendation 9:

The policy for SCs should be subjected to a continuous review process.

Recommendation 10:

VUT should ensure that the policy is widely known by the relevant stakeholders.

Recommendation 11:

VUT should ensure that mechanisms are in place, which ensures the effective monitoring of the implementation of the policy.

5.4 LIMITATIONS OF THE STUDY

The researcher regards the following as limitations to this study:

5.4.1 Formulation of questionnaire

The QMS and internal structures for SCs of HEIs are diverse; it was, therefore, a challenge to design 'generic-type' questions that would provide

sufficient data from the majority of participants. Therefore, the diverse nature of QMS of institutions in South Africa, as well as the limitations of close-ended questions, made it very difficult to formulate questions that address the characteristics of the diverse types of SC management systems. This resulted in a need by the researcher to obtain clarity or explanations of answers provided by some of the respondents.

As an example, a few respondents wrote notes on the questionnaire to explain why their response was 'moderately agree/disagree' instead of 'strongly agree/disagree'. This qualitative type of information was valuable during the interpretation of the data. One institution reported that it has three campuses and SCs are managed somewhat differently on each of the three campuses. Institutions that follow centralised-decentralised approaches might also have difficulties completing this 'generic' questionnaire.

One of the respondents noted per e-mail that question 20, "Senate approves the offering of credit bearing SC", needed more explanation. In this case, Senate approval is done indirectly, by having Senate representatives on appropriate committees, who consider and approve SC applications. An open-ended question might be the solution to this limitation. This emphasises the value of a 'mixed approach', *inter alia* applying quantitative and qualitative methodology to this type of study.

5.4.2 Likert scale

During the data analysis phase the researcher realised that the six-point Likert scale could have been reduced to a four-point scale. In many instances the percentages of disagree/moderately disagree, or agree/moderately agree, were combined to give a total percentage.

5.4.3 In-depth information

Due to the limitations of a mini-dissertation, it was not possible during the field study to collect in-depth information from the five universities with best practice.

5.5 IMPLICATIONS FOR FUTURE RESEARCH

The findings from the study point toward several useful directions for future study.

The implementation of a revised QAS for SCs will enhance the institution's offering of SCs and contribute to the effective QM of SCs at VUT. It is envisaged that this study may result in a framework for the implementation of a QAS for SCs at VUT and the refinement of the current policy on SCs. It might also contribute to enhancing and conceptualising the QM of SC on national level for institutions that have an ineffective QAS. Therefore, this study can inform the development of a conceptual framework for understanding and enhancing SC quality management on national level.

5.6 CONCLUDING REMARKS

The primary purpose for this study was to conceptualise an effective QAS for the QM of SCs within VUT by identifying components of good practices on QAS's at HEIs on national level.

The researcher identified institutions that received commendations and full delegation for SCs from the data gathered from respondents. The researcher regards these institutions as universities with possible best practices due to the positive outcome of their audits on QM during the Cycle one HEQC institutional audits (*cf.* 1.1). This study provides an overview of the diverse QM and quality assurance arrangements at HEIs in South Africa. Information on best practices at the institutions that participated in this study enabled the researcher to conduct a comparison study. The outcome of this comparison informs the researcher's attempt to suggest recommendations to VUT on

initiatives that will have a positive impact on the enhancement of the quality of its SC offerings. This empirical study is a contribution to VUT's attempt to conceptualise and enhance the QM of its SC offerings, which is on par with the recommendation of the HEQC's cycle one audit report. It can also feed, on national level, into the refinement of the SC quality management and assurance practices, given the fact that 63.2 percent of the respondents find this an area of concern. This study will benefit VUT if it is taken to a next level of re-planning of the QM and QAS of SCs, as part of the ongoing initiatives, which is characteristic of a TQM approach. Continuous benchmarking and comparative studies such as this one, are on par with VUT's institutional QMS, which has a strong focus on continuous improvement and stakeholder satisfaction.

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ANNEXURE A: QUESTIONNAIRE COVER LETTER

Vaal University of Technology
Your world to a better future

VUT

SURVEY QUESTIONNAIRE

QUALITY MANAGEMENT OF SHORT COURSES AT HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA: A COMPARATIVE STUDY

Dear Colleague

I hereby kindly request you to participate in this research. This e-mail survey forms part of an MTech study at the Vaal University of Technology (VUT) regarding quality management of short courses by comparing the short course quality assurance systems of higher education institutions on national level. I am conducting this research to conceptualise an effective quality assurance system for the quality management of short courses within the VUT.

The questions of this research focus on the **quality management of Short Courses** at your institution. The questionnaire should ideally be completed by the officer at your institution who is involved in the coordination and monitoring of the Quality Assurance and Quality Management of your institution's Short Courses (e.g. Dedicated Senior Officer/Manager/Director: Short Courses or Quality Manager).

Your participation in this research is voluntary and answering this questionnaire will take approximately 15 minutes of your time. Please provide the information requested to the best of your ability. Confidentiality and anonymity are assured and the material that you submit will not be used against you or your institution in any way (no names of persons or institutions will be disclosed). The use of this data will be limited to research purposes only.

Your participation in this research will be appreciated and your response to this survey can greatly enhance our understanding of quality assurance systems for Short Courses on national level. Please take note that the concept "Short Course" will be utilised in this questionnaire. Short Courses in this context refer to a type of short learning programme through which a learner may or may not be awarded credits, depending on the purpose of the programme.

Please send your response to Marieda Brits at the Vaal University of Technology: marieda@vut.ac.za before 16 July 2012.

Kind regards

Marieda Brits
Unit for Preparatory Programmes
(016) 950-9723

ANNEXURE B: SURVEY QUESTIONNAIRE

SECTION A: INSTITUTIONAL INFORMATION

(To be completed by the Quality Manager or dedicated Short Courses officer or staff member responsible for the administration and management of Short Courses at a 'site of delivery', or in a faculty, department or unit of an institution). .

Name of your institution: *(Please take note that your institution's identity and that of its staff members are protected in this study).*	
Your designation and relation to Short Courses:	
Years of employment at your (particular) Short Courses/Quality office:	
If your institution has a central office for Short Courses, name your Short Courses department/office/unit:	
If your institution has a decentralised Short Course management system, please explain the system briefly:	

SECTION B: HEQC AUDIT INFORMATION ON SHORT COURSES

(Please indicate your choice by means of an (x):

		YES	NO
1	Our institution received a commendation during the HEQC audit on the quality management of Short Courses		
2	Our institution received a letter after our HEQC audit stating that the institution meets the criteria and minimum standards of the HEQC for Short Courses and, therefore, the HEQC fully 'delegated' the Short Courses function to us		

SECTION C: SURVEY QUESTIONS

Reflect on the situation and current practice at your institution and answer the following questions by marking the appropriate block (with an X) to indicate to what extent you agree/disagree with each of the statements.

Scale: 1 = Strongly disagree to 6 = Strongly agree

		Strongly Disagree	Disagree	Moderately Disagree	Moderately Agree	Agree	Strongly Agree
1.	Our institution has arrangements in place to monitor the implementation of the Short Course policy	1	2	3	4	5	6
2.	Our mechanisms for the quality assurance of Short Courses are widely known in the institution	1	2	3	4	5	6
3.	There is a quality assurance system in place that ensures the regular reviews of all arrangements for Short Courses	1	2	3	4	5	6
4.	At our institution, continuous improvement of our Short Courses takes place by means of a quality management model that is based on the principles of a cyclical process of planning, doing, reviewing, adjustments and (re-)planning	1	2	3	4	5	6
5.	Mechanisms and processes are in place for the approval of Short Courses by the appropriate academic unit or governance structure at our institution (e.g. Senate)	1	2	3	4	5	6
6.	The planning for the provision of Short Courses at our institution takes into account a range of issues such as availability of staff to develop and offer the courses, admin capacity, fees, revenue sources, etc.	1	2	3	4	5	6
7.	The quality assurance system at our institution is effective for identifying deficiencies and gaps that hampers the quality of our Short Course programmes	1	2	3	4	5	6
8.	At our institution, the outcome of the above-mentioned quality assurance processes of reviews feeds into remedial action plans to ensure continuous improvement	1	2	3	4	5	6
9.	The management of Short Courses at our institution is underpinned by systematic processes of planning, implementation, reviews, adjustments and re-planning (e.g. PDCA/ADRI models)	1	2	3	4	5	6

		Strongly Disagree	Disagree	Moderately Disagree	Moderately Agree	Agree	Strongly Agree
10.	There is more than one approach to the quality management of Short Courses at our institution	1	2	3	4	5	6
11.	It is the responsibility of each faculty to implement systems and mechanisms to ensure quality enhancement of Short Courses at our institution	1	2	3	4	5	6
12.	The Head/Manager of the Short Courses Office has overall accountability for the implementation of quality management systems for Short Courses	1	2	3	4	5	6
13.	At our institution, a Short Courses "Register" is in place that has information on the status of courses i.e. course title and code, outcomes, credit bearing status, admission requirements, assessment criteria and methods, teaching and learning strategies, venue, fees and other financial information	1	2	3	4	5	6
14.	Certificates of Short Courses are issued at our institution on par with the institution's relevant policy for certification processes	1	2	3	4	5	6
15.	Clear and efficient arrangements are in place at our institution that ensure the integrity of learner records and certification processes	1	2	3	4	5	6
16.	We improved our quality management system by means of benchmarking with other institutions	1	2	3	4	5	6
17.	There are no concerns with regard to the quality management of Short Courses at our institution	1	2	3	4	5	6
18.	Our quality management system for Short Courses is on par with "good practice"	1	2	3	4	5	6
19.	We report to Senate on the offering of our Short Course programmes	1	2	3	4	5	6
20.	Senate approves the offering of credit bearing Short Courses	1	2	3	4	5	6
21.	Senate approves the offering of non-credit bearing Short courses	1	2	3	4	5	6
22.	New Short Course proposals are approved by a Faculty committee	1	2	3	4	5	6
23.	Credit bearing Short Course certificates are signed by the appropriate level of accountability of our institution (i.e. the Registrar, Deputy Vice Chancellor, etc.)	1	2	3	4	5	6
24.	After the completion of each Short Course, an evaluation of participants' learning experiences are conducted	1	2	3	4	5	6
25.	There is a Short Course brochure available at our institution	1	2	3	4	5	6
26.	Our institution has a policy for Short Course management	1	2	3	4	5	6

Thank you for your participation and candid responses.

ANNEXURE C: LETTER OF CONSENT

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UNIT FOR PREPARATORY PROGRAMMES

ATTENTION: THE REGISTRAR

I am an MTech student at the Vaal University of Technology (VUT). The completion of a mini-dissertation forms part of my course, and my research topic for this mini-dissertation is: **The Quality Management of Short Courses at Higher Education Institutions in SA.**

My research will focus on conceptualising an effective quality assurance system for the quality management of short courses within the VUT. For the purpose of my empirical study, I am sending out survey questionnaires to all 23 Higher Education Institutions in SA in order for me to identify good practices with regards to short course quality management. My target population would be the staff members who are responsible for the quality management and/or coordination of Short Courses.

I herewith request your institution's permission to include your institution in my survey. The data and information that will be gathered from your institution will be handled as confidential information and will be utilised for the purpose of the study only. I will refer to your institution by means of a number (e.g. U2). Please note that your approval will enhance our understanding of short courses quality assurance systems on national level and contribute to the implementation of a quality assurance system for short courses at the VUT.

Please find an example of the survey questionnaire attached.

Regards

Marieda Brits

Tel: (016) 950-9723